SWAYAM Courses: At a Glance

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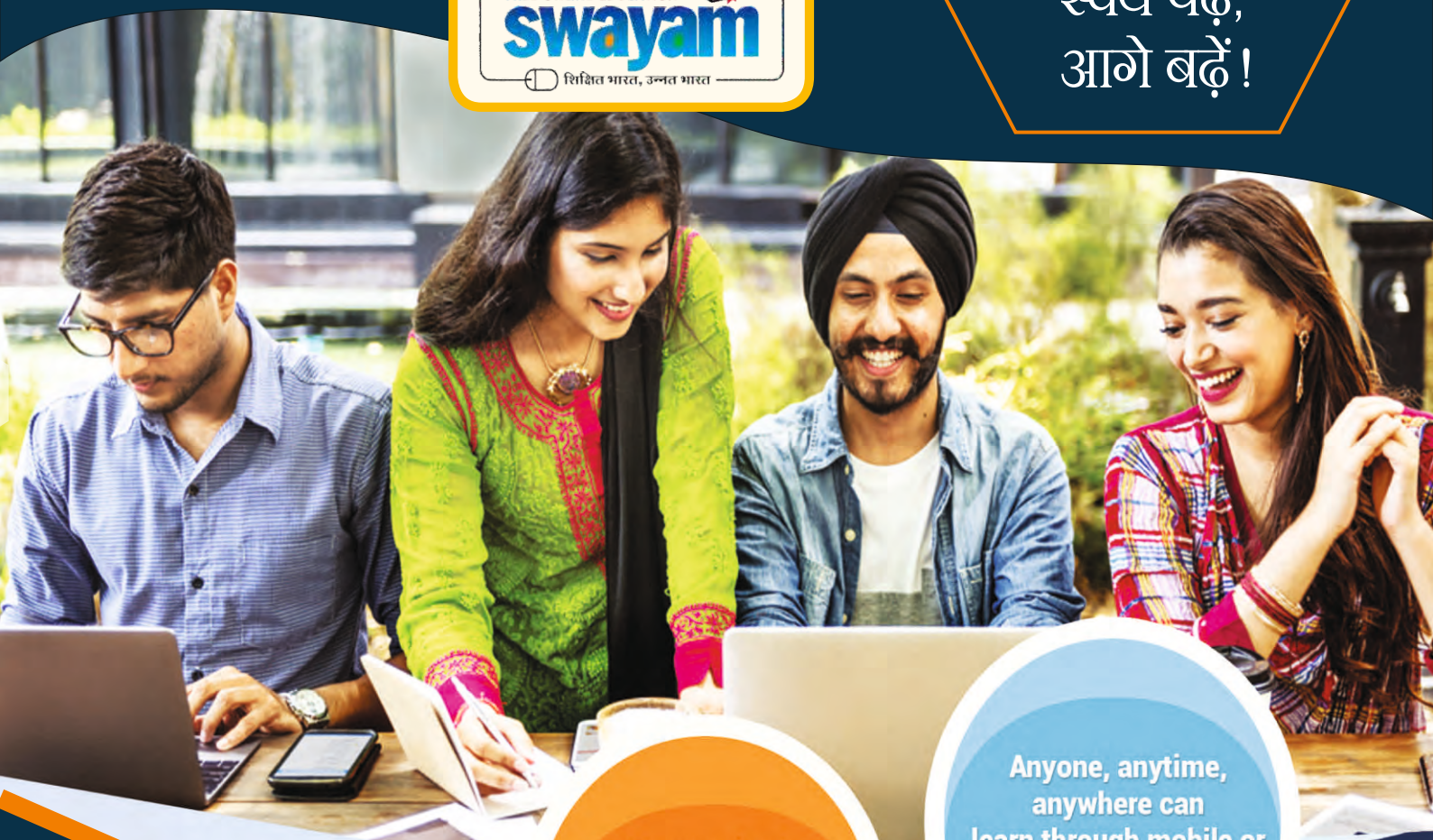

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सत्यमेव जयते

Ministry of Human Resource Development
Government of India

July 2018

विद्यया ऽमृतमश्नुते
एन सी ई आर टी
NCERT

NIOS
The National Institite of Open School

ignou
THE PEOPLE'S UNIVERSITY

Consortium for Educational Communication

ज्ञान-विज्ञान विमुक्तये

AICTE

IIMB
तेजस्वि नावधीतमस्तु

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Message of the Chairman

The Indian higher education system is one of the oldest and largest in the world with 903 universities including Instituions of National Importance, 41, 012 colleges, 3.66 crore students and 12.84 lakh teachers. This massification of higher education brings along with it many issues which confront the higher education of our country today like, the issues of access, equity, relevance, quality, management and financing.

The ICT plays a major role in addressing these issues. In this context, Massive Open online courses are very successfully bridging the digital divide as through these courses quality education can be brought at the doorstep of every learner at virtually no cost. I congratulate the Ministry of Human Resource Development for this noble initiative which will bring a marked improvement in the quality of education being imparted in our country.The project would also help the students and teachers to update their knowledge and skills especially for those located in rural/backward/remote areas and would help the nation move towards an information-rich society.

I congratulate, Prof Rajnish Jain, Secretary, UGC, Dr(Mrs) Pankaj Mittal, Additional Secretary, UGC and her team in bringing out this document which will be very handy information booklet for our Vice Chancellors.

Wishing you all the best.

Prof. D P Singh
Chairman, UGC

Foreword

The phenomenal growth of ICT in the education system has had a tremendous impact globally. India has been quick enough to leverage technology for teaching learning processes as ICT has facilitated the accessibility to education andpromoting quality teaching and learning to learners of all age groups across the length and breadth of the country. Taking cognizance of such advancements , the Ministry of Human Resource Development, Government of India launched SWAYAM (Study Webs ofActive Learning for Young Aspiring Minds), an indigenously developed platform aimed at providing learningopportunities to the learners through MOOCs (Massive Open Online Course) free of cost in a structured manner.

MHRD has identified nine National Coordinators for developing MOOCs from School to PG level on the platform , namely- NCERT for school education from 9th to 12th; NIOS for out of school children from 9th to 12th; Consortium for Educational Communication(CEC), an IUC of UGC, for Non-technology UG programmes; UGC for Non-technology PG programmes; IGNOU for Diploma and Certificate programmes; NPTEL for Technical/ Engineering UG & PG degree programmes; IIM for management programmes, NITTR, Chennai for Teacher Training programmes and AICTE for self paced programmes.

The MOOCS courses on Swayam being run by these National Coordinators (except for NPTEL) in the coming semester beginning from July, 2018 arecompiled in this document for easy reference of the Vice Chancellors and academicians.

I compliment my colleagues, Dr(Mrs) Pankaj Mittal, Additional Secretary, UGC and Dr Diksha Rajput, Publication Officer and her team in editing and compiling this document which will work as a ready reckoner for our users.

My Good Wishes for all.

Prof Rajnish Jain
Secretary, UGC

Preface

The MOOCs on the SWAYAM are high quality, curriculum-based, interactive content in different subjects across disciplines of social sciences, arts, fine arts, humanities, natural & mathematical sciences, linguistics, languages, technology, management, teacher training and skill sector. These courses are developed by the best faculty of the country carefully chosen from various educational institutions across the country from Secondary till Post-Graduation level. The basic philosophy of MOOCS on SWAYAM is free learning for Any one, Any time, Any where (AAA) with the facility of credit transfer for upto 20% of the courses in a programme.

The MOOCS on SWAYAM follow a Four Quadrant Approach comprising of Quadrant-I - e-Tutorial, which contains Video and Audio Content in an organised form, Animation, Simulations, video demonstrations, Virtual Labs, etc. , Quadrant-II - e-Content, which contains PDF, Text, e-Books, illustrations, video demonstrations, documents and Interactive simulations; Quadrant-III - Web Resources, Open source Content on Internet, Case Studies, books including e-books, research papers & journals, Articles, etc. and Quadrant-IV - Self-Assessment, which contains Problems and Solutions, which could be in the form of Multiple Choice Questions, Fill in the blanks, Matching Questions, Short Answer Questions, Long Answer Questions, Quizzes, Assignments and solutions, Discussion forum topics and setting up the FAQs, Clarifications on general misconceptions etc.

This document SWAYAM Courses : At a Glance " is a compilation of the Courses developed by the Course Coordinators/Instructors of eight National Coordinators and gives a bird's eye view of the Course objectives, learning outcomes, course duration, credits and profile of the course coordinator for the learner. It is hoped that this document will enable learners and institutions to make informed choices about the MOOCS courses to be pursued in the coming semester, commencing from July, 2018.

The compilation and production of this document would not have been possible without the active support of my colleagues in UGC, Dr Diksha Rajput, Mr Abhishek Anand and in INFLIBNET, Dr Jagdish Arora and Dr Abhishek Kumar. I am grateful to them for their support.

Wishing you a happy learning.

Dr(Mrs) Pankaj Mittal
Additional Secretary, UGC

ज्ञान-विज्ञान विमुक्तये

University Grants Commission
New Delhi

Non-Technology Post Graduate Courses

सत्यमेव जयते

MHRD

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Non-Technology Post Graduate Courses

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ARTIFICIAL INTELLIGENCE

PROF. BHUSHAN TRIVEDI, PH.D.
Dean, Faculty of Computer Technology, GLS University,
Ahmedabad

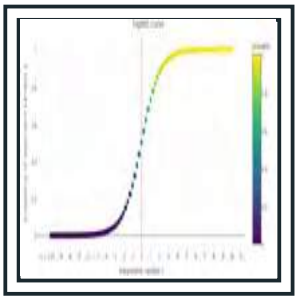
TYPE OF COURSE : UG as well as PG
INTENDED AUDIENCE : UG as well as PG

COURSE DURATION : 15 weeks (15/08/2018 to 15/12/2018)
EXAM DATE : 15/12/18 to 15/01/19
NO OF CREDITS : 4

PRE-REQUISITES : Preliminary Maths, Data Structures, introduction to any programming language

OBJECTIVE OF COURSE

Introduce the idea of how computers and other devices can be made to act like humans and solve problems with techniques different than conventional methods of solving problems.



LEARNING OUTCOME

- Describe what state space search is, convert a given problem in state space form, devise a solution
- Differentiate heuristic methods to solve AI based problems, judge the method needed to solve a typical problem.
- Narrate problems in using guided search and find solutions to those problems
- List and judge different search methods and their usage in different cases
- Use AI in Game Playing, Planning, solving constraint satisfaction problems, and other related problems
- List different knowledge representation techniques, judge most suitable technique
- Describe characteristics of and differentiate conventional system from an Expert system.
- Generate algorithms reasoning with uncertain and incomplete information

COURSE PLAN

W01:- Introduction to AI and State space search

W02:- Introduction to unguided and guided search

W03:- problems in search and solutions, Genetic algorithms

W04:- Neural Networks, BPNN, learning process in BPNN

W05:- Some other search methods and Admissibility

W06:- Planning

W08:- Game Playing

W09:- Minimax and other game playing algorithms

W10:- Using predicate logic for Knowledge Representation

W11:- reasoning using Resolution and non-monotonic reasoning

W12:- Fuzzy logic and CD to represent knowledge in a stronger way

W13:- Scripts and Introduction to Expert systems

W14:- Developing expert systems and Machine learning

ABOUT INSTRUCTOR

Prof. Trivedi has 4 patents, 96 papers and 3 books all published by Oxford University Press. He has 29 years of experience in teaching at post graduate level. Nine of his students received a Ph. D. degree and 5 more are perusing. He has written two EPG Pathshala courses out of which one is repurposed to MOOC. One more of his course proposal is accepted for the next cycle. He has conducted 25 workshops on effective teaching and a few other on research related topics across India.

PROF. DEEPAK H. KANNAL

Former Head & Dean, Faculty of Fine Arts, M.S. University, Baroda

TYPE OF COURSE : UG/PG

INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (2nd July'2018 to 13th Oct.'2018)

EXAM DATE : 15th Week of the course i.e 8thto13th Oct.2018

NO OF CREDITS : 4

PRE-REQUISITES : The learners are expected to have completed Graduation in any discipline and have knowledge about theoretical aspect of Art and Art History

OBJECTIVE OF COURSE

The main objectives of this course are –

- to discuss the problems pertaining to aesthetics, which is also called philosophy of art.
- to understand the theoretical aspect of art. Every civilization whether it is western or Indian has given a thought to the problems of art and from that thought the aesthetic theories have emerged.
- to discuss the western theories as well as the Indian theories and comparative study of it.
- to understand the similarities between the two and also the differences and also trace their evolution independently and collectively.
- -to give a thought to the differences between the aesthetic thought and the critical theories.

LEARNING OUTCOME

This Course will help to develop the understanding of philosophy of art and theoretical aspect of art. Every civilization whether it is western or Indian has given a thought to the problems of art and from that thought the aesthetic theories have emerged. The learner will understand the western theories as well as the Indian theories and comparative study of it.

COURSE PLAN

Week 01:- 1. Aesthetics: A Comparative Study, 2. Evolution of Aesthetic Theorization in India. 3. Bharata and his Natyasastra

Week 02:- 4. Theory of Rasa and its later exponents – I, 5. Theory of Rasa and its later exponents – II, 6. Vritti, Riti and style

Week 03:- 7. Alamkara : The Embellishment, 8. Chitrasutra of Vishnudhar mottara, 9. Theory of Dhvani – Bhartrihari

Week 04:- 10. Dhvani- Lakshana, 11. Dhvani– Vyanjana and Anandavardhana, 12. Shadanga : the Six Principles of Painting

Week 05:- 13. The Talamana : Iconometry, 14. The Medieval Shilpa texts in India, 15. Plato and the theory of Mimesis

Week 06:-16. Aristotle and the theory of Catharsis, 17. Horace and Longinus, 18. Medieval European Aesthetics

Week 07:- Assignment Week

Week 08:- 19. Renaissance Aesthetics, 20. Absolute Idealism, 21. Emanuel Kant and the Notion of Beauty

Week 09:- 1. Croce and Art as Intuition, 2. Sigmund Freud and Psychoanalysis I, 3. Sigmund Freud and Psychoanalysis II

Week 10:- 4. Psychoanalysis: Later Developments , 5. Formalism – Roger Fry and Clive Bell

Week 11: 6. Susanne Langer, 7. Feminist Aesthetics

Week 12:- 8. Sublime- Rediscovery, 9. Sublime- Post Modern view – Lyotard

Week 13 :- 10. Structuralism I, 11. Structuralism II, 12. Post-structuralism

Week 14 :- 13. Deconstruction, 14. Marxist Theories.

Week 15 :- Final Exam

ABOUT INSTRUCTOR

Prof. (Dr.) Deepak Kannal is a practicing sculptor and an Art Historian. He has a number of National level awards, scholarships and distinctions including the 'Charles Wallace fellowship' for his post doctoral project at Cambridge, UK, The National Lalit Kala commendation, Gujarat Lalitkala awards for sculpture, A.P. Council Biennale award and the Gujarat Gaurav as well as the Raja Ravi Verma Puraskar. He has curated sculpture shows in India and US and has participated in several important shows.

He taught in the Dept. of Art History and Aesthetics and also was the Head of the department, coordinator, UGC DSA program and the Dean of the Faculty of Fine Arts, Maharaja Sayajirao University of Baroda. He has worked on several prestigious bodies and committees of various institutions, Govt. Of India, University Grants Commission and a number of Universities. He is engaged in active research in Art History and Aesthetics and

BIBLIOMETRICS AND SCIENTOMETRICS

PROF. I K RAVICHANDRA RAO
Retd Professor, Documentation Research and Training Centre, Bangalore

TYPE OF COURSE : PG

INTENDED AUDIENCE : UG/PG Students of Library & Information Science

PRE-REQUISITES : The learner should have basic knowledge of computers, acquaintance with traditional libraries using manual processes as well as computerized library operations and services offered by both types of libraries.

COURSE DURATION : 10 weeks (13th Aug to 28st Oct, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 3

OBJECTIVE OF COURSE

The objective of the course is to impart in-depth knowledge on Bibliometrics and Scientometrics including its scope and definition, computational aspects, parameters and indicators. Another objective of the course is to instil skills in learners that would enable them to collect and analyse Bibliometrics and Scientometrics data. This course will help learners to read and understand the scientific literature in the field of Scientometrics.

LEARNING OUTCOME

After successful completion of the course, learners would gain in-depth knowledge about bibliometrics and scientometrics. Learners will develop skills to collect, analyse and evaluate bibliometric scientometric data. Learners will be able to read understand bibliometric scientometric literature; and to carry out research in Scientometrics.

COURSE PLAN

Week 1: Introduction to Scientometrics

Week 2: Classical Laws of Bibliometrics

Week 3: Use Studies

Week 4: Obsolescence of Literature

Week 5: Growth of Literature

Week 6: Scientometric Indicators

Week 7: Citation Analysis and Collaboration in Science

Week 8: National Mapping and Role of Scientometrics in Science Policy

Week 9: Research Methodology

Week 10: Testing of Hypotheses

ABOUT INSTRUCTOR

After completing BSc. in Mathematics and Statistics from the Mahatma Gandhi Memorial College, Udupi in 1968, Prof. Rao obtained his Master's degree in Statistics (M.Stat) and Diploma in Computer Science from Indian Statistical Institute, Kolkata in 1970. He also completed the Associateship in Documentation (1975) course from DRTC of the Indian Statistical Institute. He received his Ph.D. degree from the University of Western Ontario, Canada, in 1981. He joined Documentation Research and Training Centre (DRTC) of the Indian Statistical Institute (ISI) in Oct. 1970. Since June 1987, he was working as Professor at DRTC. Prof. Rao is also the Chief Editor and the Editor of the COLLNET Journal of Scientometrics and Information Management and SRELS Journal of Information Management respectively. He is a Fellow of the Society for Information Science, New Delhi.

DR. DHANESWAR HARICHANDAN
Professor cum Director Incharge, University of Mumbai,
Institute of Distance and Open Learning.

TYPE OF COURSE : PG Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (1st Aug to 10th Nov,2018)
EXAM DATE : 10th November 2018
NO OF CREDITS : 4

PRE-REQUISITES : Graduates/Post Graduates in any discipline especially students and teachers of B.Ed./ D.El.Ed./M.Ed./M.A. Education.

OBJECTIVE OF COURSE

The broad objective of this Massive Open Online Course is to acquaint the learners with the idea of online learning at anytime, anywhere and any place. The learners will be exposed to the various facets of communication technologies used in education and elsewhere.

LEARNING OUTCOME

- After going through this course learners will be able to understand the Concept, Processes, Models and Media of Communication.
- Learners will also know about the Concept of Technology e-learning Legal concept of technology and ICT in Education
- The learners will be exposed to contemporary technologies such as Spoken Tutorials, OER, MOOCs etc.

COURSE PLAN

Week 1: Basics of Communication

Week 2: Process of communication

Week 3: Communication Skill

Week 4: Concept of Technology of Education

Week 5: Trends and Methods in Communication

Week 6: Technical Aspects of Networking

Week 7: Role & Legal Aspects of Technology

Week 8: ICT in Education

Week 9: Technology for Development

Week 10: E-Learning

Week 11: Learning Management Systems

Week 12: Contemporary Technologies

Week 13: Open Education

Week 14: Use of Tutorials

Week 15: Role of National Bodies

ABOUT INSTRUCTOR

Dhaneswar Harichandan (born on 11th October, 1960) is Professor cum Director Incharge, Institute of Distance and Open Learning, University of Mumbai. He holds a Ph.D. degree in Distance Education from YCMOU, Nashik. He has more than three decades of experience as a teacher educator in face-to-face classroom teaching as well as distance education mode and has guided 7 students at M.Phil. and 6 students at Ph.D. level. He has published 5 books, edited 14 Self Learning Materials, 4 chapters in edited books, 24 articles and research papers in National and International journals and has organised, participated and contributed papers in workshops, seminars & conferences. He is an Ambassador for advocacy of OER by ICDE Norway, Oslo.

DR. JAGDISH ARORA
Director, Information and Library Network Centre, (INFLIBNET)

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

PRE-REQUISITES : The learner should have basic knowledge of computers, acquaintance with traditional libraries using manual processes as well as computerised library operations and services offered by both types of libraries.

COURSE DURATION : 15 weeks (13th Aug to 26th Nov, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 5

OBJECTIVE OF COURSE

The objective of the course is to impart in-depth knowledge on digital libraries, their characteristics, components, standards and protocols, IPR and legal issues, digital rights and access management, planning and evaluation. The ultimate aim of the course is to instil skills in learners that would enable them to evaluate commercially available digital libraries before subscribing them for their institutions as well as to set-up their own institutional digital library with all intermediate steps involved in it from planning to offering digital library services.

LEARNING OUTCOME

After completing the course, the learner would gain in-depth knowledge about digital libraries, their characteristics and major components. The course elaborates on technology, processes and steps involved in digitization and digital preservation. It enunciates on applications and services offered by digital library and its relationship with semantic web. It delves into the process of planning, implementation, marketing, promotion and evaluation of digital libraries. Learners would have insights into various aspects of digital rights and access management and its applications in digital libraries. The course also elaborates on examples of open access digital libraries and backend technologies used.

COURSE PLAN

Week 1: Digital Library: Overview

Week 2: Major Components of Digital Library - 1

Week 3: Major Components of Digital Library – 2

Week 4: Major Components of Digital Library – 3

Week 5: Digital Libraries: Planning, Implementation, Marketing and Promotion

Week 6: Digital Library: Standards, IPR and Legal Issues

Week 7: Major Projects in Digital Libraries

Week 8: Digital Library Initiatives in India

Week 9: Open Access and Digital Library

Week 10: Digitization

Week 11: Digital Library Services and Semantic Web

Week 12: Digital Rights Management / Access Management

Week 13: Digital Preservation

Week 14: Case Studies in Digital Library

Week 15: Evaluation of Digital Library

ABOUT INSTRUCTOR

Dr. Jagdish Arora, is the Director of Information and Library Network (INFLIBNET) Centre from August, 2007 onwards. Prior to his present assignment, Dr. Arora has worked as the Librarian at the Indian Institute of Technology Delhi from Sept. 2003 to August 2007. Dr. Arora is recipient of Fulbright Professional Fellowship in Library and Information Science (1997- 98), Dr. Arora was presented a Citation and Memento for his Commendable Contribution to Digital Initiatives for Higher Education, by the Honourable Shri Pranab Mukherjee, Govt. of India on 9th July 2017 at Vigyan Bhawan, New Delhi. He was also recipient of Librarian's Choice Award for Life Time Achievement instituted by the Royal Society of Chemistry for the year 2017. He was awarded NDLTD Leadership Award for the year 2017 for Shodhganga Scheme of the INFLIBNET Centre during 20th International Symposium on Electronic Theses and Dissertations held in Washington, D.C., USA from August 7 to 9, 2017. Dr. Arora was the Principal Investigator for several projects sponsored by agencies like AICTE, Deptt. of Biotechnology (DBT), Ministry of Information Technology (MIT), Ministry of Human Resource Development (MHRD), etc. He was a member of the delegation that visited selected libraries and library science schools in Germany in 2002.

EDUCATIONAL ADMINISTRATION, MANAGEMENT AND LEADERSHIP IN SCHOOL EDUCAT

PROF. AMARENDRA P.BEHERA
Joint Director, CIET-NCERT, New Delhi

DR. AERUM KHAN
Assistant Professor, CIET-NCERT, New Delhi

PROF. P.K. SAHOO
Professor, University of Allahabad, Allahabad

DR. SURINDAR PAL KAUR DHILLAN
Principal, Khalsa College of Education, Amritsar

TYPE OF COURSE : PG

INTENDED AUDIENCE : PG

PRE-REQUISITES : Basic understanding of the management process, administration structure, leadership patterns of school education.

COURSE DURATION : 35 weeks (2 July 2018 – 3 March 2019)

EXAM DATE : After completion of course in March 2019, to be organised Jointly by University of Allahabad and CIET-NCERT

NO OF CREDITS : 4

OBJECTIVE OF COURSE

After completing this course the learners will be able to:

- Discuss the meaning/concept and common features of Educational Administration, Management and Governance, and leadership.
- Describe the history of educational administration, educational management and leadership.
- Elaborate the functions and approaches of Educational Administration, educational management and leadership.
- Describe the academic support structures like NUEPA, NCERT, SCERT, SIEMAT, DIETs.
- List the role of research and evaluation in Educational Administration Management and Governance.
- Discuss the issues and trends in Educational Administration Management and Governance.
- Enumerate the challenges in Educational Administration Management and Governance.

LEARNING OUTCOME

- This course is intended to apprise the students about
- The meaning/concept and common features of Educational Administration, Management and Governance, and leadership.
- The History of educational administration, educational management and leadership.
- The functions and approaches of Educational Administration, educational management and leadership.
- The institutions related to Educational Administration Management and Governance.
- Academic support structures like NUEPA, NCERT, SCERT, SIEMAT, DIETs.
- Role of research and evaluation in Educational Administration Management and Governance.
- Issues and trends in Educational Administration Management and Governance.
- Challenges in Educational Administration Management and Governance.

COURSE PLAN

Week 1: Concept and approaches to educational administration, management and governance
Week 2: Theories of educational administration
Week 3: Federalism and Decentralization in educational administration and management
Week 4: Multi-level system of educational administration, management and governance
Week 5: Comparative study of multi-level systems of educational administration among some developed and some developing countries
Week 6: Development of educational administration in India in Pre-British era- A historical perspective
Week 7: History and structure of educational administration during British period
Week 8: Assignment 1
Week 9: Landmarks in the development of educational administration in India after independence, Constitutional provisions governing educational administration in India- sharing of powers
Week 10: State acts and rules related to educational administration in India- A critical appraisal
Week 11: Educational administration: structure, function and processes at the central government level
Week 12: Educational administration: structure, function and processes at the state government level
Week 13: Educational administration: structure, function and processes at the district and sub-district levels
Week 14: Administration and management of centrally sponsored programmes and schemes for improvement of school education- A critical analysis
Week 15: Assignment 2
Week 16: Principles and practices of supervision and monitoring of education system in India, School Supervision: Concept and Theories
Week 17: School standards and their evaluation
Week 18: Regulations and accountability mechanisms, regulatory bodies guiding the education system
Week 19: Code of conduct of teachers and professional ethics
Week 20: Academic support structures like NUEPA, NCERT, SCERT, SIEMAT, DIET
Week 21: Resource centres at block and cluster levels- structure and appraisal
Week 22: Programme evaluaition
Week 23: Decentralizattion, local management and governance in education
Week 24: Decentralized and participatory school governance- what and why?
Week 25: Assignment 3
Week 26: Constitutional provisions and policy framework for decentralized educational governance in India, Role of Panchayati Raj institutions in management of education
Week 27: Community based structures for school governance
Week 28: Role of Civil society organizations in governance of education
Week 29: NGO's and community based organizations in school governance
Week 30: Emerging issues and problems of educational administration
Week 31: Human resource management in education, Teacher management and development issues
Week 32: Issues relating to management of continuing professional development of teachers
Week 33: Need and importance of research in Educational Administration
Week 34: Trend of research in Educational Administration: Gaps and priorities, Issues relating to management of public institutions
Week 35: Assignment 4

ABOUT INSTRUCTOR

Prof. A.P. Behera is the Joint Director of CIET-NCERT. A Ph.D. in Education, he is working in NCERT since 1996 on various assignments, like Curriculum Development, ET and ICTs in Education, Development of e-Contents, Training of Teachers and Educators on ICTs in Education. Also involved in various research studies on ICT in Karnataka, Chandigarh, KVS and RCI. He has worked on piloting of UNESCOs General Education Quality Analysis Framework (GEQAF) in India.

Dr. Aerum Khan has been working in CIET-NCERT, New Delhi for more than 5 years. She has Ph.D. degrees in Botany and Education and teaching experience of more than 12 years. Her profile includes development and management of the National Repository of Open Educational Resources, providing training to teachers across the levels for ICT interventions, and academic coordination of ePGPathshala for the subject of 'Education' at CIET-NCERT. She has also developed 2 MOOCs in Chemistry for Sr. Secondary level at CIET-NCERT; these courses are available on SWAYAM.

Prof. P.K. Sahoo is from the Dept. of Education, Allahabad University, Allahabad. He is the Principal Investigator of the ePGPathshala for the subject of 'Education'.

Dr. Surinder Pal Kaur Dhillon is the Principal of Khalsa College of Education, Ranjit Avenue, Amritsar.

DR. JAVAHAR LAL
Associate Professor, Department of Sarva Darshan, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi

TYPE OF COURSE : PG/ACHARYA
INTENDED AUDIENCE : UG/PG/Diploma
COURSE DURATION : 15 weeks (01/08/2018 to 31/12/2018)
EXAM DATE : Jan 2019
NO OF CREDITS : 4

PRE-REQUISITES : 1. सस्कृत का सामान्य ज्ञान होना चाहिये। 2. सामान्यरूप से दर्शन शास्त्र का परिचय होना चाहिये। 3. स्नातक उपाधि धारक होना चाहिये

OBJECTIVE OF COURSE

भारतीय दर्शनम्:-एकः परिचयः इति मूल विषय मधिकृत्य पञ्चदशसप्ताहेषु चत्वारिंशत्पाठानाम् अध्ययनव्यवस्थानिर्मिता वर्तते। तत्र दर्शनमिति शब्दः नाम दृशिर् प्रेक्षणे इति धातोः भावे ल्युट् प्रत्यये सति निष्पन्नः यस्यार्थः भवति आत्मसाक्षात्कारः । आत्मसाक्षात्कारसाधनप्रतिपादनम् एतेषां दर्शनशास्त्राणां मुख्यमुद्देश्यंभवति।

तच्च दर्शनं भारतीय परम्परायां मुख्यतः वैदिका वैदिक भेदेनद्विविधं भवति।वैदिकदर्शनंतावत्याय-वैशेषिक-सांख्य-योग-पूर्वमीमांसा-उत्तरमीमांसाभेदेनषड्विधं भवति। अवैदिकदर्शनञ्च चार्वाक-जैन-बौद्धदर्शनभेदेन त्रिविधं तत्रापि बौद्धानां चत्वारः सम्प्रदायाः सौत्रान्तिक-वैभाषिक-माध्यमिक-योगाचारभेदेन सन्ति । तेनअवैदिकदर्शनमपि षड्विधंभवति। अस्मिन् पाठ्यक्रमे एतेषां द्वादशदर्शनानां विषये भवन्तः पठिष्यन्ति।अस्य दर्शनशास्त्रस्य उद्देश्यं किम् इति विषये अत्र एतदेव वक्तुं शक्यते यत् प्रथमतः दर्शनशास्त्रं लोकशास्त्रं वर्तते । लोके अस्माभिः यदपि आचरते तत् सर्वं दर्शनमेव। अहिंसा-सत्य-अस्तेयादीनामाचरणं तावत् दर्शनमेव। अतः एतेषां दर्शनशास्त्राणां प्रतिपाद्यविषयाणां सम्यक् ज्ञानं सर्वेभ्यः एव भवेत् । एतदर्थम् अयं पाठ्यक्रमः भवतां समक्षं समुपस्थाप्यते।

LEARNING OUTCOME

1. छात्राः दर्शनशास्त्रस्य विविधशाखानां परिचयात्मकं ज्ञानं करिष्यन्ति।
2. तत्तत् दर्शनस्य, आचार्याणां तेषां च दार्शनिकसिद्धान्तानाम् ऐतिहासिकं विवरणं, तत् सम्बद्धानां दार्शनिकपदपदार्थानां च ज्ञानं प्राप्स्यन्ति ।
3. अयं पाठ्यक्रमः नैकेषां प्रतियोगितापरीक्षाणां कृते उपयोगी भविष्यति।

COURSE PLAN

SAN_C3_M1_W1_Vचार्वाकदर्शनस्य परिचयः
SAN_C3_M2_W1_Vचार्वाकदर्शनम्
SAN_C3_M3_W1_Vचार्वाकदर्शनम्
SAN_C3_M4_W2_Vबौद्धदर्शनस्य उद्भवः विकासश्च
SAN_C3_M5_W2_Vबौद्धदर्शनस्य वैशिष्ट्यम्
SAN_C3_M6_W2_Vचार्वाकदर्शने प्रमाणमनुमानस्य खण्डनञ्च
SAN_C3_M7_W3_Vबौद्धजैनदर्शनस्य आचार्याः तत्कृतयश्च
SAN_C3_M8_W3_Vसर्वदर्शनसंग्रहः –चार्वाकमतस्य खण्डनम्, अनुमानस्य प्रामाण्यव्यवस्थापनञ्च
SAN_C3_M9_W3_Vबौद्धतन्त्रवाङ्मयस्येतिहासः
SAN_C3_M10_W4_Vप्रतीत्यसमुत्पादवादः
SAN_C3_M11_W4_Vहीनयानस्य सम्प्रदायः स्थविरवादः– एकः परिचयः
SAN_C3_M12_W4_Vशून्यवादः
SAN_C3_M13_W5_V
SAN_C3_M14_W5_V
SAN_C3_M15_W5_Vक्षणिकत्वपक्षे जैनबौद्धाभिमतविमर्शः
SAN_C3_M16_W6_Vजैनदर्शनस्य उद्भवः विकासश्च
SAN_C3_M17_W6_Vजैनदर्शनस्य सारः
SAN_C3_M18_W6_Vअर्हतः स्वरूपनिर्देशः
SAN_C3_M19_W7_Vरत्नत्रयधर्मः
SAN_C3_M20_W7_Vजीवाजीवतत्त्वद्वयम्
SAN_C3_M21_W7_Vजीवाजीवद्रव्याणि
31/10/2016
SAN_C3_M22_W9_Vसप्ततत्त्वानि
SAN_C3_M23_W9_Vसप्तभङ्गीनयविमर्शः
SAN_C3_M24_W9_Vजिनदत्तसूरिनिर्दिष्टं किञ्चित्
SAN_C3_M25_W10_Vन्यायदर्शनस्य उद्भवः विकासश्च
SAN_C3_M26_W10_Vन्यायदर्शनस्य परिचयः
SAN_C3_M27_W10_Vअक्षपाददर्शनस्य परिचयः
SAN_C3_M28_W11_Vआह्निकानां प्रकरणानाञ्च परिचयः
SAN_C3_M29_W11_Vप्रमाणादिपदार्थनवक निरूपणम्
SAN_C3_M30_W11_Vवादादिपदार्थसप्तकनिरूपणम्
SAN_C3_M31_W12_Vअपवर्गनिरूपणम्।
SAN_C3_M32_W12_Vईश्वरसिद्धिः
SAN_C3_M33_W12_Vवैशेषिकदर्शनस्य उद्भवः विकासश्च
SAN_C3_M34_W12_Vवैशेषिकदर्शनस्य परिचयः
SAN_C3_M35_W13_Vसांख्यदर्शनस्य उद्भवः विकासश्च
SAN_C3_M36_W13_Vयोगदर्शनस्य उद्भवः विकासश्च
SAN_C3_M37_W13_Vसाङ्ख्ययोगदर्शनयोः परिचयो
SAN_C3_M38_W14_Vमीमांसादर्शनस्य उद्भवः विकासश्च
SAN_C3_M39_W14_Vवेदान्तदर्शनस्य उद्भवः विकासश्च
SAN_C3_M40_W14_Vमीमांसावेदान्तदर्शनयोः परिचयं

ABOUT INSTRUCTOR

Dr. Jawahar lal is working as assistant professor in the Department of Sarvadarshan at shri Lal Bahadur Shastri Rastriya Sanskrit Vidyapeeth, Qutub Institutional Area, New Delhi, 110016, since 2004. He has received his Bachelors degree and Post graduate degree from the Banaras Hindu University, Varanasi. He has completed his Ph.D in the subject 'दार्शनिक दृष्टि से सृष्टि एवं प्रलय सिद्धान्त की समीक्षा from the Department of vaidic darshan, faculty of Sanskrit vidya dharma vigyan samkay, Banaras Hindu university, Varanasi. He has published thirty research articles/book chapters and a book.

INFORMATION STORAGE AND RETRIEVAL

PROF. DEVIKA P MADALLI
Professor at Indian Statistical Institute Bangalore Centre

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

COURSE DURATION : 11 weeks (13th Aug to 29th Oct, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 3

PRE-REQUISITES : The learner should have basic knowledge of computers, acquaintance with traditional libraries using manual processes as well as computerized library operations and services offered by both types of libraries.

OBJECTIVE OF COURSE

The objective of the course is to impart in-depth knowledge on information storage and retrieval, right from foundational definitions, components of multimedia resource retrieval systems, functions and design of ISAR systems, evaluation and advanced topics such as natural language processing and semantic web in information retrieval. Topics of information extraction and statistical methods in IR will be covered. The ultimate aim of the course is to instil skills in learners that make them aware of the importance of information storage and retrieval in the information profession and to learn methods of IR, systems, querying and query processing. Knowledge of ISAR will empower the students to handle and manage ISAR systems efficiently and effectively.

LEARNING OUTCOME

The course is designed for the students of library and information science as well as for professionals working in library and information centres. Other learners interested in digital libraries may also take up the course. The course imparts in-depth knowledge on Information Storage and Retrieval. It provide insights on query formulation and querying of information in the Information Storage and Retrieval.

COURSE PLAN

Week 01: Introduction and Basic Concepts and Components of IR Systems

Week 02: Database Management Systems, the Physical Organization of Data

Week 03: Querying of the Information Retrieval System

Week 04: ISAR Systems: Functions and Design, ISAR Models

Week 05: Evaluation and Measurement of Information Retrieval System

Week 06: Multimedia Information Retrieval

Week 07: Users of Information Retrieval

Week 08: Evolutions in Information Retrieval

Week 09: Advanced Course in ISAR

Week 10: Statistical Methods in IR

Week 11: Information Extraction

ABOUT INSTRUCTOR

Prof. Devika P Madalli is a Professor at the Documentation Research and Training Centre, Indian Statistical Institute, India and Adjunct faculty, DISI, University of Trento, Italy. Her interest is in the area of knowledge organization and application of facetization in information systems, information infrastructures, digital libraries, semantic web technologies, faceted ontologies, content management system, multilingual information services and e-learning. She served as a member of Evaluation Committee of UNFAO statistical database and information services, FAOSTAT. She is a member of the Karnataka Evaluation Authority. She contributed to UNESCO's Global Open Access Portal (GOAP). She is on the Advisory Board of Universal Decimal Classification. She is also a member of the G8+05 Data Infrastructures Working Group. She is co-chair of the Interest Group on Agricultural Data at the Research Data Alliance.

DR USHA MUNSHI
Librarian, Indian Institute of Public Administration, New Delhi

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

PRE-REQUISITES : The learner should have basic knowledge of computers and acquaintance information and communication tools and it uses in the automated library environment.

COURSE DURATION : 15 weeks (13th Aug to 26th Nov, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 5

OBJECTIVE OF COURSE

The objective of the course is to impart in-depth knowledge on use of information and communication technology in libraries and to prepare students either to work in a fully automated library that subscribes to resources in print as well as in electronic format or to set-up a modern library on their own. The aim of this course is to inculcate in-depth knowledge on use of information and communication technologies in libraries.

LEARNING OUTCOME

After completing the course, the learner would gain in-depth knowledge on basic concepts and scope of ICT, its associated technologies and their evolution. It deals with functional units of computers and computer software including operating system, system software and application software including word processing, spreadsheet and database management system. The course also elaborates on various contemporary programming languages and their levels. During the course a learner will gain knowledge about library automation, integrated library management software packages and its functional modules including acquisition, cataloguing, circulation, serials control and OPAC.

COURSE PLAN

Week 1: Basics of ICTs and Functional Units of Computers

Week 2: Computer Software: Operating System, Application Software and Programming Languages

Week 3: Basics of Computer Network: Types, Topologies, Switching Techniques, Media and Devices, Network Protocols

Week 4: Data Network and Network Security

Week 5: Basics of Internet and Search Engines

Week 6: Web 2.0 and Semantic Web

Week 7: Library Automation: Concept, Acquisition, Cataloging, Retro-conversion of Bibliographic Records

Week 8: Library Automation: Circulation, Serial Control, OPAC and Library Security Technology

Week 9: Library Automation: Case Studies using SOUL, Koha and LibSys

Week 10: Open Source Library Software and Library Standards MARC and Dublin Core

Week 11: Library Networks in India: INFLIBNET & DELNET

Week 12: Case Studies: Library Network in UK and USA

Week 13: Academic Library Consortia

Week 14: Library Consortium: UGC-INFONET Digital Library Consortium, INDEST-AICTE Consortium, e-Shodh Sindhu

Week 15: Open Data, Crowd Sourcing, Cloud Computing and Ethics in Cyberspace - Plagiarism

ABOUT INSTRUCTOR

Dr.Usha Mujoo Munshi, a Fulbright scholar, is currently with Indian Institute of Public Administration (IIPA) as head of its library. She has over 155 research publications and a few books to her credit. Recipient of several national and international awards which include Raizada Memorial Award, for Young Information Scientist of the Society of Information Science (SIS); SIS Fellowship; Fulbright Fellowship; ASSIST International Best Paper Award by ASSIST, USA. Recently she has been elected as a member of Data Policy Committee of CODATA, International Council for Science (ICSU).

INFORMATION SOURCES, SYSTEM AND SERVICES

MRS. RENU ARORA
Former Head, Education and Training, NISCAIR, New Delhi

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

COURSE DURATION : 15 weeks (13th Aug to 26th Nov, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 5

PRE-REQUISITES : **The learner should have basic knowledge of Information, characteristics of information sources, library services, information institutions and role of library and information professionals in dissemination of information.**

OBJECTIVE OF COURSE

Objective of course is to impart in-depth knowledge to the learners on the concept and need for information and to identify information sources best suited for specific information needs; to acquaint the learners with various reference, information and computerised services as these keep the information seekers up-to-date in their field of interest or specialization by providing timely information; and to identify organisations at national and international level and systems including library/information organisations and to explain the programmes and activities being undertaken by such organizations in promotion, coordination and development of library and information activities.

LEARNING OUTCOME

After successful completion of the course, learners will gain in-depth knowledge about 'Information Sources, Systems and Services'. He/she will develop skills to identify sources of information, viz. Documentary, non-documentary or current source of information'; various kinds of information services – anticipatory or responsive; and national and international level organisations and systems including library/information organisations that are engaged in promotion, coordination and development of library and information activities. In addition, learners would have also gained skills to set-up information sources/resources in their own institution by planning information services required by the users of the institution.

COURSE PLAN

Week 1: Information Sources, Systems and Services: Concept and Need for Information

Week 2: Types of Information Sources: Documentary, Non-Documentary and Sources for Current Information

Week 3: Reference Sources: Use and Evaluation Criteria, e-Information Sources

Week 4: Reference Sources: Dictionaries, Encyclopaedias, Handbooks and Yearbooks: Use and Evaluation

Week 5: Reference Sources: Geographical, Biographical, Bibliographical and other sources: Use and Evaluation

Week 6: Indexing & Abstracting Sources: Use and Evaluation

Week 7: Information Products: Types of information Products

Week 8: Information Users and User Studies

Week 9: Reference and Information Services

Week 10: Reference Interview, Literature Search & Search Techniques

Week 11: Role of various professionals in providing information services

Week 12: Information services

Week 13: Organisation of National and International Information Systems and Programmes

Week 14: International Information Systems: Services & Products: INIS, AGRIS and MEDLARS / MEDLINE

Week 15: National Information Systems and Programmes in Social Sciences and Humanities

ABOUT INSTRUCTOR

Mrs. Renu Arora has been working for over 38 years in the field of Library and Information Science. Her last appointment was as Head, Education & Training Division, CSIR-NISCAIR, New Delhi. She was Editor, Annals of Library and Information Studies, a quarterly journal of NISCAIR, and Coordinator, IGNOU Study Centre, NISCAIR, New Delhi. She has over 35 years of teaching experience in Library & Information Science; over 21 years of working experience in the area of technical editing, proof reading and technical communication. She conducted several training programmes in the field of library science.

INTRODUCTION TO PUBLIC ADMINISTRATION

DR. AJMER SINGH MALIK
Professor, Dept. of Public Administration, Kurukshetra University
Kurukshetra, Haryana

TYPE OF COURSE : PG
INTENDED AUDIENCE : Enrolled in PG Courses/ Civil Service Aspirants/In- Service Officers
COURSE DURATION : 15 weeks (6th Aug to 18th Nov, 2018)
EXAM DATE : 18th November, 2018
NO OF CREDITS : 4
PRE-REQUISITES : The learners are expected to have completed Graduation in any discipline.

OBJECTIVES OF COURSE

This course is prepared to acquaint the learners with the developments in the discipline which will help the learners to know its evolution and current status. After completing the course, the learner will be able to: understand the basic principles of an organization; familiarize with various approaches to the discipline of Public Administration; and also articulates the changes and impact of Globalization, ICT, etc. on the structure and functioning of administrative systems.

LEARNING OUTCOME

This Course will help to develop a basic understanding of the principles and issues of public administration which is essential to understand more complex issues concerning governance and administrative system and public well-being in general.

COURSE PLAN

WEEK-1 :

Public Administration: Meaning, Nature and Scope
Evolution of Public Administration

WEEK-2

New Public Administration
Globalization and Public Administration

WEEK-3

Approaches to Public Administration- Classical, Scientific and Bureaucratic
Human Relations Approach
Behavioural Approach

WEEK-4

Hierarchy
Unity of Command

WEEK-5

Span of Control
Control and Supervision

WEEK-6

Authority, Power and Responsibility
Centralization and Decentralization

WEEK-7

Delegation and Deconcentration
Line, Staff and Auxiliary Agencies

WEEK-8

Coordination
Coordination – A Case Study

WEEK-9

9th WEEK FOR REVISION / PREPARING ASSIGNMENT

WEEK-10

Communication
Decision Making

WEEK-11

Public Interest
Ethics in Administration

WEEK-12

Paradigm Shift from Government to Governance
Public Accountability

WEEK-13

Project Work

WEEK-14

REVISION

WEEK-15

EXAMINATION

ABOUT INSTRUCTOR

Dr A S Malik, Professor at Kurukshetra University Kurukshetra Haryana (India) teaching Public Administration to PG students and guiding research students since 1991. He has been the Chairman, Department of Public Administration and also the Coordinator, Special Assistance Programme (2011-16) sanctioned by University Grant Commission New Delhi. He is editing a bi-annual journal titled Public Affairs & Governance. At present he is also the President of Indian Public Administration Association.

PROF. K. S. RAGHAVAN
Visiting Scientist, Centre for Knowledge Analytics and Ontological Engineering, PES Institute of Technology, Bangalore

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

COURSE DURATION : 15 weeks (13th Aug to 26th Nov, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 3

PRE-REQUISITES : There are no specific pre-requisites for registering for this course. However, it is expected that the learner has a clear understanding of the functions of libraries and information centres, and of library and information science as a discipline.

OBJECTIVE OF COURSE

The objective of the course is to provide the students with an understanding of the characteristics of knowledge societies, the major factors affecting transition to a knowledge society and the issues in and implications of knowledge society with focus on libraries and information centres. On completing the course a learner would be in a position to have an idea of the changing dimensions of information disciplines as a consequence of developments in the information / knowledge environment.

LEARNING OUTCOME

On completing the course, students will understand the notion and characteristics of knowledge societies and how they differ from information societies. Students will also have a clear understanding of the various dimensions of knowledge society and their implications for libraries and information centres.

COURSE PLAN

Week 1: Data, Information and Knowledge

Week 2: Communication

Week 3: Knowledge Society

Week 4: Digital Divide

Week 5: Copyright

Week 6: Intellectual Property Rights: Patents

Week 7: Right to Information and Censorship

Week 8: Information Security

Week 9: National Information Infrastructure (India)

Week 10: E-Commerce and E-Governance

Week 11: Social Media and Content Management Systems in Libraries

Week 12: Economics of Information

Week 13: Knowledge Management

Week 14: The Information Disciplines

Week 15: Information Society Vs. Knowledge Society

ABOUT INSTRUCTOR

Prof. Raghavan taught at Madras University from 1977 to 2005 at Dept. of Library & Information Science. He retired as Dean (Academic) of the University and Professor & Head of the Dept. of Library & Information Science. He was Professor at DRTC from 2005 to 2013. He was visiting Scientist, Centre for Knowledge Analytics and Ontological Engineering, a World Bank funded project at PES Institute of Technology, Bangalore, 2013-2016. He was Senior Fulbright Scholar at UCLAin 1987. He also served as Visiting Professor,Federal University of Minas Gerais, Belo Horizonte, Brazil in 2003 and at Nanyang Technological University, Singapore in 2015. He is editor of SRELS Journal of Information Management and on the editorial board of Knowledge Organization.He guided 12 PhD students at Madras University.

PROF. RAGINI ROY
Professor & Head, Dept. of Drawing & Painting, Dayalbagh Educational Institute
(Deemed University), Dayalbagh, Agra

TYPE OF COURSE : UG/PG

COURSE DURATION : 15 weeks (2nd July to 13th Oct.'2018)

EXAM DATE : 15th Week of the course i.e.8thto13thOct 2018

NO OF CREDITS : 4

INTENDED AUDIENCE : It is expected that aspirants, desirous of joining this programme as a whole or selecting some courses as a part of one's PG Programme of Studies in any other institution, should have the minimum knowledge of Visual Arts equivalent to that of graduation degree in any other subject or equivalent qualification from a recognized academic institution.

PRE-REQUISITES : Students are required to go through the weekly planning carefully and, as far as possible, observe the works, as cited under demonstrations. All reading material are enlisted by modules in Quadrant 03. Wherever possible web links are indicated for an easy access of the learners.
The course is ideally meant for PG course in Visual Arts and for those teachers of the subject who may wish to register and audit the course for additional information.
Apart from the above, one who has the adequate proficiency in the field of visual arts, who may neither be a student nor a teacher, are also welcome to register themselves to enhance knowledge.

OBJECTIVE OF COURSE

The objectives are to impart knowledge in the discipline at post-graduation level. Landscape paintings refer to the depiction of natural scenery, such as bodies of water, mountains, forests and valleys. The sky is usually a main element, and weather often plays a key role in the overall total composition. The course manifests all these aspects gradually through its content. The main emphasis is placed on learning through various mediums like Pencil, Charcoal, Dry Pastel, Oil Pastel, Watercolour, Gouache, Oil colour, Acrylic and Mix Media in different techniques. The main emphasis is placed on the enhancement of observation skill of the students. Care has been taken to present the content in a gradual manner to instil confidence in the minds of the students. The course has been designed to have parity with syllabi to be at par with those at national and international levels.

LEARNING OUTCOME

Students having completed the course are not only expected to be skilled in the taught visual art, but should also be able to develop an analytical mind to critically examine works of other artists, which are covered under the syllabus and also be able to understand those, which may have been suggested additionally in the assignment sections

COURSE PLAN

Week 01:- 1. Learning to see, 2. Warm & Cool colours, 3. Angles & Perspectives

Week 02:- 4. Scribbling, 5. Flower, Shrubs and Bushes, 6. Tree

Week 03:- 7. Snow, Water & Mountain, 8. Pencil Live, 9. Pencil Imagination

Week 04:- 10. Charcoal Live, 11. Charcoal Imagination, 12. Dry Pastel Live

Week 05:- 13. Dry Pastel Imagination, 14. Monochrome, 15. Watercolour Live

Week 06:- 16. Watercolor Imagination, 17. Watercolor opaque technique, 18. Wet on Wet

Week 07:- Assignment Week

Week 08:- 19. Gouache imagination, 20. Gouache on tinted paper, 21. Oil Pastel Live

Week 09:- 22. Oil Pastel Imagination, 23. Oil paint Live, 24. Oil paint imagination

Week 10:- 25. Impasto (Acrylic Live), 26. Acrylic Imagination, 27. Mix Media

Week 11:- 28. Stippling, 29. Glazing

Week 12:- 30. Sponge, 31. Moonlight

Week 13:- 32. Night Landscape, 33. Working with Complimentary Color

Week 14:- 34. From Photograph, 35. Final Landscape

Week 15:- Final Exam

ABOUT INSTRUCTOR

Professor Ragini Roy is an artist and senior teaching faculty. Since 1984, she has been affiliated with the Department of Drawing & Painting at the Faculty of Arts, Dayalbagh Educational Institute (Deemed University), Dayalbagh, Agra. Having obtained her Masters in Drawing & Painting and while working on her Ph.D. from Kanpur University in 1981, she taught there for a year.

She is a Professor since 2008, at the Department of Drawing & Painting, DEI. Her major contribution has been in the fields of Painting, Mural and History of Indian Art. She designed all courses for UG, PG and Doctoral Levels at her parent University and the same for many other institutions in the country too.
A recipient of National Kalidas Award for her contribution in the field of Painting, she has remained chairperson of BOS, member of Faculty Board, Academic Council, Primary Body, Governing Body, Committee Social Welfare Scholarships (GN), Life Member of Rock Art Society of India, Life Member of All India Oriental Conference-Pune; All India Women's Conference and lately the Principal Investigator of e-PG Pathshala: Visual Arts and MOOCs.

Prof. Roy has to her credit the organization of a number of national seminars, workshops, group shows, exhibitions and artist camps. She has a good number of quality publications, paintings, murals and books to her credit also.

PROF. DINESH K. GUPTA
Professor, V M Open University, Kota, Rajasthan

TYPE OF COURSE : PG

INTENDED AUDIENCE : LIS Students at PG/UG level
Lifelong learning

PRE-REQUISITES : The learner should have the foundational knowledge or working experience of libraries and information centres.

COURSE DURATION : 15 weeks (13th Aug to 25th Nov, 2018)

EXAM DATE : Date to be announced in December 2018

NO OF CREDITS : 5

OBJECTIVE OF COURSE

- To make learners aware about the concept of management, management theories and application of management in libraries and information centres;
- To familiarize learners with management techniques applied to libraries and information centres and knowledge centres; and
- To acquainted learners with the newer areas and techniques of library and information centres management.

LEARNING OUTCOME

On Successful completion of the course, a learner would be acquainted with Knowledge on following aspects:

- Meaning and scope of management in daily operations of libraries and information centres and also about the long term managerial implications;
- The evolution of management theories and its application to current practice in library and information centres;
- About the strategic planning, problem-solving and decision-making skills as applied to actual library and/or information services management;
- Articulating the mission and other drivers of a library and information centre in relation to the users they served;
- Utilizing appropriate theory and skills to create an environment of excellence within the library and information services; and
- Dealing with aspects of financial planning and management for library and information centres.

COURSE PLAN

Week 1: Concept of Management, Principles and Application in L& Centres, and Management Thoughts

Week 2: Change Management and Strategic Planning

Week 3: Operations Research and Planning

Week 4: Total Quality Management and Marketing

Week 5: Governance, Organizational Structure and Different Sections of a Modern Library

Week 6: House Keeping Operations: Selection, Acquisition and Technical Processing

Week 7: House Keeping Operations: Care, Preservation and digitization

Week 8: Human Resources Planning and Development

Week 9: Managerial Roles and Team Management

Week 10: Performance Analysis and Motivation

Week 11: Self Management and Communication

Week 12: Financial Planning and Management

Week 13: Statistics, Reporting and Management Information Systems

Week 14: Space, Event and Disaster Planning

Week 15: Management of Technologies

ABOUT INSTRUCTOR

Dinesh K. Gupta is Professor of Library & Information Sc. at Vardhaman Mahaveer Open University, Kota. He served as Member of Standing Committee of IFLA Education & Training Section, 2011-2015, IFLA Management and Marketing Section, 2003-2007 and 2007-2011 and also served as the Chair of the Jury of 'IFLA International Marketing Award' in 2009-2013. He served as a Member of the Selection Committee of South Asia LIS Award, 2012-2014. He has published three IFLA books by official publisher K. G. Saur/ De Gruyter Saur (Munich, Germany).

PROF. BAGIRATHI NANDA
Prof. Bhagirathi Nanda, Professor & HOD Department of Sahitya, Shri Lal Bahadur Shastri Rastriya Sanskrit Vidyapeetha, Qutub Institutional Area, New Delhi-16

TYPE OF COURSE : PG/ACHARYA
INTENDED AUDIENCE : PG
COURSE DURATION : 15 weeks (01/08/2018 to 31/12/2018)
EXAM DATE : 04/01/2019
NO OF CREDITS : 6

PRE-REQUISITES : संस्कृतभाषां पठितुम्, अवगन्तुं, लिखितुं च सामर्थ्यम्

OBJECTIVE OF COURSE

अस्य पाठ्यपत्रस्य नाम "साहित्यशास्त्रं सौन्दर्यशास्त्रञ्च "इति। अत्र चत्वारिंशत् पाठाः सन्ति। अस्मिन् पत्रे नाट्यशास्त्रम्, दशरूपकम्, काव्यालङ्कारः, काव्यालङ्कारसूत्रवृत्तिः, काव्यादर्शः, ध्वन्यालोकः, काव्यप्रकाशः, साहित्यदर्पणम् इति एभ्यः ग्रन्थेभ्यः पाठाः संकलिताः सन्ति। तत्र नाट्यशास्त्रात् प्रथमाध्यायः, दशरूपकस्य प्रथमाध्यायः, काव्यालङ्कारस्य प्रथमपरिच्छेदः, काव्यालङ्कारसूत्रवृत्तेः प्रथमाधिकरणम्, काव्यादर्शस्य प्रथमाध्यायः, ध्वन्यालोकस्य प्रथममाननम्, काव्यप्रकाशस्य प्रथमोल्लासः, साहित्यदर्पणस्य प्रथमः परिच्छेदः च इति पत्रेऽस्मिन् विषयाः संकलिताः सन्ति। तत्रापि नाट्यशास्त्रस्य चत्वारः, दशरूपकस्य चत्वारः, काव्यालङ्कारस्य चत्वारः, काव्यालङ्कारसूत्रवृत्तेः चत्वारः, काव्यादर्शस्य अष्टौ, ध्वन्यालोकस्य अष्टौ, काव्यप्रकाशस्य चत्वारः, साहित्यदर्पणस्य च चत्वारः पाठाः पाठ्यक्रमेऽस्मिन् सन्निहिताः सन्ति। काव्यनाट्ययोः सम्यक् परिचयार्थं पाठोऽयम् उपकल्पितो वर्तते, येन नाट्यशास्त्रकाव्यशास्त्रप्रवेशार्थं

LEARNING OUTCOME

अनेन पाठ्यांशमाध्यमेन :
१.अध्येतारः साहित्यशास्त्रवाङ्मयेन सह परिचिताः भवितुमर्हन्ति |
२.साहित्यशास्त्रे वर्णितानां विविधवैज्ञानिक-कला-सौन्दर्य-पक्षाणाम् अवगाहनञ्च कर्तुं समर्थाः भविष्यन्ति |
3.पाठ्यक्रमोऽयं विविधासु प्रायोगिकपरीक्षासु साफल्यमवाप्तये च उपकारको भविष्यतीति |

COURSE PLAN

Week 01:- नाट्यशास्त्रम् (परिचयः)
Week 02:- नाट्यशास्त्रम् (प्रथमाध्यायः)
Week 03:- दशरूपकम्
Week 04:- काव्यालङ्कारः
Week 05:- काव्यालङ्कारसूत्रवृत्तिः
Week 06:- काव्यादर्शः (काव्यादर्शप्रस्तावना)
Week 07:- काव्यादर्शः (काव्यमार्गः)
Week 08:- Assignment-I
Week 09:- काव्यादर्शः (काव्यगुणाः)
Week 10:- ध्वन्यालोकः (ध्वन्यालोकस्य परिचयः)
Week 11:- ध्वन्यालोकः (काव्यात्मनोःध्वनितत्त्वस्य पारम्पर्यम्)
Week 12:- ध्वन्यालोकः (अर्थानन्त्यं संवादश्च)
Week 13:- काव्यप्रकाशः
Week 14:- साहित्यदर्पणम्
Week 15 :- Assignment-II

ABOUT INSTRUCTOR

Prof. Bhagirathi Nanda, HOD Department of Sahitya, Shri Lal Bahadur Shastri Rastriya Sanskrit Vidyapeetha, Qutub Institutional Area, New Delhi-16
Teaching Experience- 24 Years (UG & PG Level)
Email: ibnanda2@gmail.com
Mob- 9911333950, Off. 011-46060624

PORTRAIT STUDY

PROF. ZAHOOR AHMAD ZARGAR
Ex-Dean, Faculty of Fine Arts, Jamia Millia Islamia,
New Delhi

TYPE OF COURSE : UG/PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (02/07/2018 to 13/10/2018)
EXAM DATE : November/December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : **Students are required to go through the weekly planning carefully and, as far as possible, observe the works, as cited under demonstrations. All reading material are enlisted by modules in Quadrant 03. Wherever possible web links are indicated for an easy access of the learners. The course is ideally meant for PG Course in Visual Arts and for those teachers of the subject who may wish to register and audit the course for additional information.**
Apart from the above, one who has the adequate proficiency in the field of visual arts, who may neither be a student nor a teacher, are also welcome to register themselves to enhance knowledge.

OBJECTIVE OF COURSE

The objectives are to impart knowledge in the discipline at post-graduation level. Portrait painting has been one of the important aspects of painting throughout the history of art in the world. Human portrait reflects the temporary feeling which roughly demonstrates one's individual personality and manners, besides the beautiful coordination of forms, colours and variety of moods. The course manifests all these aspects gradually through its content. The main emphasis is placed on the enhancement of observation skill of the students. Care has been taken to present the content in a gradual manner to instil confidence in the minds of the students. The course has been designed to have parity with syllabi to be at par with those at national and international levels.

LEARNING OUTCOME

Students having completed the course are not only expected to be skilled in the taught visual art, but should also be able to develop an analytical mind to critically examine works of other artists, which are covered under the syllabus and also be able to understand those, which may have been suggested additionally in the assignment sections.

COURSE PLAN

Week 01:- M1. The Head Learning to See, M2.Seeing and Interpreting Shapes, M3.Scribbling

Week 02:- M4.Sketching, M5.Structure of the Skull Drawing the Basic Shapes of the Head, M6.Positioning the Facial Features & Line of Expression

Week 03:- M7.The Head from Different Viewpoint and Major Planes of the Head, M8.Making the Head Look Three Dimensional and Features in an Inverted Triangle, M9.Using Tone to Create Three Dimension

Week 04:- M10.Measurement and Proportion, M11.The Facial Features-Eyes, M12.Nose and Ears

Week 05:- M13.Mouth and Chin, M14.Hair, M15.Method and Material

Week 06:- M16.Working with Complementary Color, M17.Warm & Cool Colors, M18.Light and Dark Colors

Week 07:- Assignment Week

Week 08:- M19.Quick Portrait Sketches in Pencil, M20.Portrait in Charcoal (Imagination), M21.Portrait in Charcoal (Live)

Week 09:- M22.Wet on Wet, M23.Allaprima, M24.Portrait in Dry Pastel (Imagination)

Week 10:- M25.Portrait in Dry Pastel (Live Model), M26.Portrait in Oil Pastel, M27.Portrait in Oil Paint (Realistic Portrait L)

Week 11:- M28.Portrait in Oil Paint (Impressionist Portrait L), M29.Portrait in Gouache

Week 12:- M30.Portrait in Acrylic, M31.Portrait in Mixed Media

Week 13:- M32.Glazing, M33.Final Touching

Week 14:- M34.Final Portrait (Part_1), M35.Final Portrait (Part_2)

Week 15:- Final Exam

ABOUT INSTRUCTOR

Prof. Zargar Zahoor was born in the blessed vale of Kashmir. Zahoor's talent manifested itself when he was still a boy, and by 1971 he decided to be an artist. In that year he was admitted to the prestigious M.S. University of Baroda. Prodigiously gifted as indeed he was, Zahoor had the fortune to work under the stalwarts of Indian art in Baroda including Ghulam Mohammad Sheikh, Jeram Patel, K.G. Subramanyam and others.

He is recipient of innumerable national and international awards and honours, Prof. Zahoor joined Jamia Millia Islamia, New Delhi in 1985 and rendered his services with full devotion till his retirement as Professor and Head of the Department of Applied Art in the year 2015. In the enormous range of his work and in its intrinsic qualities, Prof. Zargar Zahoor has, beyond doubt, achieved mastery in Landscape Painting and Portrait Painting as well as in Applied Art.

He has designed many books and given various special lectures at many places in India and abroad. Prof. Zahoor has to his credit many solo exhibitions and group shows. He was invited to many workshops as expert for awards and scholarships. His collection of paintings is spread all around the world.

In fact there is a strong consistency about the evolution of his work throughout his unremitting painting life. As a painter he is happy with the fleeting aspect of weather, avalanches and deluges. Of course they are not the only aspects of nature with which he is happy, nor is he obsessed with them. In fact, his refined brushstrokes can magically convey in paint a sense of enchanted serenity and tranquility at large. His scrutiny of nature composes a picture almost from the start but he could grow trees and rocks within. His innovation in technique enables him to create brilliant light by a harmony of light tones instead of by a contrast of light with dark tones. It is a simple impressionistic innovation but a revolutionary one.

DR. SUNDAR NARAYAN JHA
Assistant Professor, Department of Veda, Shri Lal Bahadur Shastri Rastriya Sanskrit Vidyapeetha, Qutub Institutional Area, New Delhi-16

TYPE OF COURSE : PG/ACHARYA
INTENDED AUDIENCE : UG/PG/Diploma

COURSE DURATION : 15 weeks (01/08/2018 to 13/10/2018)
EXAM DATE : 10/12/2018
NO OF CREDITS : 6

PRE-REQUISITES : अत्र पाठ्यक्रमे सर्वेषामपि अवकाशोऽस्ति । वैदिकसाहित्यानामवगाहनाय ये प्रयत्नशीलाः सन्ति, ये च वेदज्ञानपिपासवः, संस्कृतानुरागिणः, एम् ए विकल्पाधारित क्रेडिट् प्रणाल्यां क्रेडिट प्राप्तुमिच्छुकाश्च सन्ति ते सर्वे अत्र प्रवेष्टुमर्हाः | अन्ये ये खलु सेवानिवृत्ताः तेप्यत्र प्रवेशं लब्धुमर्हन्ति । अस्मिन् पाठ्यक्रमे सर्वेऽपि पाठाः संस्कृतभाषामाध्यमेनैव पाठयिष्यन्ते। तस्मात् कारणात् संस्कृतं ये अवगच्छन्ति त एवात्र प्रवेशं स्वीकुर्वन्तु । अत्र सरलया संस्कृतगिरा एव पाठयितुं विद्वद्भिः प्रयासः कृतोऽस्ति इति तु महान् सन्तोषस्य विषयः ।

OBJECTIVE OF COURSE

वैदिकभाषा-वाङ्मयञ्च इति शीर्षकान्विते पाठ्यक्रमेऽस्मिन् भवन्तः ऋग्वेद-यजुर्वेद-सामवेद-अथर्ववेद-ब्राह्मण-उपनिषद्-निरुक्त-प्रातिशाख्यादीन् विषयान् पठिष्यन्ति | विदन्त्येव भवन्तो यत् विश्वस्य समस्तेष्वपि वाङ्मयेषु वैदिकवाङ्मयं समुद्रवदगाधम् अपारं गम्भीरञ्चास्ति | अत्र समस्तमपि ज्ञानविज्ञानात्मकं सूत्रं क्वचित् सूक्ष्मेन क्वचिच्च स्थूलरूपेण वर्णितमस्ति, अत एवोक्तं भगवता मनुना "सर्वज्ञानमयो हि सः" इति | अत्र श्रेयःशास्त्रं प्रेयःशास्त्रञ्चोभयं समभावेन समेधितमस्ति अतो वेदानामध्ययनेन ऐहिकानां पारलौकिकानाञ्च विषयाणां सम्यगवबोधो जायते | "यत्र विश्वं भवत्येकनीडम्" इत्युद्घोषो वर्तते वेदस्य तस्मात् समस्तमपि विश्वमेकीकर्तुं वेदानामध्ययनमनिवार्यमस्ति | अत्र वैयक्तिक-पारिवारिक-सामाजिक-नैतिक-चारित्रिक-आर्थिक-वैज्ञानिक-भौतिक-दैविक-आध्यात्मिकोन्नतेश्च सर्वाण्यपि आवश्यकानि सूत्राणि, विविधानि च साधनानि सुवर्णितानि सन्ति | विश्वबन्धुत्वस्य भावना यथाऽत्र वर्णिता न तथाऽन्यत्र क्वापि लभ्यते |
अतः स्पष्टमेवास्ति यद्वेदानामध्ययनेन सर्वविधं कल्याणं सर्वविधञ्च ज्ञानं प्राप्तं भवति | यो वेदं जानाति स एव सम्यक्तया राजकार्यादिकमपि सञ्चालयितुं समर्थो भवति | तदुक्तं मनुना- सेनापत्यञ्च राज्यञ्च दण्डनेतृत्वमेव च | सर्वलोकाधिपत्यञ्च सर्वं वेदविदर्हति ||

LEARNING OUTCOME

अनेन पाठ्यांशमाध्यमेन :
1. अध्येतारः वैदिकवाङ्मयेन सह परिचिताः भवितुमर्हन्ति |
2. वेदेषु वर्णितानां विविधवैज्ञानिकपक्षाणाम् अवगाहनञ्च कर्तुं समर्थाः भविष्यन्ति |
3. पाठ्यक्रमोऽयं विविधासु प्रायोगिकपरीक्षासु साफल्यमवाप्तये च उपकारको भविष्यतीति |

COURSE PLAN

SAN_C1_M1_W1_Vऋग्वेदस्य परिचयः अश्विनोः सूक्तस्य आदितः षण्मन्त्रं यावत्
SAN_C1_M2_W1_Vअश्विनोः सूक्तस्य सप्तममन्त्रतः पञ्चविंशतिममन्त्रं यावत्
SAN_C1_M3_W1_Vइन्द्रसूक्तम्
SAN_C1_M4_W2_Vविश्वामित्रनदीसंवादसूक्तम्
SAN_C1_M5_W2_Vबृहस्पतिसूक्तम्, उषःसूक्तञ्च
SAN_C1_M6_W2_Vपूष्णः सूक्तम्, वरुणसूक्तञ्च
SAN_C1_M7_W3_Vविश्वेषां देवानां सूक्तम्
SAN_C1_M8_W3_Vकितवसूक्तम्
SAN_C1_M9_W3_Vपर्जन्यसूक्तम्
SAN_C1_M10_W4_Vवास्तोष्पतिसूक्तम्
SAN_C1_M11_W4_Vसरस्वतीसूक्तम्
SAN_C1_M12_W4_Vमित्रावरुणसूक्तम्
SAN_C1_M13_W5_Vमण्डूकसूक्तम्
SAN_C1_M14_W5_Vयमसूक्तम्
SAN_C1_M15_W5_Vयजुर्वेदस्य परिचयः
SAN_C1_M16_W6_Vशिवसंकल्पसूक्तोक्तमन्त्राणां पाठः
SAN_C1_M17_W6_Vरुद्रसूक्तोक्तमन्त्राणां पाठः
SAN_C1_M18_W6_Vउपनिषदां परिचयः
SAN_C1_M19_W7_Vयजुर्वेदीयब्राह्मण-ग्रन्थानां परिचयः
SAN_C1_M20_W7_Vविश्वरूपवधाख्यायिका
SAN_C1_M21_W7_Vईशावास्योपनिषद्
SAN_C1_M22_W9_Vतैतिरीयोपनिषद्
SAN_C1_M23_W9_Vभार्गवीवारुणीविद्या
SAN_C1_M24_W9_Vनिरुक्तशास्त्रस्य सामान्यपरिचयः
SAN_C1_M25_W10_Vनिरुक्तस्य प्रथमोऽध्यायः
SAN_C1_M26_W10_Vनिरुक्तस्य द्वितीयोऽध्यायः
SAN_C1_M27_W10_Vनिरुक्तस्य सप्तमोऽध्यायः
SAN_C1_M28_W11_Vसामवेदस्य परिचयः
SAN_C1_M29_W11_Vसामवेदस्य पवमानकाण्डस्य प्रथमा दशती
SAN_C1_M30_W11_Vसामवेदस्य पवमानकाण्डस्य द्वितीया दशती
SAN_C1_M31_W12_Vअथर्ववेदस्य परिचयः
SAN_C1_M32_W12_Vअथर्ववेदीया छन्दोयोजना
SAN_C1_M33_W12_Vअथर्ववेदे अलङ्काराः
SAN_C1_M34_W12_Vअथर्ववेदीयकल्पसूत्राणि
SAN_C1_M35_W13_Vअथर्ववेदे चिकित्सा
SAN_C1_M36_W13_Vअथर्ववेदीयोपनिषदः
SAN_C1_M37_W13_Vअथर्ववेदस्य ब्राह्मणग्रन्थः
SAN_C1_M38_W13_Vअथर्ववेद भाष्यम्
SAN_C1_M39_W14_Vतैत्तिरीयप्रातिशाख्यं सामान्यवर्णव्यवस्था
SAN_C1_M40_W14_Vतैत्तिरीयप्रातिशाख्यं विशेषवर्णव्यवस्था
W15Assignment

ABOUT INSTRUCTOR

Dr.Sundar Narayan Jha, is working as Assistant Professor, Department of Veda, Shri Lal Bahadur Shastri Rastriya Sanskrit Vidyapeetha, Qutub Institutional Area, New Delhi-16 science 2007. He has received his Bachelors and post graduate degree from the kameshwar Singh Darbhanga Sanskrit University, Darbhanga, Bihar in Shukla Yajurveda. He received Ph.D. degree with the title पुरुषमेधयज्ञस्य समीक्षात्मकमध्ययनम् from the Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeerha, New Delhi. He is also a D.Litt. from kameshwar Singh Darbhanga Sanskrit University, Darbhanga, Bihar. His research interests are in the area of Vedic studies. He has published 90 research articles and 07 books in the field of Vedic studies and Sanskrit.

ACCESS TO JUSTICE

DR BHARTI YADAV
Assistant Professor , National Law University Delhi

TYPE OF COURSE : PG/Certificate
INTENDED AUDIENCE : PG/Certificate

COURSE DURATION : 15 weeks (1st Aug to 31st Dec, 2018)
EXAM DATE : 31 December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Preliminary knowledge about Human Rights
Preliminary knowledge about Fundamental Rights
Preliminary knowledge about role of equal access to justice in growth and development of a country and its people.

OBJECTIVE OF COURSE

- Comprehend the historical background of access to justice developments
- Understand different forums of justice administration system in India
- Learn general laws ensuring equal access to justice
- Understand special laws ensuring equal access to justice
- Know equal access to justice provisions for vulnerable group
- Explore role of community participation in promoting equal access to justice
- Know scope of law school involvement in strengthening equal access to justice

LEARNING OUTCOME

- Comprehend the concept and historical background of access to justice
- Understand different forums of justice administration system in India
- Learn general & special laws ensuring equal access to justice
- Know equal access to justice provisions for vulnerable group
- Explore role of community participation and law schools in promoting equal access to justice

COURSE PLAN

Week-1: Concept & Historical Background of Access to Justice

Week-2: Formal Access to Justice And Impediments to Access to Justice

Week-3: Access to Justice and Alternate Dispute Resolution

Week- 4: General Law for Access to Justice

Week-5: Special Law for Access to Justice

Week-6: Access to Speedy and Amicable Justice

Week-7: Access to Justice and Administrative Adjudication

Week-8: REVISION AND ASSIGNMENT WEEK

Week-9: Access to Justice for Women

Week-10: Access to Justice for Children

Week-11: Access to Justice for Senior Citizens, BC,SC/ST and Disables

Week-12: Access to Justice for Stakeholders of Justice Administration System

Week-13: Access to Justice in commercial Transactions

Week-14: Civil Society role in Promoting Access to Justice

Week-15: REVISION, ASSESSMENT and Evaluation

ABOUT INSTRUCTOR

Dr Bharti Yadav(B.A., LL.B., LLM., Ph.D., NET) has been a faculty at National Law University Delhi since 2012. Her areas of specialisation are Criminal Law, Research Methodology, Legal Aid and Clinical Legal Education. She has been a resource person at Haryana Institute of Public Administration and Gyan Darshan TV channel. She has twice offered seminar courses on criminal law at University of Wurzburg, Germany. She was invited by Justice Academy, Ankara, Turkey for addressing Judges and advocates on art of cross examination. She presided sessions on promoting justice education in 8th and 9th Global Alliance of Justice Education conference.

ADVANCED CONSTITUTIONAL LAW-I

PROF. (DR.) ANUPAMA GOEL
Professor of Law, National Law University, Delhi

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 15 weeks (1/8/2018 to 31/12/2018)
EXAM DATE : 10/12/2018
NO OF CREDITS : 4

PRE-REQUISITES : **For pursuing this course, students are required to be familiar with the following concepts:**
Preliminary knowledge and interest about law
Preliminary knowledge about constitution and its significance
Preliminary knowledge about working of the government, political scenario
Keenness to know regarding the relationship of the democratically elected government and the written constitution

OBJECTIVE OF COURSE

This Course deals with Fundamentals and Structures of Indian Government; it is specifically designed to give a complete overview and in-depth knowledge regarding the concerns and challenges faced by the modern constitutional governments and elaborately discusses the structure, procedures, powers and duties of governmental institutions. The Course analyses in detail the basic functions of a written constitution. Also, the theories and concepts relating to constitutionalism, federalism, judicial review, constitutional interpretation, etc. are reviewed. All the discussions in the Course are updated according to the latest position and the modifications made by judicial intervention

LEARNING OUTCOME

After completing the MOOC course , you shall be able to

- To understand the basic concepts of democracy, republicanism, constitutionalism and to know about the constitutional theories, virtues and constitutional interpretation
- To study and analyse the quasi-federal nature of Indian Constitution and the basic function of a written constitution regarding the allocation of State power, the functions, powers and limits of the organs of state
- To analyse elaborately regarding the emergency and amendment procedures; the need for granting of special status or special provisions to some states
- To know about Panchayats, Municipalities, Scheduled and Tribal areas

COURSE PLAN

FUNDAMENTALS & STRUCTURES OF INDIAN GOVERNMENT

WEEK-01 : Constitutional History- Making of Indian Constitution, Democratic and Republican nature of Government

WEEK-02 : Preamble, Constitutional Interpretation and Constitutionalism, Separation of Powers, Judicial Review

WEEK-03 : Union and its Territorym, Citizenship, Meaning and Concept of 'State'

WEEK-04 : Parliament and State Legislatures, Parliamentary Practices and Procedures, Anti Defection Law and Schedule X, Parliamentary Privileges

WEEK-05 : Legislative Relations between Union and States, Administrative and Financial Relations between Union and States

WEEK-06 : Executive' and Protection to Civil Servants, Public Service Commissions and Tribunals

WEEK-07 : 'Judiciary' under the Indian Constitution(Powers, Jurisdiction and Procedure), Judicial Independence

WEEK-08 : Revision and Assessment

WEEK-09 : Judicial Appointments and Accountability-I, Judicial Appointments and Accountability-II- NJAC Judgment and Way Forward

WEEK-10 : Panchayats, Municipalities and Co-Operative Societies, Elections in India

WEEK-11 : Emergency Provisions, Amendment of the Constitution and Doctrine of Basic Structure

WEEK-12 : Scheduled and Tribal Areas, Granting Special Status (J & K) and Special Provisions to States

WEEK-13 : Official Language, Inter-State Trade and Commerce

WEEK-14 : Special Provisions relating to Union Territories National Capital Territory of Delhi

WEEK-15 : Revision, Assessment and Evaluation

ABOUT INSTRUCTOR

Dr. Anupama Goel, Professor of law in National Law University, Delhi has been teaching law since 1996. She specializes in Constitutional Law, International Law, Human Rights, Tort Law and Consumer Law and has taught various subjects to undergraduate as well as post graduate students including Ph.D. students. Her doctoral thesis was titled “Social Justice and its Implementation with Special Reference to the State of Punjab,” an elaborate theoretical as well as empirical study, was hugely acclaimed by ICCSR. She has published various papers on different areas of law in prestigious law journals.

ADHUNIK KAVYA : KHAND 2

PROF. DEO SHANKAR NAVIN
Professor, Centre of Indian Languages, JNU,
New Delhi

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (21st Aug to 04th Dec, 2018)
EXAM DATE : As per UGC decision
NO OF CREDITS : 4

PRE-REQUISITES : Graduate

OBJECTIVE OF COURSE

हिन्दी के प्रमुख प्रश्नपत्र आधुनिक कविता खण्ड 2 में कोशिश रहेगी कि आधुनिक कविता की प्रवृत्तिगत विशेषताओं को रेखांकित कर शिक्षार्थियों को उस दिशा में विशेष अध्ययन के लिए उन्मुख कर दिया जाए।

LEARNING OUTCOME

- आधुनिक कविता के प्रमुख कवियों के काव्य-कौशल का साक्षात्कार करेंगे।
- युगीन परिस्थितियों में छायावादोत्तर कवि के स्वर के स्वरूप को समझेंगे।
- छायावादोत्तर राष्ट्रीय काव्यधारा के प्रमुख कवियों के काव्य लेखन से परिचित होंगे।
- समकालीन समय के प्रमुख कवियों तथा उनकी रचनाओं का आप साक्षात्कार करेंगे।

COURSE PLAN

Week 1:

Janshangharsh Aur Kavita, Nagarjun Ka Kavya-Kathay, Nagarjun Ki Kavya-Bhasha

Week 2:

Nagarjun Ki Kavitaon Ka Paath Vishleshan, Hindi Alochana Main Nagarjun Ka Mulyankan, Nagarjun Aur Shamsher

Week 3:

Kaviyon Ke Kavi Shamsher, Shamsher Ki Kavitaon Main Prem Aur Saundarya

Week 4:

Shamsher Ki Kavitaon Ka Paath Vishleshan-Bail,· Shamsher Ki Kavitaon Ka Paath Vishleshan-Tuti Huyee Bikhri Huyee, Hindi Alochna Main Shamsher Ka Mulyankan

Week 5

Trilochan Shastri Ki Kavita Ka Vaishishtya, Kedarnath Agrawal Ki Kavita, Rashtriya Kavyadhara Ke Pramukh Kavi

Week 6

Khabar Aur Kavita : Raguveer Sahay, Raguveer Sahay Ka Kavya-Kathay

Week 7:

Raguveer Sahay Ki Kavya Bhasha, Raguveer Sahay Ki Kavitaon Ka Paath Vishleshan,Hindi Alochna Main Raghuveer Sahay Ka Mulyankan

Week 8

Nayi Kavita Aur Shreekant Verma, Magadh Mithak Aur Yatharth, Magadh Main Rajneetik Chetna

Week 9

Magadh Ki Kavya Bhasha, Rajkamal Chaudhary Ki Kavitaon Ka Vaishishathay, Sathottari Hindi Kavita Aur Dhumil

Week 10

Dhumil Ki Kavitaon Main Vidroh, Dhumil Ki Kavitaon Ka Paath Vishleshan, Hindi Alochna Main Dhumil Ka Mulyankan

Week 11

Samkaleen Kavita Aur Kuwar Narayan, Kuwar Narayan Ka Kavya Kathay, Kuwar Narayan Ki Kavya Bhasha

Week 12

Kuwar Narayan Ki Kavitaon Ka Paath Vishleshan, Hindi Alochna Main Kuwar Narayan Ka Mulyankan

Week 13

Samkaleen Kavita Par Dhumil Ka Prabhav, Nayi Kavita Aur Kedarnath Singh

Week 14

Samkaleen Kavita Aur Jantantr, Samkaleen Kavita Ke Mulyankan Ki Samasyayen, Vyavshtha Se Vidroh Aur Aaj Ki Kavita

Week 15

Samkalin Samay Ke Vishishtha Kavi-1, Samkalin Samay Ke Vishishtha Kavi-2

ABOUT INSTRUCTOR

Deo shankar Navin, <https://deoshankarn.wixsite.com/deoshankar> working as Professor with Center of Indian Languages, JNU New Delhi, with more than 14 Years academic Experiences. Recipient of many awards -- Best Young Poet award by Hindi Akademi, Delhi in 1991, Uttar Pradesh Hindi Sansthan Sauhard Samman, 2013, DBD Koshi Samman-2015, Vidyapati Samman-2017, Bihar Govtt. In his credit, 46 authored, Compiled, and translated Books, more than thirty chapter writings, around 300 Articles are published in both the languages--Hindi and Maithili in distinguished Books and Journals; while dozens of pieces are translated and published in many Indian and foreign Languages.

BIOSTATISTICS

BHASWATI GANGULI
Professor, Department of Statistics, University of Calcutta

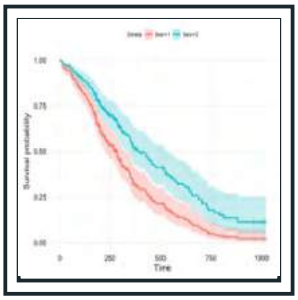
TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 14 weeks (13/8/2018 - 16/11/2018)
EXAM DATE : 20/11/2018
NO OF CREDITS : 4

PRE-REQUISITES : Basic knowledge of statistical inference

OBJECTIVE OF COURSE

The purpose of the course is to familiarise students with the tools and methods required for a biostatistician. The course focuses on three areas viz. survival analysis, clinical trials and epidemiology. Basic concepts os survival analysis are defined and an introduction to parametric and Kaplan Meier estimation of the survival function provided . The Cox proportional hazards model, AFT models, frailty and competing risks are also discussed. Basic clinical trial design and variants such as the group sequential schemes are discussed. An introduction to alternative means for design and analysis of epidemiologic studies is provided. The course is supplemented by examples using R.



LEARNING OUTCOME

Tools and methods for survival analysis, clinical trials and epidemiology with implementation in R.

COURSE PLAN

Basic concepts of survival analysis
Parametric survival models
Actuarial estimation
Kaplan-Meier estimators I
Kaplan Meier estimators II
Nelson Aalen estimators
Equality of survival functions
Mantel-Haenszl estimators
Cox's proportional hazards model
Estimation and inference for Cox's PH model
Partial Likelihood & Cox Proportional Hazard Model
Diagnostics for Cox's PH model
The Accelerated Failure Time model
Competing Risks model
Introduction to Clinical Trials
Sample size determination for clinical trials
Randomization
Group sequential design I
Group sequential design II
Group sequential design III
MIDTERM EXAM
Play the Winner rule
Randomised Play the Winner rule
Crossover design
Introduction to epidemiology
Disease Frequency and Association I
Disease Frequency and Association II
Disease Frequency and Association III
Observational studies
Analytical studies
Confounding
Odds Ratio
Cohort Studies I
Cohort Studies II
Case Control Studies I
Case Control Studies II
Stratified Analysis
Matched Analysis I
Matched Analysis II

ABOUT INSTRUCTOR

Prof. Bhaswati Ganguli is a faculty member of the Department of Statistics at Calcutta University.
Prof Ganguli received her Ph.D. in Biostatistics from Harvard University and her research interests include smoothing, mixed models and spatial data analysis. She is an author of the R package Semi Par and was the Principal Investigator for the e PG Pathshala project in Statistics of the MHRD.

BIOMOLECULES : STRUCTURE, FUNCTION IN HEALTH AND DISEASE

DR. MOGANTY R RAJESWARI
Professor, Dept. Of Biochemistry, All India Institute Of Medical Sciences,
New Delhi

TYPE OF COURSE : PG

INTENDED AUDIENCE : M.Sc. in any of these subjects Biochemistry/Biotechnology/Life Sciences/Environmental Sciences / Med. Biochemistry/ Microbiology/B.Sc /Biophysics/Zoology/Bioinformatics etc.

COURSE DURATION : 15 weeks (14th Aug, 2018 to 12th Dec, 2018)

EXAM DATE : 3rd January,2019

NO OF CREDITS : 4

PRE-REQUISITES : Student eligibility- Interactions, working on assignments and basic educational qualification or prior knowledge required for doing the course- M.Sc. in any of these subjects Biochemistry/Biotechnology/Life Sciences/Environmental Sciences / Med. Biochemistry/ Microbiology/B.Sc /Biophysics/Zoology/Bioinformatics etc.

OBJECTIVE OF COURSE

- This course On Biomolecules is one of the basic course for all PG students of Biological sciences.
- All PG 1st Year students or in their 1st semester need to do this course
- This course is designed in view of all PG Degree students of any Indian University.
- This will help in understanding of other courses (papers) that they will do in the subsequent semesters.

LEARNING OUTCOME

This course is essential and will help in understanding of other courses (papers) that they will do in the subsequent semesters.

COURSE PLAN

Week 1 : Chemical bonds-covalent and non-covalent types of Bonds and Bond energies,Bond Angles etc, Water-The molecule of life, Aqueous Solution,Acids & Bases,Measurements of pH, Henderson Haselbatch equation,Titration Curve & pK values,Buffers

Week 2 : Amino acids, chirality, peptide bond and polypeptides, Structural levels of proteins and Stabilizing forces, Conformational properties of polypeptides and Ramachandran plot

Week 3 : Turns, loops, Super secondary structures, motifs and domains in proteins, Structures and function of Fibrous Proteins, Structure and function of Actin and myosins

Week 4 : Hemoglobin, Myoglobin and Oxygen binding, Role of Protein Structure Health and Disease, Assessment 1

Week 5 : Methods of Protein Separation and purification, Protein sequencing

Week 6 : Methods of structure determination of proteins : X-ray, NMR, CD etc, Clinical Proteomics

Week 7 : Protein Structure-based Drug Designing, Protein-Ligand(Small Molecules including drugs) interaction

Week 8 : Components of Nucleic Acid, Conformational parameters of Nucleic acids and DNA double helix, DNA Double Helix and Polymorphism

Week 9 : Circular and Supercoil DNA, Different types and structures of RNA

Week 10 : Interactions of small molecules (ions, drugs) with DNA, DNA Structure in health and disease

Week 11 : DNA-Protein interactions, Assessment 2

Week 12 : Introduction to Carbohydrates, Structures and conformations of polysaccharide cellulose, amylase, chitin, carbohydrate conjugates, Saturated and unsaturated fatty acids, Nomenclature of fatty acids and Essential and non-essential fatty acids

Week 13 : Glycoproteins and proteoglycons, Classification of Lipids: simple and compound lipids, phospholipids, Cholesterol, Micelles and Liposomes: Applications in biology and medicine

Week 14 : Lipids: extraction, separation and analysis, Components and architecture of Cell membrane, Various membrane models including Fluid-mosaic model

Week 15 : Cholesterol and its role in health and disease, Overview of Biomolecules , their Structure & Function, Revision of the course, Final Assessment

ABOUT INSTRUCTOR

Dr. Moganty R Rajeswari, Professor, Dept. Of Biochemistry in All India Institute Of Medical Sciences New Delhi-110029.She has 27 years of teaching and 33 She was awarded the Post – Doctoral Fellowship by the French Government in “Molecular Biology” also awarded the French Govt. scholarship through Ministry of Education under the head “Molecular Biology” in 1984. Dr Rajeswari is a Expert Committee Member of University Grants Commission , for various XIth plan, committee etc.

She is the Member of Project Review committee of Neurology & Neurochemistry division, ICMR, New Delhi

She was Assistant Editor of the" Indian J. Clinical Biochem" 2000-2004. Review research papers which are submitted for publication in International journals----Journal of Molecular Structure, At Present she is the president of DNA Society.

CITY AND METROPOLITAN PLANNING

PROF. DR. SANJUKKTA BHADURI
Dean (Research) and Professor, Department of Urban Planning.
School of Planning and Architecture, Delhi

TYPE OF COURSE : PG

INTENDED AUDIENCE : Graduate from any discipline, post graduate students of any discipline, professional from any sector, academicians, researchers and policy/decision makers and anybody who is interested in the subject.

COURSE DURATION : 15 weeks (14th Aug to 7th Dec 2018)

EXAM DATE : 18th Dec 2018

NO OF CREDITS : 4

PRE-REQUISITES : Graduate from any discipline, post graduate students of any discipline, professional from any sector, academicians, researchers and policy/decision makers and anybody who is interested in the subject.

OBJECTIVE OF COURSE

The objective of the course is to impart knowledge related to planning of urban settlements. Considering the scale, typology hierarchy and the complexity pertaining to growth and development of Indian cities and the present inadequate capacity for planning the cities, this course would impart knowledge related to urbanization, city region linkages, planning history, theory, techniques of planning, concepts and approaches, processes, planning and development policies, types of plans, implementation of plans, projectization of these plans and case studies supplementing various aspects.

LEARNING OUTCOME

Upon Completion of this course, students will:

1. Understand the dichotomy between the urban and natural environment and resources
2. Understand the significance of city-region linkages and inter-dependence.
3. Understand the complex nature of issues, process specifically at metro and mega cities scale.
4. Understand how to develop indicators to measure various environmental, social and economic qualities of urban areas.
5. Be familiar with concepts such as climate change, green infrastructure, transit oriented development
6. Be familiar with approaches to human settlement planning
7. Be familiar with major urban policies and programmes at various levels and how they impact a city's development.
8. Be familiar with acts and legal tools relevant to city planning.
9. Be familiar with finance and management aspects of urban development.

COURSE PLAN

Week 01:- Definition and characteristics of Urban areas (Part I and II)

Week 02:- Implications of urbanization in India (Part I and II)

Week 03:- City in context of the Region (Part I and II)

Week 04:- Evolution of Cities (Part I, II and III)

Week 05:- Evolution of Cities (Part IV and V)

Week 06: New towns, counter magnets and satellite towns (Part I,II and III)

Week 07:- Peri urbanization, Inner cities

Week 08:- History of town Planning (Part I and II)

Week 09:- Planning Theories and Models (Part I,II and III)

Week 10:- Planning Approaches and Techniques (Part I,II and III)

Week 11:- Hierarchy of Plans – Regional plan and Master plan (Part I,II and III)

Week 12:- Hierarchy of Plans – Zonal plan, local area plan and layout plan (Part I,II)

Week 13:- Planning legislation – Acts, Policies, Missions and Schemes

Week 14:- Management of urban development

Week 15:- Financing Urban Development in India (Part I and II)

ABOUT INSTRUCTOR

Prof. Dr. Sanjukkta Bhaduri is a full time Professor of Urban Planning at SPA, New Delhi. She has done Bachelor in Architecture from Jadavpur University (1983), Masters in City Planning from I.I.T Kharagpur (1985) and Ph.D from SPA, New Delhi (2003). She has 33 years of professional, research and teaching experience in the fields of Urban Planning, Environmental Planning; the areas of special interest are Smart cities, Sustainable Development of settlements, Participatory Planning, Social aspects related to Planning Disaster Management, Urban Environmental Management, Assessment of Environmental Impacts, Energy and Urban Development, Environmental Quality of Human Settlements. She has worked in SPA, Delhi for 30 years in various positions.

CORPORATE LAW

PROF. (DR.) HARPREET KAUR
Professor of Law,
National Law University Delhi

TYPE OF COURSE : UG/PG/Diploma/Certificate
INTENDED AUDIENCE : UG/PG/Diploma/Certificate

COURSE DURATION : 15 weeks (1st Aug to 31st Dec, 2018)
EXAM DATE : November/ December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : For LL.M students, it will be mandatory to have Bachelors' degree in law. Other professionals should be enrolled in their professional courses and will be presumed to meet requirements of admission to their professional degrees. Other working professionals should have at least bachelors' degree in any discipline and must have Preliminary knowledge about business and business organisations and role of business in economic development of the country

OBJECTIVE OF COURSE

India has witnessed tremendous growth in the corporate sector in the last few decades. In view of this, it becomes important for students of law and commerce to understand the legal dynamics of the corporate sector. The course covers all important recent developments in this area. The course of Corporate Law has been specifically designed to provide not only an overview but also an in-depth knowledge about incorporation, raising capital by companies, borrowings and investments by companies, foreign direct investment in Indian companies, corporate restructuring, corporate insolvency and other related important issues.

LEARNING OUTCOME

- In-depth understanding about different business organisations and comprehend importance of company form of business organisation with its incorporation and administration
- Learning about raising of capital by companies in compliance with SEBI regulations
- Comprehension of corporate management and governance
- Learning legal aspects of accounts and audit of companies with role of auditors
- Understanding different restructuring methods for companies
- Understanding business rescue proceedings and compromises
- Knowledge about investigations and adjudicatory machinery of companies
- Knowledge about remedies available to shareholders and others
- Understanding corporate insolvency

COURSE PLAN

Week 1- Business organizations, Corporate personality and Registration of companies

Week 2- Companies: Kinds, meetings and other applicable laws

Week 3- Raising of Capital by companies

Week 4- SEBI- Issue of capital and Disclosure Requirements

Week 5- Borrowings and investments by companies

Week 6- Corporate Management and Governance: Part One

Week 7- Corporate Management and Governance: Part Two

Week 8- REVISION AND ASSIGNMENT WEEK ONE

Week 9- Accounts of companies

Week 10- Auditing of companies

Week 11- Business Rescue Proceedings and Compromises

Week 12- Investigations and Adjudicatory Machinery

Week 13- Remedies to shareholders and others

Week 14- Corporate Insolvency and Bankruptcy

Week 15- REVISION, ASSESSMENT and Evaluation

ABOUT INSTRUCTOR

Prof. (Dr.) Harpreet Kaur joined National Law University, Delhi in 2011. She is currently Professor of Law at NLU Delhi, as well as the faculty-in-charge for certificate and diploma courses on Competition Policy and Law. She teaches Corporate Law, Securities Regulations and Competition Law. She has 16 years of regular teaching experience in her specialisation in Commercial Laws.

She is a Fulbright Scholar in Residence and was selected for the International Visitor Leadership Programme on Competition Law sponsored by US State Government and visited USA for three weeks exchange programme in 2015. She has served as Indian Council for Cultural Relations Chair Professor of Indian Studies at Leibniz University, Hannover, Germany from Oct 2015 till April 2016. She is a visiting professor at Faculty of Law, University of Bergen, Norway.

CREATIVE PAINTING

DR. ALKA CHADHA
Astt. Prof., Dept. of Visual Art: Drawing & Painting, RG (PG) College, Meerut

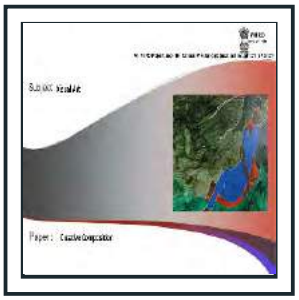
TYPE OF COURSE : UG/PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (2nd July to 13th Oct, 2018)
EXAM DATE : 8th to 13th Oct. 2018
NO OF CREDITS : 4

PRE-REQUISITES : **Knowledge of Technical Theory of Composition and how to compose the creative composition by using the technical base like methods, process and styles in which a creative composition can be made.**

OBJECTIVE OF COURSE

With this paper of Visual Arts learner will be able to utilize techniques of composition in a creative manner.



LEARNING OUTCOME

The learners will learn about the techniques of composition and visual elements of art and how they contribute in making a painting more appealing. The learner will also learn how to compose the good composition.
Further on, the modules include technical base like methods, process and styles in which a creative composition can be made. Learning to express and communicate, one can experiment using various styles like 2D, 3D, realistic, traditional, cubistic, expressionistic, surrealist, decorative, constructive, minimal approach, symbolic, thumb nail, illustrative, idealistic, free and then sketching.

COURSE PLAN

Week 01:- 1. Meaning and Technical Theory of Composition Rule of Thirds, 2. Focal Points in Composition,3. Rule of Line in Composition

Week 02:- 4. Rule of Space in Composition, 5. Rule of Form, Shape in Composition, 6. Importance of Colors in Composition

Week 03:- 7. Rule of Harmony in Composition, 8. Rule of Rhythms in Composition, 9. Rule of Textures in Composition

Week 04:- 10. Rule of Contrast, 11. Balance in Composition, 12. Movement in Composition

Week 05:- 13. Rule of Odds in Composition, 14. Importance of subject, idea and feeling in painting, 15. Importance of imagination expression in Composition

Week 06:- 16. Role of Medium, Method, Process, Technique and Style in Composition, 17. Expression and Communication Using the Visual Arts

Week 07 :- Assignment Week

Week 08:- 18. 2-dimensional composition, 19. 3-dimensional composition, 20. Traditional Composition

Week 09:- 21. Realistic Composition, Part 1, 22. Realistic Composition, Part 2, 23. Cubistic composition

Week 10:- 24. Expressionistic Composition, 25. Surrealistic composition, 26. Decorative composition

Week 11:- 27. Constructive Composition, 28. Minimal composition, 29. Symbolic Composition

Week 12:- 30. Thumbnail Composition, 31. Illustrative Composition

Week 13:- 32. Idealistic Composition, part 1, 33. Idealistic Composition, part 2

Week 14:- 34. Free and Creative Composition, 35. Outdoor Sketching

Week 15 :- Final Exam

ABOUT INSTRUCTOR

Dr Alka Chadha has been working as Astt Prof in Dept of Visual Art, RG College, Meerut since the year 2001 after being appointed by Higher Education, Allahabad. She did Ph.D -2004 from Faculty of Visual Arts, B.H.U.,Varanasi; UGC (NET) 1998; M.F.A. (Painting) 1995-97, B.F.A. (Painting). She had to her credit many awards. She also bagged a Certificate of Excellence, International magazine- Startists: Contemporary women in art, 2017
Dr Alka has been the Guest Faculty for 40 lectures, under MHRD E-learning project from 26th-28th March and 27th-31st August,2011, and also the Content writer for E-pathshala MHRD project DEI Deemed Univ, Dayalbagh, Agra 2015, 2016, 2017; Guest lectures in many reputed Institutes, Invitee artist, and has written Reviews in catalogues of exhibitions of many renowned artists.
She has participated in many All-India, Regional and State level exhibitions. Dr Alka has held one two-man show and almost thirty group shows in India and abroad. Her collections are with many National & International collectors. She has attended twenty three Workshop; twenty six National and International seminars and four Conferences; and presented twenty three papers. Her Fifty four papers have been published in many seminars and reputed journals and books. She is the Editor of reputed National and International Journals.

CRIMINAL JUSTICE ADMINISTRATION

NEERAJ TIWARI
Assistant Professor
National Law University Delhi

TYPE OF COURSE : UG/PG/Certificate
INTENDED AUDIENCE : UG/PG/Certificate

COURSE DURATION : 15 weeks (1st Aug to 31st Dec 2018)
EXAM DATE : In the month of December
NO OF CREDITS : 4

PRE-REQUISITES : This course is beneficial for LL.B. and LL.M. students. Though other professionals who are familiar with the following concepts may also take up this Course:
Basic understanding of the normative structure of the Indian Criminal Justice System
Preliminary knowledge about agencies of Criminal Justice System
Basic understanding of provisions of Code of Criminal Procedure and Part III of the Indian Constitution

OBJECTIVE OF COURSE

The object of the course is to make the learners well versed with the Indian criminal justice system. To achieve this, the modules may be divided in to three categories- first, the modules which deal with functionaries of criminal justice system, second the modules which detail the pre-trial, trial and post trial processes and third the modules which raise voice and concern of other stakeholders like accused, victim and witnesses.

LEARNING OUTCOME

After completing the MOOC course, the student shall be able:

- To have a comprehensive understanding of the substantive and procedural issues which are shaped by the constitutional guarantees.
- To understand the roles of various functionaries in Criminal Justice System.
- To understand the procedural ramifications involved in investigation and other preliminary processes.
- To have the fundamental knowledge and understanding relating to cognizance, charge and trial process under the Code of Criminal Procedure.
- To expose about the process of sentencing and alternate modes of punishment.
- To have a fair idea about the correctional system within the realm of the criminal justice administration

COURSE PLAN

Week 01:- Foundations of Criminal Justice System : Modules 1, 2 and 3

Week 2 :- Functionaries of Criminal Justice Administration : Modules 4 and 5

Week 3:- Crime Reporting, Arrest and Investigation: Modules 6 , 7 and 8

Week 4:- Search & Seizure and Processes to Procure attendance of persons and documents: Modules 9 and 10

Week 5:- Pre Trial Process & Role of Courts, Access to Justice and Remand Procedure: Modules 11, 12 and 13

Week 6:- Rights of Arrestee, Procedural Safeguards to Rape Victims and Custodial Justice: Modules 14, 15 and 16

Week 7:- Principles of Fair Trial and Trial Process- Cognizance and Framing of Charge:

Modules 17 and 18

Week 8:- REVISION AND ASSIGNMENT WEEK ONE TO SEVEN

Week 9:- Initiation of Proceedings before Magistrate, Bail Jurisprudence: Modules 19 and 20

Week 10:- Trial Process- Place of Inquiry and Trial, Kinds of Trial and Appreciation of Evidence: Modules 21, 22 and 23

Week 11:- Compounding of Offences, Plea Bargaining and Probation: Modules 24, 25 and 26

Week 12:- Principles of Sentencing, Remission and Commutation of Sentence: Modules 27 and 28

Week 13:- Appeals, Revision and Correctional System: Modules 29, 30 and 31

Week 14:- Victims of Crime, Witness Protection, Maintenance Proceeding and Inherent Jurisdiction of High Courts: Modules 32, 33, 34 and 35

Week 15:- REVISION AND ASSIGNMENT WEEK NINE TO FOURTEEN

ABOUT INSTRUCTOR

Neeraj Tiwari is Assistant Professor of Law and Member of Centre for Criminology and Victimology at National Law University, Delhi. He specializes in Criminal law. He is pursuing his academic and research interest in Criminal Law and Criminal Justice Administration. Before joining NLU, Delhi Neeraj has served as a faculty at National Judicial Academy, India. Neeraj has published several papers in national and international journals primarily focusing on issues relating to criminal justice administration. Presently he is pursuing his doctorate research on Role of Magistracy in Criminal Justice Administration from NLU Delhi.

DALIT SAHITYA

PROF. DEVENDRA KUMAR CHOUBEY
Professor, Centre of Indian Languages, JNU,
New Delhi

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (21st Aug to 04th Dec, 2018)
EXAM DATE : As per UGC decision
NO OF CREDITS : 4

PRE-REQUISITES : Graduate

OBJECTIVE OF COURSE

- दलित साहित्य के वैचारिक आधार को समझने का प्रयास किया जाएगा,
- दलित साहित्य की सैद्धांतिकी पर चर्चा की जाएगी,
- हिन्दी दलित साहित्य पर मराठी दलित साहित्य का प्रभाव देखने का प्रयास किया जाएगा,
- पहली दलित रचनाकार हीराडोम से अबतक की प्रमुख रचनाओं के वैशिष्ट्य पर चर्चा की जाएगी,
- इन सबके साथ आप आदिवासी साहित्य की परम्परा, सैद्धांतिकी एवं प्रमुख रचनाओं के सन्दर्भ में भी चर्चा की जाएगी।

LEARNING OUTCOME

- दलित साहित्य की अवधारणा, दलित साहित्य का स्वरूप, दलित साहित्य परंपरा से परिचित होंगे।
- दलित साहित्य का वैचारिक आधार, दलित साहित्य के अध्ययन की समस्याएं, दलित साहित्य और वैश्वीकरण, दलित साहित्य की भाषा, स्वानुभूति और सहानुभूति, दलित साहित्य और आदिवासी साहित्य का संबंध, आदिवासी साहित्य की प्रवृत्तियाँ और परंपरा सरहपा समझ सकेंगे।
- प्रमुख दलित एवं आदिवासी रचनाकार के रचनाओं के माध्यम से दलित एवं आदिवासी साहित्य की दिशा समझने में सक्षम हो सकेंगे।

COURSE PLAN

Week 1

Dalit Sahitya Ki Avdharana, Dalit Sahitya Ka Swaroop

Week 2

Dalit Sahitya Ki Parampara 1, Dalit Sahitya Ki Parampara 2, Dalit Sahitya Ki Parampara 3

Week 3

Dalit Sahitya Ki Bhasha, Swanubhuti Aur Sahanubhuti, Dalit Sahitya Ke Adhyann Ki Samasyayen

Week 4

Dali Sahitya Ka Vaicharik Adhar (Mahatma Jyotibha Fule), Dali Sahitya Ka Vaicharik Adhar (Dr.Bhimrao Ambedakar)

Week 5

Hindi Dalit Sahitya Par Marathi Dalit Sahitya Ka Prabhaw, Dalit Andolan Ka Itihas

Week 6

Dalit Stree Chintan, Dalit Sahitya Aur Vaishvikaran

Week 7

Dalit Kahaniyan, Dalit Kavita, Dalit Alochna

Week 8

Sarahapa 1, Sarahapa 2, Ravidas 1, Ravidas 2

Week 9

Dadudayal : Jivan Aur Sahitya, Hira Dom Aur Achhutanand

Week 10

Juthan Ka Alochnatmak, Adhyan, Akkarmashi,Murdaiya

Week 11

Aaj Bajar Band hai, Salam, Fulva Aur upmahadveep

Week 12

Sajish, Chappar, Dohra Abhishap

Week 13

Mera Bachpan Mere Kandhon Par, Shikanje Ka Dard

Week 14

Dalit Sahitya Aur aadivasi Sahitya Ka Antah Sambandh, Aadivasi Sahitya Ki Pravritiyan, Aadivasi Sahitya Ki Parampra

Week 15

Global ganv Ke Devta, Nirmala Putul Ki Kavitayen, Adiwasi Kahaniyan

ABOUT INSTRUCTOR

Devendra Kumar Choubey, working with Centre of Indian Languages, JNU, New Delhi, on the post of permanent Professor, having 20 years teaching experience in the University Education. Mobile Number 9868272999
E-mail ID cdevendra@gmail.com

DISCRETE DATA ANALYSIS

BHASWATI GANGULI
Professor, Department of Statistics, University of Calcutta

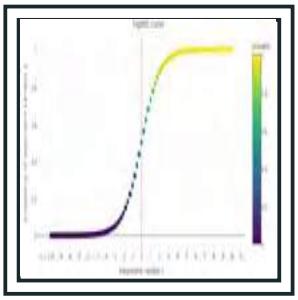
TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 14 weeks (13/8/2018 - 16/11/2018)
EXAM DATE : 20/11/2018
NO OF CREDITS : 4

PRE-REQUISITES : Basic knowledge of regression

OBJECTIVE OF COURSE

The purpose of the course is to familiarise students with the tools and methods required for discrete data analysis. An introduction to the need for special methods is provided for the case when the outcome of a regression model is discrete rather than continuous. Methods for tabular representation and summarisation for such data are provided and the different types of discrete data such as ordinal, nominal etc are introduced. The latter part of the course focuses on GLMs with logistic and count data being the focus. The course is supplemented by examples using R.



LEARNING OUTCOME

Tools and methods for discrete data analysis and their implementation in R.

COURSE PLAN

Introduction to categorical data
Types of Data
Prospective and Retrospective Studies
The analysis of 2x2 table
Ordinal data I Ordinal Data II
Relative Risk and Relative Difference
Odds Ratio
Simpson's Paradox
The Binary Choice model
Logit and probit model
How to summarise categorical data in R
The O Rings dataset
Introduction to GLM
Components of GLM
Likelihood based inference 1IRLS equations
Inference for the logistic model
Residual Analysis for a GLM
Goodness of fitThe glm function in R

MID TERM ASSESSMENT
Grouped and ungrouped binary data
SparsenessRegression models for count data -I
Regression models for count data -II
Case Study: Analysis of the gala dataset of the faraway library in R
Zero Inflated Poisson models
Quasi likelihood
The quasi Poisson model
Polytomous regression 1
Polytomous regression 2
Polytomous regression 3
Models with constant Coefficient of Variation
Linear Mixed Model
Longitudinal Data Anaylsis in R
Subject specific models for longitudinal data
Conditional and Marginal Likelihood
GAMs

ABOUT INSTRUCTOR

Prof. Bhaswati Ganguli is a faculty member of the Department of Statistics at Calcutta University. Prof. Ganguli received her Ph.D. in Biostatistics from Harvard University and her research interests include smoothing, mixed models and spatial data analysis. She is an author of the R package SemiPar and was the Principal Investigator for the e PG Pathshala project in Statistics of the MHRD.

DISTRIBUTION FREE METHODS

DR. RAHUL BHATTACHARYA
Assistant Professor in Statistics, Department of Statistics,
University of Calcutta

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 14 weeks (13/08/2018 to 16/11/2018)
EXAM DATE : TBA
NO OF CREDITS : 4

PRE-REQUISITES : Honours or Major in Statistics, Operations Research, B. Stat, B. Tech

OBJECTIVE OF COURSE

The course on Distribution free methods aims to give an exposure on distribution free methods in statistics starting from a very basic level. The course is logically divided into two halves- one explaining large sample methods and the other nonparametric methods. It presents the concepts, methodologies and applications in real fields in a unique way. The course is designed and developed with the aid of a number of theoretical and practical examples and develops insights in students through the self-assessment exercises.

LEARNING OUTCOME

The course is developed considering the needs of Post graduate students of statistics. After course completion, the students are primarily expected to identify the situations, where these procedures can be applied. However, from a larger perspectives, the course will develop interest among the students for further study and help them to prepare for advanced studies and competitive examinations like ISS, NET etc.

COURSE PLAN

Week 01:- Basics of nonparametric inference

Week 02:- U statistic with properties

Week 03:- Sign Test

Week 04:- Signed rank Test

Week 05:- Two sample tests

Week 06:- Goodness, Association and Homogeneity problems

Week 07:- Midterm week

Week 08:- Mathematical Prerequisites for large sample-I

Week 09:- MathematicalPrerequisites for large sample-II

Week 10:- MathematicalPrerequisites for large sample-III

Week 11:- Stochastic Convergence

Week 12:- Delta Theorems and applications

Week 13:- Asymptotic distributions and applications in inference

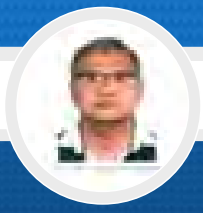
Week 14:- Asymptotic Optimality

Week 15 :- Final Examination

ABOUT INSTRUCTOR

Dr. Rahul Bhattacharya is currently an Assistant Professor in the Department of Statistics, University of Calcutta. Dr. Bhattacharya was a student of Presidency College, Kolkata with honors in Statistics, graduated from Calcutta University and thereafter obtained his Ph.D (Sc.) degree from the same institution. He has more than a decade long experience in teaching at both undergraduate and post graduate levels in topics like, Statistical inference (parametric & nonparametric), Large sample theory, Probability theory and Real Analysis. However, his research interest is Biostatistics and related inference and he has been awarded the prestigious J.B.Haldane Memorial Prize from Indian Statistical Institute for outstanding research work done on his field. He has to his credit more than forty research articles on various fields of statistics.

ECONOMETRIC ANALYSIS



SUGATA SEN ROY
Professor, Department of Statistics,
University of Calcutta

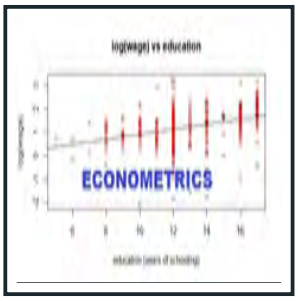
TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (13/8/2018 to 16/11/2018)
EXAM DATE : 20/11/2018
NO OF CREDITS : 4

PRE-REQUISITES : Ideas of basic statistical methods.

OBJECTIVE OF COURSE

The objective is to introduce the students to the idea of Econometrics, which primarily is a synthesis of Statistics and Economic Methods. First, an introduction to the classical regression model is made. Since most of the assumptions for these models do not hold for economics data, methods for tackling the violations are then discussed. Finally, extensions are made to several interdependent regression equations.



LEARNING OUTCOME

The student would be versed in the standard econometric techniques. This includes methods for choosing a proper model; ways of handling violations of classical assumptions like heteroscedasticity, autocorrelation and multiocollinearity; tackling interdependent variables in regression models through simultaneous equations systems, etc.. At the end of the course, the student will have enough perspective to do meaningful analysis of economic data.

COURSE PLAN

Week 01: Introduction to regression model

Week 02: Regression with categorical regressors

Week 03: Detection of Outliesr

Week 04: Model selection techniques

Week 05: Problem of Heteroscedasticity

Week 06: Problem of Autocorrelation

Week 07: Problem of Multicollinearity

Week 08: Mid-term Assessment

Week 09: Censored response Variables

Week 10: Measurement Error Models

Week 11: Lagged Variable Models

Week 12: Simultaneous Equations Models

Week 13: Simultaneous Equations Models

Week 14: Simultaneous Equations Models

Week 15 : Final assessment

ABOUT INSTRUCTOR

Did graduation in Statistics (Hons) from Presidency College, Calcutta. Stood first in the post graduate examination in Statistics at University of Calcutta. Did Ph.D. in Statistics from University of Calcutta in the area of Time Series Analysis. Have been teaching at the University of Calcutta since 1989. Primary teaching and research interests are in Time Series Analysis, Regression Analysis, Econometrics, Development Statistics, Survival Analysis, Applied Multivariate Analysis and Functional Data Analysis.

ENVIRONMENTAL LAW

DR. BHARTI KUMAR
Associate Professor at National Law University, Delhi

TYPE OF COURSE : UG/PG/Diploma/Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 01/08/2018 to 31/12/2018
EXAM DATE : As scheduled by SWAYAM
NO OF CREDITS : 4

OBJECTIVE OF COURSE

The indelible impact of environment on the lives of people is overwhelming. The current scenario is particularly compounded by multitudinal issues as rampant air and water pollutions, climate change, loss of biodiversity and the like that has contributed to immense problems of environment and health care as well as raised the inevitable question of survival of life itself on earth. Apart from an overview of the vast subject matter, a substantive understanding in the gradual evolution of pertinent themes in environment shall be imparted so that the student is not only conversant with the overall framework of environmental law but also becomes acquainted with fundamental concepts of basic themes. The basic objective is to familiarize the concept and scope of environmental law and also of its particular dominant issues so as to become a value addition in learning and to ignite academic/research interest, eventually.

LEARNING OUTCOME

- Learning about the significance of law and the fundamental principles that have emerged developments in international environmental.
- Exposition about the human right to environment and constitutional framework governing environment in select countries, including India. ·
- Comprehending the statutory and regulatory mechanisms pertaining to environment in India. ·
- Understanding judicial response to environmental issues in India.

COURSE PLAN

Week 1- a) Introduction of international environmental law, b) Principles of Environmental Law

Week 2- a) Human rights to environment and constitution of the world, b) Sources of Environmental Law

Week 3 and 4- a) Law relating to Water pollution, b) Regulation of wetlands, c) Dams and the environment, d) Coastal regulation laws in India, e) High seas and outer space

Week 5 and 6- a) Law relating to Air pollution, b) Ozone depletion, c) Climate change law, d) Financial mechanisms and technology transfer, e) Energy laws

Week 7 and 8- a) Law relating to Waste management, b) Law relating to Plastic and bio- medical waste management, c) Industrial disasters and the environment, d) Disaster management and environment, e) Chemicals and impact on environment

Week 9- a) Regulation of Mining sector in India, b) Forest conservation laws in India, c) Wildlife protection, d) Environment crimes

Week 10- a) Biodiversity, b) Access and benefit sharing, c) Bio safety and legal issues

Week 11- a) Environment Impact Assessment, b) Procedural environmental rights, c) Role of NGO in environmental protection

Week 12- a) Judicial remedies in environmental cases b) Responsibility and Liability for environmental harm

Week 13 and 14- a) Nuclear energy and law, b) Armed conflict and the environment, c) International law and the Protection of the Antarctica and the Arctic, d) Regional environmental co-operative framework, e) International environment institutions

ABOUT INSTRUCTOR

Dr. Bharti is presently Associate Professor at National Law University, Delhi which she joined in 2009. Prior to that, she was teaching at Faculty of Law, Delhi University between 1998-2009. Her areas of interest and specialization are Environmental Laws, Human Rights, Humanitarian and Refugee Law, Constitutional Law, Laws relating to women, Alternative Dispute Resolution etc. She has been Visiting faculty at Bureau of Parliamentary Studies and Training, Institute of Constitutional and Parliamentary Studies, Indian Law Institute etc. Various paper presentations on different themes have been presented by her at several Conferences including SAARC Law Bhutan and GAJE at Turkey. She has been a part of Law Commission's Panel on Early Childhood Development as well as NCPCR's Panel on Education, Child Marriage etc. She is also part of Ministry of Women and Child Development's Panel to review institutional mechanisms related to delay in grant of maintenance to women. The International Environmental Conferences held by NGT in the past 3 years have seen the active participation by her in the organization and publication of its proceedings. She is Director, Centre for Environmental Law, Policy and Research at NLU, Delhi. She has coordinated various workshops and seminars. She is also involved in Legal Aid activities including mediation clinics as well as imparting clinical legal education at NLU Delhi.

FOOD MICROBIOLOGY AND FOOD SAFETY

DR TEJPAL DHEWA
Assistant Professor, Central University of Haryana,
Mahendergarh, Haryana

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (21/08/2018 to 20/12/2018)
EXAM DATE : 20/12/2018
NO OF CREDITS : 4

PRE-REQUISITES : Graduation in science

OBJECTIVE OF COURSE

The major learning objectives of this course will be to study:

- The scope of food microbiology and food safety.
- To obtain the knowledge about important genera of microorganisms associated with food and their characteristics.
- To learn various techniques for enumeration and control of microorganisms in food
- To gain the essential knowledge and applications of various techniques (traditional to advanced) for preserving food.
- To understand the role of different microorganisms in food spoilage, food fermentation and foodborne diseases.
- To comprehend the microbiological quality control and foodborne illnesses investigation procedures for ensuring food safety and hygiene.
- To understand current national and international food safety rules and regulations.
- To know the requirements and components of food safety management system (FSMS) and use of microbiological risk assessment (MRA) tools for assessing microbiological risks in food sector.

LEARNING OUTCOME

After completion of this course, the learners will acquire the knowledge about:

- The scope of food microbiology and food safety.
- Important genera of microorganisms associated with food and their characteristics.
- Various techniques for enumeration and control of microorganisms in food
- Numerous techniques (traditional to advanced) for preserving food.
- The role of different microorganisms in food spoilage, food fermentation and foodborne diseases.
- The microbiological quality control and foodborne illnesses investigation procedures for ensuring food safety and hygiene.
- National and international food safety rules and regulations.
- The requirements and components of food safety management system (FSMS) and use of microbiological risk assessment (MRA) tools for assessing microbiological risks in food sector.

COURSE PLAN

Week 01 : 1. Introduction to food microbiology and food safety, 2. Microflora of Food, 3. Intrinsic factors affecting microbial growth and survival in food Discussion forum

Week 02 : 4. Extrinsic factors affecting microbial growth and survival in food, 5. Microbiological examination of food, 6. Advances in isolation and enumeration of microorganisms in food

Week 03 : 7. Principles of food preservation and significance, 8. Preservation of food by physical methods – low and high temperature, 9. Preservation of food by physical methods – radiation

Week 04 : 10. Preservation of food by chemical methods, 11.Biopreservation of food, Assignment-I

Week 05 : 12. Modified environment for storage of food, 13. Microorganisms as food, 14. Lactic fermentation in food

Week 06 : 15. Yeast-lactic fermentation in food, 16. Mold-lactic fermentation in food, 17. Starter cultures for food fermentation, Discussion forum

Week 07 : 18. Fermented milk, 19. Fermented milk products, 20. Fermented juice, vegetables and other beverages

Week 08 : 21. Fermented meat, 22. Fermented fish products, Assignment-II

Week 09 : 15. Introduction to food spoilage, 16. Spoilage of fruits, vegetables, and their products, 17. Spoilage of dairy products

Week 10 : 18. Spoilage of canned food, 19. Spoilage of bakery and egg products, 20. Spoilage of meat, fish, and sea food, Discussion forum

Week 11 : 21. Newer methods for controlling spoilage of food, 22. Predictive modelling for food spoilage, Assignment -III

Week- 12 : 23. Food borne outbreaks- Bacterial agents for foodborne illnesses, 24. Fungal and algal agents for foodborne illnesses, 25. Foodborne animal parasites

Week 13 : 26. Investigation of foodborne illnesess outbreaks, 27. Indicators of food microbial quality and safety, 28. Application of hurdle technology in food industry

Week 14 : 29. Principles of hygiene and sanitation in food service establishment, 30. Food safety laws: National and international, 31. Food safety and quality management system

Week 15 : 32. Principles and guidelines for conducting microbiological risk of food, Revision of the course, Discussion forum, Final assessment/Term-end examination

ABOUT INSTRUCTOR

Dr. Tejpal Dhewa is an Assistant Professor at Central University of Haryana. He is also serving as a UGC-SWAYAM Coordinator and Coordinator-Food Safety Training and Certification (FoSTaC) Centre-CUH, Food Safety and Standards Authority of India (FSSAI). He has a diverse industrial, teaching, and research experience. He has successfully completed DU innovation project (2013-2015). Recently, Dr. Dhewa granted an ECR project as Principal Investigator by Science and Engineering Research Board, Department of Science and Technology, Govt. of India. Besides, he is a course coordinator of two GIAN courses [Food Safety, Food Security, and Food Regulations: A primer, Course Code: 174040H04; and Metabolomics in food and nutrition science, Course Code: 174040H06] sponsored by MHRD, Government of India.

PROF. SHAMBHUNATH TIWARI
Professor, Hindi Depatt. AMU, Aligarh

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (22nd Aug to 05th Dec, 2018)
EXAM DATE : NA
NO OF CREDITS : 4

PRE-REQUISITES : Graduation in any discipline having working Knowledge for M.A. level language & literature learning of Hindi.

OBJECTIVE OF COURSE

- विद्यार्थी न केवल हिंदी साहित्य के इतिहास से समग्रता के साथ परिचित हो सकेंगे, बल्कि हिंदी साहित्य के विविध पक्षों से जुड़े अनेक विवाद एवं मुद्दों पर भी निष्पक्ष एवं तर्कपूर्ण ढंग से विचार कर पाने में समर्थ हो सकेंगे।
- विद्यार्थियों की आवश्यकताओं और अपेक्षाओं के अनुरूप विषय के साथ पूर्ण न्याय हो सकें और उन्हें हिंदी साहित्य के इतिहासविषयक अधुनातन शोधपरक सामग्री से पूरी तरह परिचित करवाया जा सके।

LEARNING OUTCOME

'हिंदी साहित्य का इतिहास' पाठ्यक्रम में 'विद्यार्थियों को हिंदी साहित्य के संपूर्ण इतिहास से परिचित करवाना होता है, क्योंकि बिना साहित्य-इतिहास को समझे भाषा और साहित्य के सर्जनात्मक विकास को समझना कठिन होगा। साहित्य के इतिहास को हम इसलिए नहीं पढ़ते हैं कि उसमें अतीत की अनेक तिथियों, घटनाओं के साथ कवियों और उनकी रचनाओं के नाम जान लें, बल्कि उसका अध्ययन इसलिए आवश्यक है कि विभिन्न कालखंडों में अवस्थित कवियों के काव्यात्मक वैशिष्ट्य के साथ उनके द्वारा रचित साहित्य की विकासधारा को हम भलीभाँति समझ सकें।

COURSE PLAN

Week 1: Hindi Sahitya Ke Itihas Ki Rooprekha, Hindi Sahitya Ki Prishbhumi

Week 2: Aadikaal Ki Pramukh Pravritiyan, Raso Sahitya Ki Parampra, Bhakti Ka Uday Or Vikas

Week 3: Krishanbhakti Kavydhara, Rambhakti Kavyadhara, Gyanashrayi Kavyadhara, Premasharayi Kavyadhara

Week 4: Ritikaleen Kavya Ke Prernastrot, Riti Ka swaroop Evam Ritikaal Ki ParisthitiyanWeek 5Ritibaddh Kavya, Ritisiddh Kavya, Ritimukt Kavya

Week 6: Sahitya Bhasha Ke Roop Main Brijbhasha Ka Vikas, Sahitya Bhasha Ke Roop Main Avdhi Ka Vikas

Week 7: Sahitya Bhasha Ke Roop Main Khdi Boli Ka Vikas, Hindi Sahitya Ke Itihas Lekhan Main Hindi Aur Urdu Ka sambandh

Week 8: Hindi Sahitya Main Adhunikata Ka Uday, Bhartenduyug, Dwivediyug

Week 9: Chhayawaad, Chhayawadottar Kavya Ki Vibhinna dharayen

Week 10: Pragatisheel Hindi Kavya dhara, Prayogwad, Samkaleen Hindi Kavita

Week 11: Hindi Upanyas Ka Vikas, Hindi Kahani Ka Vikas, Hindi Nibandh Ka Vikas

Week 12: Hindi Natak Ka Vikas, Hindi Alochna Ka Vikas

Week 13: Hindittar Bhartiya Bhashayen Or Hindi Sahitya, Hindi Ka Pratibimbit Sahitya Aur Hindi Sahitya Ka Itihas, Hindi Sahitya Ke Itihas Main Prampra Aur Pragati Ka sambandh

Week 14 : Hindi Sahitya Ke Itihas Lekhan Main Kaal Vibhajan Ka Aadhar, Hindi Sahitya Ke Vibhinn Kalon Par Punarvichar Ki jarurat, Hindi Sahitya Ke Naye Itihas Lekhan Ki jarurat Aur sambhavna

Week 15 : Prawasi Sahitya Aur Hindi Sahitya Ka Itihas, Hindi sahity Ki samriddhi Mein Anuwad Ki Bhumika, Adhunik Hindi Sahitya Ke Vikas Mein Patra-Patrikaon Ki Bhumika

ABOUT INSTRUCTOR

Shambhunath Tiwari,
a Professor(Hindi) in AMU ALIGARH. M.A.from JMI, NewDelhi, M.Phil., Ph.D. with J.R.F. from J.N.U.New Delhi. Having 24years of P.G. teaching experience he is actively engage in teaching and research.His main focus area is history of Hindi Literature, comparative study and modern poetry. Four books have been published in his cradit.He received many awards including rajasthan sahitya academy award(2010), Hindi Academy Award(1988). He has been a member of Rajasthan Urdu Academy (2007-10). Many programs have been telecast through Doordarshan, Jaipur.
FOREIGN VISIT
Prof.Shambhunath has visited Australia for two months (July-August 2016) as Academic and cultural purposes and delivered many lectures.

DR. SHIVSHANKAR MISHRA
Associate Professor & HOD, Research & Publication,
SLBSRS Vidyapeetha, New Delhi-16

TYPE OF COURSE : PG/ACHARYA
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (01/08/2018 to 31/12/2018)
EXAM DATE : 04/01/2019
NO OF CREDITS : 6

PRE-REQUISITES : संस्कृत भाषा का ज्ञान , परास्नातक (एम.ए./आचार्य) पाठ्यक्रम में जो किसी विश्वविद्यालय अथवा महाविद्यालय में पंजीकृत हैं। यह पाठ्यक्रम संस्कृत के जिज्ञासुओं के साथ इतिहास, दर्शन, समाजशास्त्र आदि विषय के अभ्यर्थियों के लिए भी विशेष लाभदायक सिद्ध होगा।

OBJECTIVE OF COURSE

१. भारतीय संस्कृति का समग्र परिचय।
२. भारतीय संस्कृति की पुरातनता एवं ऐतिहासिकता का सम्यक् बोध।
३. प्राचीन–मध्यकालीन एवं आधुनिक भारत का इतिवृत्त ज्ञान।
४. इतिहास के विषय में भारतीय अवधारणा का परिचय।
५. पुराणों में भारतीय इतिहास की अवधारणा।
६. भारतीय धार्मिक परम्परा एवं संस्कृति के मूलतत्त्वों का निरूपण।
७. भारतीयदर्शन का संक्षिप्त परिचय।
८. संस्कृतवाङ्मय का संक्षिप्त परिचय।
९. पालि-प्राकृत-अपभ्रंश वाङ्मय का सम्यक् ज्ञान।
१०. भारतीय कलाओं का परिचय, उनकी दार्शनिक एवं सामाजिक पृष्ठभूमि का परिज्ञान।
११. भारत के सांस्कृतिक इतिहास का परिज्ञान।

LEARNING OUTCOME

इस पाठ्यक्रम के अध्ययन से छात्रों को भारतीय संस्कृति एवं भारतीय इतिहास के मूलभूत तत्त्वों का ज्ञान हो सकेगा। संस्कृत वाङ्मय के ग्रन्थों के आधार पर भारत की संस्कृति एवं भारत के इतिहास को भारतीय चिंतन की दृष्टि से समझने की दिशा में एक नवीन दृष्टि प्राप्त हो सकेगी।

COURSE PLAN

Week 1 : प्राचीनभारतीयेतिहासः प्रथमभागः (Ancient Indian History - Part One)– 01, प्राचीनभारतीयेतिहासः द्वितीयभागः (Ancient Indian History - Part Two)– 02, मध्यकालीनभारतम् (Medieval Indian History)– 03

Week 2 : आधुनिकभारतस्य इतिहासः (Mordern Indian History)- 04, इतिहासस्य भारतीया अवधारणा परम्परा च (Indian ideas of history and its tradition)– 5, पुराणेषु भारतीय इतिहासः (Indian history of puranas)– 6

Week 3 : ऐतिहासिकमहाकाव्यानि 1000-1599 ई (Historical epics 1000-1599 A.D.) – 7], ऐतिहासिकमहाकाव्यानि 1600-2000 ई (Historical epics 1000-1599 A.D.) – 8, भारतीयपरम्परा तत्र धर्माः- 09

Week 4 : धर्मपरम्परायां निहितानि तत्त्वानि- 10, धार्मिकपरम्परायां योजकानि तत्त्वानि- 11, धार्मिकपरम्परायाम् आह्निककर्म- 12

Week 5 : सांख्यदर्शनस्य सामान्यपरिचयः– 13, योगदर्शनस्य सामान्यपरिचयः– 14, वल्लभवेदान्तस्य दार्शनिकपरिचयः – (Philosophical introduction to Vallabha Vedanta)-15

Week 6 : शैवविशिष्टाद्वैतसिद्धान्तस्य सामान्यपरिचयः- 16 (Introduction to Shaiva Vishistadwaita Vedanta)-16, चार्वाकदर्शनम् (Philosophy of charvaka – 17, बौद्धदर्शने प्रथमः पाठः (First lesson on the philosophy of Budha)– 18

Week 7 : बौद्धदर्शने द्वितीयः पाठः (Second lesson on the philosophy of Budha)– 19, जैनदर्शनम् (Philosophy of jaina)- 20, कलाया दार्शनिकी पृष्ठभूमिः (Philosophical background of Art)- 21

Week 8 : Assignment 1

Week 9 : कलायाः सामाजिकी पृष्ठभूमिः (Social background of Art)- 22, भारतीया संगीतकला(Indian musical art)- 23, भारतीया नृत्यकला(Indian art of dancing)- 24

Week 10 : भारतीयनाट्यकला(Indian art of theater)– 25, भारतीया चित्रकला(Indian art of drawing)- 26, भारतीया मूर्तिकला (Indian art of Sculpture)- 27

Week 11 : भारतीया स्थापत्यकला(Indian art of Architecture)- 28, वेदवाङ्मयपरिचयः (Introduction to Vedic Literature) – 29, पुराणवाङ्मयपरिचयः (Introduction to Purana Literature)- 30

Week 12 : आर्षकाव्यपरिचयः (Introduction to Arsha Kala)- 31, संस्कृतपद्यवाङ्मयपरिचयः (Introduction to Sanskrit poetic literature)- 32, संस्कृतगद्यवाङ्मयपरिचयः (Introduction to sanskrit prose literature)– 33

Week 13 : संस्कृताट्यवाङ्मयपरिचयः (Introduction to sanskrit theatrical literature)– 34, पालिप्राकृतापभ्रंशवाङ्मयपरिचयः (Introduction to Apabramsha literature of Pali and Prakrit)– 35, संस्कृतलोकवाङ्मयपरिचयः(Introduction to literature of sanskrit lok)– 36

Week 14 : धार्मिकपरम्परायाम् आश्रमव्यवस्था- 37, धार्मिकपरम्परायां कालः- 38

धर्मिकपरम्परायां व्रतम्- 39, धार्मिकपरम्परायां गणपतिकल्पः ग्रहशान्तिश्च- 40

Week 15 : Assignment 2

ABOUT INSTRUCTOR

Associate Professor & HOD, Research & Publication, SLBSRS Vidyapeetha, New Delhi-16
Post Graduate Teaching/Research Experience: 20 Years
Email : ssmishralbs@gmail.com
Mob. 9411171081, 9456328499

DR. APARAJITA BHATT
Assistant Professor
National Law University, Delhi

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (1/8/2018 to 1/12/2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

PRE-REQUISITES : Graduation in any discipline
Preliminary knowledge about Law & Technology

OBJECTIVE OF COURSE

- To understand the law relating to information technology
- To understand the challenges in the area of cyber law
- To understand the different facets of cyber crimes and learn about their prevention
- To understand the concept and issues related to net neutrality, internet governance and e-governance etc
- To make a comparative study with US, UK and other jurisdictions
- To understand the issues related to the jurisdiction in cyberspace
- To understand issues related to e-commerce
- To educate about the regulation of cyberspace at national and international level.

LEARNING OUTCOME

- Understand about the governance of internet and the issues relating to it.
- Learn about different kinds of cybercrimes and contraventions and their prevention.
- Understand about the issues and challenges in e-commerce
- Learn about privacy and data protection issues in cyberspace
- Understand computer forensics and the significance of digital evidence in the present world
- Understand the intricacies and challenges in digital and electronic signatures
- Understand the legal provisions under the Information Technology Act
- Comprehend cyber security issues
- Understand e-governance
- Analyse the concepts such as net neutrality

COURSE PLAN

WEEK 1 : 1. Internet Governance, 2. Jurisprudence and Scope of Cyber Law

WEEK 2 : 1. Jurisdictional Issues in Cyberspace, 2. Case Laws on Jurisdiction in Cyber space

WEEK 3 : 3. Overview of IT Act 2000, 4. Digital and Electronic Signatures, 5. Adjudication and Online Dispute Resolution

WEEK 4 : 6. E- commerce: Concept and Issues, 7. Taxation Issues related to e-commerce, 8. Financial Frauds and e-commerce

WEEK 5 : 9. E-Contracts, 10. Consumer protection in Cyberspace

WEEK 6 : 11. Cyber offences under the IPC-Challenges to the Old Criminal Justice System, 12. Cyber Crimes & Contraventions, 13. New Cyber Crimes

WEEK 7 : 14. Phishing, 15. Hacking, Cyber Bullying, Cyber Defamation

WEEK 8 : REVISION AND ASSIGNMENT WEEK ONE

WEEK 9 : 1. Cyber Pornography and Obscenity, 2. Crime against Government-Cyber Terrorism, 3. Liability of Intermediaries

WEEK 10 : 4. Computer Forensics, 5. Digital Evidence- Broad Principles

WEEK 11 : 6. Copyright Law and Cyberspace, 7. Patent Law and Cyberspace, 8. Trademark Law and Cyberspace

WEEK 12 : 9. International Cyber Law- US, 10. International Cyber Law- UK, 11. International Cyber Law- Other Jurisdictions

WEEK 13 : 12. Online Profiling, 13. Cloud Computing, 14. Online Privacy Issues and Data Protection Law in India, 15. Cyber Security

WEEK 14 : 16. Net Neutrality, 17. Electronic Governance

WEEK 15 : REVISION, ASSESSMENT AND EVALUATION

ABOUT INSTRUCTOR

Dr. Aparajita Bhatt, Assistant Professor, Faculty of Law at National Law University, Delhi is a Gold Medalist and University topper in LL.M.(Business Law) and LL.B. She teaches Cyber Law and Corporate Law at the University. She has also worked as an Assistant Professor in National Law University, Jodhpur. Her doctorate work focuses on the legal aspects of mergers and acquisitions in the light of changes in the Indian corporate world. She has given lectures on several occasions on various issues in workshops organized for the training of police officers at Rajasthan Police Training Centre, Jodhpur. She has guided a number of LL.M. students for their dissertations and projects. Aparajita has been a resource person for Rajasthan Police Training Centre on several occasions and has delivered lectures on various topics of Cyber Law and Human Rights. She has also been a resource person for various other workshops, national and international conferences including Delhi Judicial Academy. She has contributed in Distance Education Program by supervising DEP dissertations and has also written modules on M&A. She has also written modules on Corporate Law for Indian Institute of Corporate Affairs. She has guided several research students for their post-graduate degrees.
Her areas of interest are Cyber Law Mergers & Acquisitions, Company Law, Securities Law & Financial Market Regulations. She has presented papers in National and International Conferences/Seminars. She has also been a resource person for news channels. She has also been a coordinator for various projects, events and conferences at the University.
She has also coordinated a paper titled Information and Communication Technology for the e-pg pathshala

INTELLECTUAL PROPERTY

DR. YOGESH PAI
Assistant Professor of Law and the Co-Director of Centre for Innovation, Intellectual Property and Competition (CIIPC) at National Law University Delhi

TYPE OF COURSE : UG/PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 15 weeks (01/08/2018 to 15/12/2018)
EXAM DATE : December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Basic knowledge of property law; temperament to understanding science, tech and interest in creativity and innovation.

OBJECTIVE OF COURSE

The course on intellectual property (IP) will provide: i. Conceptual clarity on various categories of IP law as property and its different dimensions; ii. Deeper understanding of the nature and content of IP rights, IP transactions and IP remedies/ enforcement; iii. Deeper understanding of the role and limits of balancing competing interests embedded in IP law; iv. Understand the contextual and contemporary developments in IP law and why they matter in practice; v. Will equip students to deal with real world IP issues

LEARNING OUTCOME

After finishing this course, students will be able to develop:

- Conceptual clarity on various categories of IP law
- Deeper understanding of the nature and content of IP rights, IP transactions and IP remedies/ enforcements
- Deeper understanding of the role and limits of balancing competing interests embedded in IP law
- Understand the contextual and contemporary developments in IP law and why they matter in practice

COURSE PLAN

Week 1 : Module 1: Introduction to Intellectual Property: A Conceptual Primer Module 2: Universal Origins of Intellectual Property Module 3: Theoretical Justifications for Intellectual Property Module 4: Economics of Intellectual Property: Innovation and Creativity - Policy Linkages

Week 2: Module 5: Legal Principles of International Intellectual Property Regime: Introduction to TRIPS Module 6: Intellectual Property and Interface with Fundamental Freedoms Module 7: TRIPS and Public Health: Challenges for Access to Medicines Module 8: Intellectual Property and Competition Law- A Primer

Week 3: Module 9: Concept of Invention, Novelty, Inventive Step and Industrial Application and Disclosure Module 10: Pharmaceutical Patents- Subject Matter Exclusions Module 11: Biotechnology Patents- Subject Matter Exclusions

Week 4: Module 12: Software and Business Methods Patents Module 13: Patents, Traditional Knowledge and Biodiversity

Week 5: Module 14: Originality Requirement in Copyright Law Module 15:: Subject-Matter Requirement in Copyright Law Module 16: Neighbouring/ Related Rights

Week 6: Module 17: Trademarks- Concept of Distinctiveness and Grounds for Refusal of Trademark Registration Module 18: Trademarks- Challenges in Non-Conventional Marks and Domain Names Disputes Module 19: Well Known Marks

Week 7: Module 20: Industrial Designs: Definition of a design; Concept of Novelty and Originality; designs not patentable; - Functional Designs Module 21: Trade Secrets- Conditions of Protection Module 22: Geographical Indications: Substantive Conditions for Registration

Week 8: REVISION AND ASSIGNMENT

Week 9: Module 23: Plant Variety Protection – Conditions of Registration Module 24: Other Kinds of Intellectual Property

Week 10: Module 25: Economic and Moral Rights of Authors Module 26: Copyright in the Digital Context Module 27: IP Assignment and Licensing

Week 11: Module 28: Patent Rights- Limited Exceptions Module 29: Copyright- Fair Dealing Module 30: Limitations on Rights of Trademarks Owners

Week 12: Module 31: Principles of IP Exhaustion Module 32: Patents- Compulsory Licensing /Other Uses Without Authorization Module 33: Copyrights- Statutory and Compulsory Licensing

Week 13: Module 34: Patent Infringement Module 35: Copyright Infringement Module 36: Trademark Infringement and Passing-off Module 37: Ambush Marketing and Comparative Advertising

Week 14: Module 38: Nature of Remedies in IP Law Module 39: Patent law- remedies Module 40: Copyright-Civil and Criminal Module 41: Trademark Law- Civil and Criminal

Week 15: REVISION AND ASSIGNMENT

ABOUT INSTRUCTOR

Yogesh Pai is an assistant professor of law and the Co-Director of Centre for Innovation, Intellectual Property and Competition (CIIPC) at National Law University Delhi. Yogesh is the Thomas Edison Fellow (2017-18) at the George Mason University, Washington D.C. In the fall of 2012, Yogesh visited the School of Law, University of Washington as the Asian Law Centre short-term Visiting Scholar. Yogesh is on the roster of consultants with the World Trade Organisation for Regional Trade Policy Courses (RTPC) and a Tutor with the WIPO Academy Distance Learning Programme. Yogesh has published in national and international journals.

INTEGRAL EQUATION AND INTEGRAL TRANSFORM

PROF SUDESHNA BANERJEA
PROFESSOR, DEPARTMENT OF MATHEMATICS,
JADAVPUR UNIVERSITY, KOLKATA

TYPE OF COURSE : POST GRADUATE
INTENDED AUDIENCE : POST GRADUATE STUDENT

COURSE DURATION : 15 weeks (10/8/18 to 30/11/18)
EXAM DATE : December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Knowledge of Mathematics at undergraduate Honours level, knowledge of Functional Analysis and Complex Variable Theory.

OBJECTIVE OF COURSE

Integral equation and integral transform are important mathematical tools in Applied Mathematics. This is a fifteen week course where the students will be introduced to the topic of Integral equation and integral transform and motivation of the study. In first six weeks students will learn various types of linear integral equations, their method of solution. In next nine weeks students will be introduced to various types of integral transforms, their properties and applications.

LEARNING OUTCOME

Upon completion of the course, students will have the knowledge of various types of integral equations, their method of solution and different types of integral transforms and their applications. Students will be able to solve a boundary or an initial value problem by i) reducing to suitable integral equation ii) using suitable integral transform. Since any natural phenomena can be reduced to a boundary or an initial value problem, so the student will develop a skill to handle real world phenomena.

COURSE PLAN

Week 1: Chapter 1: M1. Classifications of integral equations. M2. Occurrence of Volterra integral equations.

Week 2: Chapter 1: M3. Occurrence of Fredholm integral equations. **Chapter 2:** M1. The theory of Fredholm alternative. M2. Homogeneous Fredholm integral equations of second kind with degenerate kernel. M3. Solution of Fredholm integral equation with degenerate kernel: example.

Week 3: Chapter3: M1: Fredholm integral equations of second kind with continuous kernel: solution by the method of successive approximations. M2. Fredholm integral equations of second kind with continuous kernel: solution by the method of successive approximations: example. M3. Method of successive approximations applied to volterra integral equation of second kind.

Week 4: Chapter 3: M4. Fredholm integral equations of second kind with continuous kernel: iterated kernel. M5. Fredholm integral equations of second kind with continuous kernel: Fredholm theorems. M6. Fredholm integral equation of second kind with square integrable kernel and forcing term.

Week 5: Chapter 4: M1. Properties of integral equations with symmetric kernel. M2. Hilbert schmidt theorem.

Week 6: Chapter 5: M1. Abel integral equation:Method based on elementary integration. M2. Abel integral equation:Method based on laplace transform.

Week 7: Chapter 6: M1. Introduction to Fourier transform. M2. Fourier transforms of some simple functions. M3. Properties of Fourier transform. M4. Convolution theorem and Parseval relation

Week 8: REVISION AND ASSIGNMENT WEEK

Week 9: Chapter 6: M5. Application of Fourier transforms in solving linear ordinary differential equations. M6. Application of Fourier sine and cosine transforms in solving linear ordinary differential equations. M7. Application of Fourier transform in solving partial differential equations. M8. Application of Fourier sine and cosine transform to the solution of partial differential equations.

Week 10: Chapter 7: M1. An introduction to Laplace transform. M2. Operational properties of Laplace transform. M3. Convolution of Laplace transform.

Week 11: Chapter :7: M4. Method of evaluation of inverse Laplace transform. M5. Application of Laplace transform to differential equations

Week 12:Chapter 8: M1. An introduction to Mellin transform. M2. Operational properties of Mellin transform. M3. Evaluation of Mellin transform of some functions.

Week 13: Chapter :9: M1. Hankel transform and its properties. M2. Hankel transform of some known functions and applications.

Week 14: Chapter 10: M1. Introduction to Z transform. M2. Inversion of Z transform.

Week 15: REVISION, ASSESSMENT and EVALUATION WEEK

ABOUT INSTRUCTOR

Educational qualification: Ph.D in Applied Mathematics from University of Calcutta.
Field of Specialization and expertise: Applied Mathematics, Theory of Water Waves, Integral Equations .
Presently working as a Professor in the Department of mathematics, Jadavpur University, Kolkata.
No. of publication: 62, No. Of Ph.D student: 6

INTERNATIONAL HUMAN RIGHTS SYSTEM

PROF. (DR.) Y.S.R. MURTHY
Professor & Registrar; Executive Director, Centre for Human Rights Studies,
O.P. Jindal Global University

TYPE OF COURSE : PG degree

INTENDED AUDIENCE : Students studying at PG level such as M.A. (Human Rights) programme in Indian universities or LL.M with Human Rights specialization. The Course is also open to UG students.

COURSE DURATION : 15 weeks (10/08/2018 to 23/11/2018)

EXAM DATE : first week of December

NO OF CREDITS : 4

PRE-REQUISITES : Exposure to undergraduate courses of Social Sciences/Law would be helpful.

OBJECTIVE OF COURSE

Overall objectives of the complete course including the expected learning outcome of the course are:
1. To give students a brief overview of theories of human rights
2. To give a thorough understanding of the international legal framework as well as institutional framework for the protection and promotion of human rights.
3. To give a brief overview of the regional mechanisms for the protection and promotion of human rights

LEARNING OUTCOME

By the end of the course students should be able to:
1. Demonstrate a good understanding of the theoretical foundations of human rights and the beginnings of the concept of human rights and the human rights system as we know it today.
2. Display a good understanding of the nature and scope of international human rights law and the UN Charter and Treaty based human rights machinery.
3. Demonstrate a good understanding of the practical application of international human rights law to specific human rights problems.

COURSE PLAN

Week 01:- 1. Historical Development of Human Rights: from Ancient Roots to Magna Carta, 2. Natural Rights, 3. Liberal Theory of Rights

Week 02:- 1. Sociological Theory of Rights, 2. Marxist Theory of Rights, 3. Cultural Theory of Rights, 4. Legal Positivist theory of Rights

Week 03:- 1. Human Rights Provision in the UN charter, 2. General Assembly Mandate of the UN General Assembly, 3. UN Security Council

Week 04:- 1. ECOSOC: Mandate of ECOSOC for the protection and promotion of Human Rights, 2. UN Human Rights Commission Historical Overview, 3. The Commission on the Status of Women

Week 05:- 1. UN Commission for Social Development, 2. CCPCJ Commission on Crime Prevention and Criminal Justice, 3. The International Court of Justice

Week 06:- 1. Human Rights Council; Birth of the Human Rights Council - Comparison between Human Rights Commission and Human Rights Council, 2. Human Rights Council: UN Secretary General's Report "In larger freedom towards security, development and Human Rights for all

Week 07:- 1. UN Women, 2. United Nations Human Settlement Programme (UN Habitat), 3. United Nations High Commissioner for Human Rights and the Office of the United Nations High Commissioner for Human Rights (OHCHR)

Week 08:- 1. United Nations High Commissioner for Refugees (UNHCR), 2. Treaty-Based Procedures: Introduction to Role of UN Treaty-Based Bodies, Part-A, 3. Treaty Based Bodies. Part B

Week 09:- 1. Overview of the Human Rights Committee (ICCPR), 2. Overview of the Committee on Economic Social and Cultural Rights, 3. Charter Based Procedures: Human Rights Council Complaints Procedure - 1503 Procedure

Week 10:- 1. Special procedures; the mandates of Special Rapporteurs, Representatives, Experts and Working group, 2. Universal Periodic Review (UPR), 3. Food and Agriculture Organization (FAO)

Week 11:- 1. International Labour Organization (ILO), 2. World Health Organization (WHO), 3. UNESCO, 4. United Nations Children's Fund (UNICEF)

Week 12:- 1. Regional Mechanisms- European System: Council of Europe and its Institutions; European Convention for the Protection of Human Rights and Fundamental Freedoms, 2. European Social Charter and the European Committee of Social Rights, 3. Other Human Rights Treaties, 4. Organization for Security and Cooperation in Europe

Week 13:- 1. Africa Systems, 2. Part A Inter-American System for protection of human rights, 3. Part – B The Inter-American System for the Protection of Human Rights: Human Rights Monitoring **Bodies**

Week 14:- 1. Arab Regional Mechanism: Human Rights, 2. Asian Mechanism: Review of Efforts to Establish a South Asian Human Rights Mechanism, 3. International Criminal Court

Week 15:- 1. Introduction to National Human Rights Protection System

ABOUT INSTRUCTOR

Dr. Y.S.R. Murthy is presently working as the Professor & Registrar and Executive Director, Centre for Human Rights Studies in the O.P. Jindal Global University, Sonipat. Prior to it, he served in the National Human Rights Commission of India in various capacities for over 12 years including as the Director, Policy Research, Programmes and Projects Division.
His books on `Halsbury's Laws of India - Human Rights' and `Human Rights Handbook' were published by LexisNexis Butterworths. He edited NHRC's Annual Journal on Human Rights for several years.
He was awarded the British Chevening Fellowship for pursuing M.A. degree in Human Rights from University of London in 1998-99. He secured his Ph.D. from Tamil Nadu Dr. Ambedkar Law University, Chennai.

INTRODUCTION TO R

DR. SANTU GHOSH
Assistant Professor, Department of Biostatistics, St. John's Medical College - an affiliated institute of Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG/Diploma/Certificate

COURSE DURATION : 14 weeks (13th Aug to 20th Nov 2018)
EXAM DATE : 20th November 2018
NO OF CREDITS : 4

PRE-REQUISITES : Fundamental knowledge on basic statistics and familiarity with the concept of computer programing.

OBJECTIVE OF COURSE

The course will give a brief introduction to R language for statistical computation. Starting from data processing to data visualization, tabulation/summarization, statistical comparison, exploration of association and effects estimation under R computation platform will be covered in this introductory course. Simultaneously, case study base course design will make learner fluent in contextual interpretation of statistical results. The course also partially introduces R-programming to enhance ability of a leaner to execute user defined algorithm in statistical analysis.

LEARNING OUTCOME

The course will develop Fluency in R computation and data analysis. It will make leaner familiar with R data structures, R objects R outputs, inbuild R functions and finally, construction of user defined function in R. It will not only teach how to apply statistical methods with the help of R, but enable learner to choose appropriate statistical technique along with subject specific interpretation of results obtained from the analysis.

COURSE PLAN

Week 01:- Overview of R
Week 02:- Linear Algebra
Week 03:- Graphics in
Week 04:- Descriptive statistics
Week 05:- R inbuild and user defined function
Week 06:- Testing of hypothesis
Week 07:- Simple Linear Regression
Week 08:- Mid-term assessment
Week 09:- Multiple Linear Regression
Week 10:- Categorical data analysis
Week 11:- Nonparametric statistics
Week 12:- Numerical Optimization
Week 13:- Maximum Likelihood Estimation
Week 14:- Case Study
Week 15 :- Examination

ABOUT INSTRUCTOR

The course coordinator has strong statistical background with almost 15years research experience in Public Health. Earlier he completed B.Sc. and M.Sc. in Statistics from University of Calcutta, Kolkata. Later he acquired an interdisciplinary PhD degree on 'Biostatistics-Environmental Health' from Faculty of Public Health, Sri Ramachandra University, Chennai. He also has more than 15years experience in R computing language and statistical analysis with plenty of research publications in international and national journals in the field of air pollution and health research in India.

MURAL STUDY

PROF. VIJAY SAKPAL
Professor, Dept. of Mural, Sir J.J. School of Art,
Mumbai

TYPE OF COURSE : UG/PG

INTENDED AUDIENCE : Students of art, artists, designers, sculptors, interior decorators, architects

COURSE DURATION : 20 weeks (2nd July to 13th Oct.'2018)

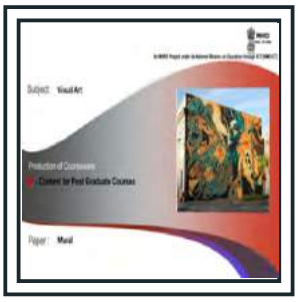
EXAM DATE : 15th Week of the course i.e. 8thto13th Oct 2018

NO OF CREDITS : 4

PRE-REQUISITES : The learners are expected to have completed Graduation in any discipline, artists, designers, sculptors, interior decorators, architects who are engaged to create magnificent and mesmerising Mural works

OBJECTIVE OF COURSE

This specialised course caters to the needs of Fine Arts students at Post-Graduate level who are interested in learning the nuances, trends and professional tips from the experts in this field and equip themselves with the vast reservoir of knowledge and experience which will be shared by these experts through very interesting as well as practical modules throwing light on minute details from the very starting to the finest execution of a particular style of Mural making.



LEARNING OUTCOME

This course on Mural Art will be beneficial to the students of art to attain competence and expertise in attempting and undertaking such Mural artworks in a very professional and systematic way providing the learners a very lucrative and monetary beneficial career besides satisfying their creative skills.

COURSE PLAN

Week 01:- 1. Introduction of Mural and History,2. Different Types of Mural,3. Temporary Mural Indoor

Week 02:- 4. Temporary Mural Outdoor, 5. Temporary Mural Wall Painting, 6. Multipurpose Medium (Tharmocol)

Week 03:- 7. Sketches For Indoor Mural, 8. Sketch Composition For Indoor Mural , 9. Sketch Convert 2-D To 3-D, Indoor

Week 04:- 10. Sketch Composition For Outdoor Mural, 11. Sketch Convert 2-D To 3-D, Outdoor, 12. Surface Making (For Tempera)

Week 05:- 13. Surface Making (For Fresco), 14. Tempera Painting , 15. Fresco Painting

Week 06:- 16. Tempera Painting On Readymade Surface (Bison Board) , 17. Acrylic On Canvas Panel , 18. Mix Media On Canvas Panel

Week 07:- Assignment Week

Week 08:- 19. Acrylic On Wooden Panel, 20. Mix Meadia On Wooden Panel, 21. Oil On Canvas Panel

Week 09:- 22. Terracotta Mural (Ceramic), 23. Ceramic's Mural On Tiles (Readymade Surface On Glaze), 24. Siporex Carving

Week 10:- 25. O.P Carving, 26. Metal Foil Work (Part I), 27. Metal Foil Work (Part II)

Week 11:- 28. Metal Enamelling, 29. Moulding And Casting

Week 12:- 30. Fibre Moulding and Casting, 31. Actual Size Composition (Indoor)

Week 13:- 32. Actual Size Composition (Outdoor), 33. Actual Material Arrangement (Indoor)

Week 14:- 34. Installation Of Mural (Indoor), 35. Installation Of Mural (Outdoor)

Week 15:- Final Exam

ABOUT INSTRUCTOR

Prof. Vijay Gopal Sakpal is Faculty Member of Dept. of Drawing & Painting (Mural), Sir J.J. School of Art, Mumbai. He did BFA (Drawing & Painting) and MFA in Portraiture from Sir J.J. School of Art, Mumbai. He had to his credit many awards like Sir J.J. School of Art Mumbai Annual Exhibition Award 1988-1995; Art Society of India Award; Bombay Art Society Award 1998; Maharashtra State Art Award 1994, 1996; VV Oak Award, Pune, 2001; Nasik Kala Niketan Award, 1992, 1994.

He has participated in many All-India, Regional and State level exhibitions. Prof. Sakpal has held four one-man shows namely Jahangir Art Gallery, Mumbai, 1999; Shrushti Art Gallery, Aurangabad, 2000; Art Walk Gallery, Mumbai, 2001; Jahangir Art Gallery, Mumbai, 2017.

His collections are with many National & International collectors like Bhawani Museum, 2000; Raj Bhawan, Mumbai, 2003, 2012; Restoration of BaburaoSadwelkar Painting Mural at NDA, Pune, 2005; Maharashtra Chitrarath Design for Republic Day Parade at Rajpath, 2014; IIFT, New Delhi, 2009. He had delivered Talks, Lectures & Demonstration of Portraits & Landscape in various Institutions and Private organizations in India and abroad.

NUMERICAL ANALYSIS

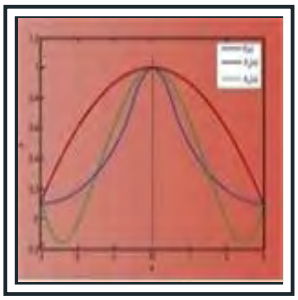
DR. MADHUMANGAL PAL
Professor, Department of Applied Mathematics with Oceanology and Computer Programming,
Vidyasagar University, Midnapore
West Bengal

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (10/08/2018 & 30/11/2018)
EXAM DATE : Eighth and fifteenth weeks
NO OF CREDITS : 4

PRE-REQUISITES : The basic knowledge of Calculus and Algebra of undergraduate level are required. To understand the C program, the very basic concept of C programming is needed.

OBJECTIVE OF COURSE



The main objectives of the course is to provide students with the specialist knowledge to
1. the sources and types of errors in numerical computations
2. develop several numerical methods for interpolation
3. develop appropriate numerical methods to approximate a function
4. derive several methods to solve an algebraic and transcendental equations
5. develop direct and iterative methods to solve a system of linear and non-linear equations
6. develop several numerical methods to solve ordinary and partial differential equations
7. derive appropriate methods to find derivative and integration of a function for single and double variables
8. design appropriate numerical methods to find eigenvalues and eigenvectors of a large matrix.

LEARNING OUTCOME

The students will be able to
1. perform an error analysis for a numerical method
2. calculate the value of a function for a given value of the argument from a table of values by appropriate interpolation formula
3. approximate a function
4. solve an algebraic and transcendental equations
5. solve a system of linear and non-linear equations by direct and iterative methods
6. solve ordinary and partial differential equations
7. evaluate derivative and integration of a single and double variables function
8. calculate eigenvalues and eigenvectors of a large matrix.
9. writing of program for numerical problem

COURSE PLAN

Week 01:- 1. Error in Numerical Computations. 2. Propagation of Errors and Computer Arithmetic.

Week 02:- 1. Operators in Numerical Analysis. 2. Lagrange's. Interpolation. 3. Newton's Interpolation Methods. 4. Central Deference Interpolation Formulae.

Week 03:- 1. Aitken's and Hermite's Interpolation Methods. 2. Spline Interpolation. 3. Inverse Interpolation. 4. Bivariate Interpolation.

Week 04:- 1. Least Squares Method. 2. Approximation of Function by Least Squares Method. 3. Approximation of Function by Chebyshev Polynomials.

Week 05:- 1. Newton's Method to Solve Transcendental Equation. 2. Roots of a Polynomial Equation. 3. Solution of System of Non-linear Equations.

Week 06:- 1. Matrix Inverse Method. 2. Iteration Methods to Solve System of Linear Equations. 3. Methods of Matrix Factorization.

Week 07:- 1. Gauss Elimination Method and Tri-diagonal Equations. 2. Generalized Inverse of Matrix. 3. Solution of Inconsistent and Ill Conditioned Systems.

Week 08:- REVISION AND ASSIGNMENT WEEK

Week 09:- 1. Construction of Characteristic Equation of a Matrix. 2. Eigenvalue and Eigenvector of Arbitrary Matrices. 3. Eigenvalues and Eigenvectors of Symmetric Matrices.

Week 10:- 1. Numerical Differentiation. 2. Newton-Cotes Quadrature.

Week 11:- 1. Gaussian Quadrature. 2. Monte-Carlo Method and Double Integration.

Week 12:- 1. Runge-Kutta Methods. 2. Predictor-Corrector Methods.

Week 13:- 1. Finite Difference Method and its Stability. 2. Shooting Method and Stability Analysis.

Week 14:- 1. Partial Differential Equation: Parabolic. 2. Partial Differential Equations: Hyperbolic. 3. Partial Differential Equations: Elliptic

Week 15:- Examination

ABOUT INSTRUCTOR

Prof. M.Pal is currently a Professor of Applied Mathematics, Vidyasagar University. Prof. Pal is the author of eight text books published from India and United Kingdom. One of them is Numerical Analysis for Scientists and Engineers: Theory and C Program, published by Narosa, New Delhi. Prof. Pal has published about 280 research papers in International and national journals. Prof. Pal is the Editor-in-Chief of "Journal of Physical Sciences", "Annals of Pure and Applied Mathematics", section editor of "International Journal of Computational Intelligence Systems" and member of editorial Boards of many journals.
He has visited China, Greece, London, Taiwan, Malaysia, Thailand, Hong Kong, Dubai and Bangladesh for academic purpose.

ORGANIZATIONAL BEHAVIOUR

PROF. (RETD) (DR.) A.K.SAIHJPAL
Former Dean, Faculty of Commerce and Management & Founder Director UIAMS, Panjab University, Chandigarh

PROF. (DR.) VISHAL KUMAR
Professor, School of Management, Maharaja Agrasen University, Baddi (H.P.)

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG Courses of Commerce, Management and Professional Studies

COURSE DURATION : 15 weeks (1st Aug to 30th Nov, 2018)
EXAM DATE : As per the decision of the University
NO OF CREDITS : 4

PRE-REQUISITES : The learners are expected to have completed Graduation in any discipline.

OBJECTIVE OF COURSE

This course aims to prepare students for understanding the human behaviour in an organization for getting desirable results. The course will provide a good foundation for students intending to study management principles and practices with the study of human behaviour within the organization. The objective of the course is to provide students with the essential content and experiences they need to become a successful manager and an effective employee. By taking this course, students will understand themselves and other people at work and will be able to learn how to create effective work groups to be a successful in life.

LEARNING OUTCOME

After completing this course, the students shall be able to:
1. Identify and analyze aspects of human behaviour at individual and group level.
2. Outline various factors that affect organizational behaviour.
3. Draw a relation between organizational factors such as structure, levels, conflict and leadership.
4. Study micro and macro factors affecting organizational behaviour.
5. Discuss theories by eminent management experts and professionals.

COURSE PLAN

Week 1 : Organisational Behaviour- Meaning and Concept, Organisational Behaviour- Importance and Fields of Study

Week 2 : Roles and Skills of Managers, Organisational Behaviour- Challenges

Week 3 : Field of OB: Individual, Groups & Systems as building blocks, Organisational Behaviour Models, Evolution of Organisational Behaviour- Part 1

Week 4 : Evolution of Organisational Behaviour- Part 2, Researches in Organisational Behaviour, International Organisational Behaviour

Assessment-1

Week 5 : Perception, Personality

Week 6 : Learning: Concept and theories Values

Week 7 : Attitude: Meaning and Concept, Attitude: Formation and Change, Motivation: Content theories

Week 8: Motivation: Process theories, Job Satisfaction, Emotions and Emotional Intelligence :

Week 9 : Formation of Groups, Types of Groups

Week 10 : Team Dynamics, Group Decision Making, Interpersonal Relations

Assessment-2

Week 11 : Communication- Nature, Types and Barriers, Leadership- Nature, Importance and Styles, Theories of Leadership

Week 12 : Power and Politics, Conflict, Foundations of Organization Structure

Week 13 : Organizational Design, Diversity and Its Management, Stress among Employees

Week 14 : Work Life Balance, Organizational Change and Development, Organizational Culture

Week 15 : Employee Empowerment, Learning Organisation, Ethical Behaviour in Organizations

Final Exam

ABOUT INSTRUCTOR

Prof. (Dr.) A.K. Saihjpal is an eminent personality in the field of Commerce and Management. He is M.Com, Adv. Dip. in Taxation Law and Ph.D in Financial Management. Dr. Saihjpal joined Panjab University, Chandigarh in January 1975. He has more than 35 years of teaching experience. He has guided more than 30 M.Phil and 8 Ph.D scholars and has also published 16 well–acclaimed research papers in the renowned journals of Commerce and Management. He has functioned as Head of Commerce Department, University School of Open Learning for over 14 years. He was the founder of starting B.Com classes through Distance Learning mode at Panjab University, Chandigarh in 1975 and also started Post Graduate Diploma in Office Management, Master of Finance & Control & lastly M.Com and MBA through the same mode.

Prof. (Dr.) Vishal Kumar is the Co-Coordinator and Resource Person of this course. He is M.Com, UGC NET, MBA and Ph.D. He is a distinguished scholar, an academician of National and International repute and a very popular teacher. He is working as Professor at School of Management, Maharaja Agrasen University, Baddi (H.P). He has 21 years of teaching experience as faculty in Commerce and Management. He is a prolific writer and has authored 24 text books and 3 edited books covering an array of topics pertaining to Commerce and Management. He has published 40 well–acclaimed Research Papers and also presented 42 Research Papers at National and International conferences/seminars. He has visited various countries to participate in International Conferences. He has also completed a project e-PG Pathshala in Management as Coordinator of the Paper "Entrepreneurship Development and Project Management".

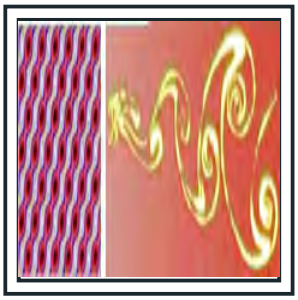
PARTIAL DIFFERENTIAL EQUATIONS

ALAKA DAS
Professor, Department Of Mathematics,
Jadavpur University

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (10th Aug to 30th Nov, 2018)
EXAM DATE : Assignment on Week 8 and Week 15
NO OF CREDITS : 4

PRE-REQUISITES : Knowledge of Linear Algebra, Ordinary Differential Equations and Theory of Special Functions.



OBJECTIVE OF COURSE

To Learn Theory Of Partial Differential Equations And Its Applications

LEARNING OUTCOME

1. Learner will have the knowledge on the theory of partial differential equation.
2. Learner will develop a skill to solve partial differential equation independently.

COURSE PLAN

Week 01:-

Basic Ideas of PDE

Week 02:-

Simultaneous Differential Equations of First Order First Degree, Pfaffian Differential Equations, Linear and Quasi-Linear First Order Equations.

Week 03:-

Nonlinear First Order PDE, Charpit's and Jacobi's Method, Solutions Satisfying Given Conditions

Week 04:-

Introduction to Second Order PDE, Solution of Second Order PDE with Constant Coefficients and Variable Coefficients

Week 05:-

Elliptic Differential Equations

Week 06:-

Parabolic Differential Equations

Week 07:-

Hyperbolic Differential Equations

Week 08:-

Rivision and Assignment

Week 09:-

Application of Integral Tranform methods specifically Laplace Transform and Fourier Tranform

Week 10:-

Application of Henkel and Mellin Transform, Finite Integral Transform Method

Week 11:-

Green's Function Method of Solving PDE

Week 12:-

Eigen Function Approach to Solve PDE

Week 13:-

Nonlinear Wave Equation, KDV Equation, Dispersion and Dissipation

Week 14:-

Burgers' and Schrödinger Equation

Week 15 :-

Rivision and Assignment

ABOUT INSTRUCTOR

- Lecturer in the Department of Mathematics of Hooghly Women's College during 2001-2005.
- Lecturer in the Department of Mathematic of Jadavpur University during 2005-2006.
- Senior Lecturer in JU during 2006-2010.
- Reader in JU during 2010-2013.
- Associate Professor in JU during 2013-2016.
- Professor in JU since 2016.

Research Interest:- Dynamical Systems, Nonlinear Dynamics, Hydrodynamic and Hydromagnetic Instabilities, uncertainty and computer vision

RESEARCH METHODOLOGY

PROF. (DR.) G.S. BAJPAI
Professor (Criminology & Criminal Justice) & Registrar

TYPE OF COURSE : PG Students

INTENDED AUDIENCE : Pursuing PG in Law, Commerce, Business Administration
Pursuing courses of Company Secretary or Chartered Accountancy

PRE-REQUISITES : Preliminary Knowledge about Social Sciences
Preliminary Knowledge about Social Research
Preliminary Knowledge about Legal Research

COURSE DURATION : 15 weeks (01/08/2018 to 31/12/2018)

EXAM DATE : December 2018

NO OF CREDITS : 4

OBJECTIVE OF COURSE

The applications of research methodology to legal research have yet to receive adequate attention India. For want of various reasons, this discipline is now gaining increased attention. This paper now forms a part of core courses in the one year LL.M. programmes recognized by the U.G.C. Besides, the need for empirical methodology in legal research is getting far more pronounced for the objectives like policy and programme evaluation, law impact assessment and implementation analysis. This course would enable the participants to imbibe the basic concepts in legal research culminating into the learning of doctrinal and non-doctrinal or empirical methods of research.

LEARNING OUTCOME

After completing the MOOC Course, the applicant shall be able to:

- Understand the concept and application of research techniques
- Draw research objectives, hypothesis and research design
- Know about the various types of research methods
- Comprehend applicability of various research models in policy making.
- Know about methods of review of literature and data collection
- Understand modes of data processing.
- Utilize a variety of research methods in developing research proposals

COURSE PLAN

Week 1 - Basics of Research, Legal Research, Legal Reasoning

Week 2 - Socio-Legal Research, Research Problem, Research Design

Week 3 - Hypothesis, Qualitative and Doctrinal Methods in Research, Quantitative Methods in Research, Sampling

Week 4 - Methods of Data Collection, Tools & Techniques of Data Collection, Data Analysis

Week 5 - Video, Text, Discussion forum, Live chat, Quiz,

Week 6 - Video, Text, Discussion forum, Live chat, Quiz

Week 7 - Video, Text, Discussion forum, Live chat, Quiz,

Week 8 - Revision and Assignment

Week 9 - Measurement, Scaling

Week 10 - Reliability & Validity, Primary & Secondary Data

Week 11 - Survey Method, Content Analysis, Case Study Method

Week 12 - Projective Techniques, Data Processing, Statistical Package for Social Sciences (SPSS)

Week 13 - Drawing Conclusions, Report Writing

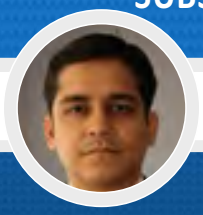
Week 14 - Citation Patters, Plagiarism

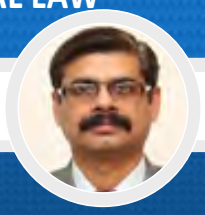
Week 15 - REVISION, ASSESSMENT and Evaluation

ABOUT INSTRUCTOR

Prof G S Bajpai serves as Professor of Criminology & Criminal Justice; Chair Professor at K.L Arora Chair in Criminal Law at National Law University, Delhi and also as the Chairperson at the Centre for Criminology & Victimology. He is also the Registrar, National Law University, Delhi. Before this, he was serving (2007-2011) as Professor & Chairperson at the Centre for Criminal Justice Administration, National Law Institute University, Bhopal (MP). Prof. Bajpai did his post doctorate study (2004) as Commonwealth Fellow at the Department of Criminology, Leicester University, U.K. Prof. Bajpai has more than 25 Years of Teaching/ Research Experience.

SUBSTANTIVE CRIMINAL LAW





DR.RANGIN PALLAV TRIPATHY
Assistant Professor, NLU Odisha

DR. MUKUL RAIZADA
Assistant Professor, NLU Delhi

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (01/08/2018 to 31/12/2018)
EXAM DATE : December, 2018
NO OF CREDITS : 4

PRE-REQUISITES : For pursuing this course, students are required to have minimum graduate degree in Law and they should be familiar with the following concepts:
Preliminary knowledge of criminal law
Preliminary knowledge about uniqueness of criminal law in the legal system
Preliminary knowledge about societal influence in the shaping of criminal law

OBJECTIVE OF COURSE

- To understand the foundations of criminal law along with the critical constituents of a crime
- To comprehend the principles of liability and punishment under the Indian Penal Code
- To grasp the nuances of inchoate offences
- To analyse the scope and application of the General Exceptions
- To understand the dimensions of various sexual offences
- To appreciate the context of several offences relating to the institution of marriage
- To comprehend the various offences concerning human body including that of murder
- To analyse the offences concerning property and reputation
- To understand the nuances of offences against the state
- To appreciate the foundation of white collar crimes
- To grasp the context of caste based offences

LEARNING OUTCOME

After the completion of the course, the following is expected from the learner

- The ability to determine if a particular set of facts can be classified as criminal conduct keeping in mind the ingredients and nuances of various offences.
- The capacity to know if the person being accused of committing the crime can be exempted from criminal liability under any of the principles of General Exceptions.
- The ability to determine the minimum and maximum punishment that may be imposed on a person if he is held guilty of having committed a crime.
- The capacity to understand the ongoing debates in the area of criminal law and contribute intelligently in any discussion on reforms in criminal law.

COURSE PLAN

Week 01:- Introduction to Criminal Law
Week 02:- Principles of Liability and Punishment under IPC
Week 03:- Inchoate Offences
Week 04:- General Exceptions
Week 05:- Sexual Offences Part-1
Week 06:- Sexual Offences Part-2
Week 07:- Offences Concerning Marriage
Week 08:- Revision and Assignment
Week 09:- Offences of Culpable Homicide and Murder
Week 10:- Other Offences Concerning Human Body
Week 11:- Offences Concerning Property and Reputation
Week 12:- Offences Against the State
Week 13:- White Collar Crimes
Week 14:- Caste Based Offences
Week 15 :- Revision, Assignment and Evaluation

ABOUT INSTRUCTOR

Dr. Rangin Pallav Tripathy
Assistant Professor of Law, National Law University Odisha, Cuttack
Dr. Rangin Pallav Tripathy has been teaching at National Law University Odisha since 2010. He has several publications in referred journal to his credit in the area of judicial appointments, access to justice and judicial performance evaluation. He has also authored a book titled 'Rights Without Law'. He is currently associated with two projects from Department of Justice in the area of judicial reforms.

Dr. Mukul Raizada
Assistant Professor of Law, National Law University, Delhi.
He has a research experience of 3 years and teaching experience of fifteen years at the Graduate levels (LL.B.) (3 yrs and 5 yrs) and Masters (LL.M.). He has research articles to his credit published in National and International journals. He has also coordinated a few national and international workshops and conferences. He has delivered lectures as resource faculty in many professional development programs.

TOPOLOGY

DR. DIBYENDU DE
Associate Professor, Department of Mathematics,
University of Kalyani

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 15 weeks (08/08/2018 to 30/11/2018)
EXAM DATE : 06/10/2018(first assessment)
Final Exam : 08/12/2018 (tentative)
NO OF CREDITS : 4

PRE-REQUISITES : **Knowledge of elementary set theory is required. Zorn's Lemma, well ordering principle, cardinal number and ordinal number will be used frequently in the discussions. Knowledge of Real Analysis and complex analysis, in particular continuous functions is necessary. Some knowledge of number theory will also be required to tackle some examples. Knowledge of metric spaces will be appreciated but not necessary.**

OBJECTIVE OF COURSE

Topology is in fact study of surfaces. This course is a twenty-week program introducing fundamental notions of topology, for example: countability axioms, separation axioms, compactness and connectedness. Starting from the definition of topology and bases we shall enter into different topological properties. We shall also examine which properties are productive properties. We shall also introduce the notion of identification topology, which will enable students to form new interesting topological spaces from old ones.

LEARNING OUTCOME

Upon completion of the course, students will be competent in topology. They will be able to discuss about continuous functions and will gather knowledge about compactness and connectedness, which are extremely useful in various branches of mathematics. They will learn several separation axioms which will guarantee rich supply of continuous functions. Students will also be friendly with manifolds, which enables them to enter in geometric objects. This course will prepare the students to enter in different kinds of research area for example, algebraic topology, geometry, topological dynamics etc.

COURSE PLAN

Week 01:- Introduction to definition of Topological spaces, Base of Topological spaces.

Week 02:- New spaces from old one, Introduction to Continuity, Homeomorphism.

Week 03:- Product topology, Metrizable spaces.

Week 04:- First countability and Second countability, Lindelofness.

Week 05:- Separation Axioms, Separation Axioms: Normality, Properties of normal spaces.

Week 06:- Urysohn's Lemma, Tietze Extension Theorem.

Week 07:- Introduction to Connected spaces, Examples of Connected Spaces, Path Connectedness, Components, Matrix Lie **groups.**

Week 08:- REVISION AND ASSIGNMENT WEEK, Assignment for 10 Marks

Week 09:- Introduction to Compact topological spaces, Finite product of Compact spaces,

Week 10:- Alexander sub-base theorem, Tychonoff product Theorem.

Week 11:- Compactness in metric spaces, Locally compact spaces, Compactness in metric spaces, some advanced properties.

Week 12:- Equicontinuity, Ascoli's theorem, Pointwise and Compact Convergence, Compact Open Topology, Baire Spaces.

Week 13:- Stone Weierstrass Theorem,Stone Cech compactification.

Week 14:- Quotient Space, Orbit Space.

Week 15 :- REVISION, ASSESSMENT and EVALUATION WEEK

ABOUT INSTRUCTOR

Ph.D. in Pure Mathematics, University of Calcutta, 2005

Research Interest

Combinatorics, Algebra in the Stone-Cech compactication of discrete semigroup and its application to Ramsey Theoretic, Ergodic Theory.

Post Doctoral Experiences

1. May 2008 to September 2008 : Postdoctoral Research Fellow in the University of Witwatersrand, Johannesburg.
2. October 2009 to December 2009 : Visitor, Instituto de Matematicas Interdisciplinar (IMI) at Universidad Complutense de Madrid.

Teaching

Post Graduate : General Topology, Algebraic Topology,
Measure and Integration, Ergodic Theory and Topological dynamical system

TOURISM PLANNING AND SUSTAINABLE DEVELOPMENT

DR. PRASHANT KUMAR GAUTAM
Director & Associate Professor, UIHTM, Panjab University, Chandigarh

TYPE OF COURSE : PG
INTENDED AUDIENCE : PG

COURSE DURATION : 18 weeks (6th Aug to 10th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

- The course will help to develop an understanding of the basic concepts of Tourism Planning, both for public and private sector among the students.
- The learners will learn about the role of planning in tourism and understand about the role of the government in the tourism planning
- All the important attributes of tourism planning will nurture the students in having good knowledge about planning & sustainable development.

LEARNING OUTCOME

This course is an attempt to prevent disorderly tourism development, in order to successfully overcome the daily changes that occur in turbulent surrounding, planning of sustainable tourism development occurs as the only way to do it successfully. So, sustainable development refers to the use without exploitation of natural, cultural and all other tourist resources from the current generation, it means to preserve them for future use by future generations. Since the development of tourism in a certain area largely dependent on natural and anthropogenic attractiveness which are located in the surrounding, the practicing of sustainable development gets more and more important.

COURSE PLAN

Week 1 to 04

Levels, type and process of planning.

Conceptualization, Background Analysis, In-depth Research and Analysis Phase

Tourism project feasibility study

Synthesis phase and preparation of statements in Destination planning

Policy making bodies in India

Involvement of Local community in tourism Development

An outline of L K Jha Committee, 1963

National Tourism Policy, 1982

Destination Development and its components

National action Plan on Tourism, 1992

The latest policy document on tourism

Week 05 to 08

Tourism Planning at International, National and State Level

Tourism and Five year plans in India

Objective Setting, Goal setting, Strategy setting and Plan writing

Techniques of Plan Formulation

Planning for tourism Destinations

Tourism planning, significance, Constraints, Grey areas and Scope

Destination Life Cycle Concept

Sources of Funding, Incentives & Concessions extended for tourism Projects

Economics of Tourism

Positive and negative impacts of tourism (environmental, economic, socio-cultural).

Week 09 to 12

Concept of mass tourism

Emergence of alternative tourism, conventional versus alternative tourism

Mass vis-à-vis selective tourism.

Synergism between tourism promotion & nature conservation

Environment and tourism – areas of conflict, symbiosis and synergy

Tourism in various bio-geographic realms and specific situation of environmental concern.

United Nations Conference on Environment and Development (UNCED) Agenda 21

Sustainable Development: Historical Background

The Nature and Scope of Sustainable Tourism

Towards a New Approach to Sustainable Tourism Management

Global Warming and Sustainable Development

Week 13 to 16

Environmental Dimension

Economic Dimension

Social Dimension

Sustainable Tourism Development-Guiding Principles for Planning and Management

Empowering Community through tourism

Community based tourism

Ecotourism

Future of Sustainable Tourism

Week 17 to End

Recapitulation, Discussion on Important Topics Again and Overview of the syllabus, Examination

ABOUT INSTRUCTOR

Author is an expert in the field of Tourism Planning and Development. He is also holding the position of Treasurer, Indian Tourism and Hospitality Congress (ITHC) and is a member of AICTE All India Board of Hospitality and Tourism Management. Dr. Gautam is also a Member of Core Group for assisting Mentor Council, Ministry of Culture, Govt. of India and a member of Tourism Committee of Saraswati Vikas Board of Haryana Govt.
He has done 3 minor research projects and undertaking one major research project in tourism. He has 40 research paper and 12 books to his credit.

DRUG DELIVERY TECHNOLOGY

PROF FARHAN JALEES AHMAD
Dean, Interdisciplinary Sciences & Technology, Professor, Pharmaceutics,
Faculty of Pharmacy, Jamia Hamdard, New Delhi

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG students
COURSE DURATION : 20 weeks (July to November)
EXAM DATE : December 2018
NO OF CREDITS : 3

PRE-REQUISITES : The candidates should have a basic understanding of dosage forms delivery systems.

OBJECTIVE OF COURSE

The technology by which a drug is delivered into the human body can have a important effect on its therapeutics effect. Most of the drugs have a concentration range within which maximum efficacy is. Controlling the pharmacokinetics, pharmacodynamics, non-specific toxicity, immunogenicity, biorecognition, and efficacy of drugs is desired. These strategies are known as drug delivery systems (DDS), and are based on multidisciplinary approaches that combine polymer science, pharmaceutics, chemistry, and molecular biology.

LEARNING OUTCOME

After successful completion of the course student will be able to:

- Understand the concepts and applications of Drug Delivery Systems.
- Apply knowledge in developing various formulations as per drug characteristics
- Develop various evaluation parameters for oral, parenteral, topical etc. drug delivery systems.

COURSE PLAN

week 1: Introduction to Controlled Release drug delivery system Factors affecting fabrication of CDDS

week 2: Types of controlled release systems

week 3: Continuous release systems

week 4: Types of Oral controlled release devices

week 5: Introduction to Mucoadhesive drug delivery

week 6: Factors affecting mucoadhesion and evaluation techniques

week 7: Introduction to Osmotic drug delivery

week 8: Introduction to parenteral drug delivery, Infusion devices

week 9: Implants and depots

week 10: Introduction to Transdermal drug delivery

week 11: Types, formulation and evaluation of transdermal delivery system

week 12: Techniques of enhancing skin permeation, Advances in Transdermal drug delivery systems

week 13: Introduction to ocular drug delivery, Intraocular drug delivery

week 14: Advances in ocular drug delivery systems

week 15: Introduction to nasal drug delivery

week 16: Nasal transport route and mechanism Nasal drug delivery systems

week 17: Nose to brain delivery of drugs

week 18: Introduction to pulmonary drug delivery, applications of pulmonary delivery system

week 19: Colloidal drug delivery Materials for colloidal drug delivery

week 20: Introduction to Controlled Release drug delivery system

ABOUT INSTRUCTOR

Prof. Farhan Jalees Ahmad is working as a Professor in Deptt of Pharmaceutics, School of Pharmaceutical Education & Research, Jamia Hamdard, New Delhi. He has 26 years experience in Research and Teaching with Ranbaxy Research Laboratories as Scientist and Jamia Hamdard. He is working in the area of Nanomedicine for the last 15 years. Four of his nanoproducts are approved by DCGI for Phase-III clinical studies. He has been granted projects to a tune of rupees 5.5 crores from DBT, CCRUM, AYUSH, UGC, DST and International agencies like FIP and OPCW etc.

He has earned awards including Young Scientist from DST, Scientist of the Year-2005 from NESA, UGC Research Award 2011, Bharat Jyoti Award 2011, Pharma Ratan 2017, ABAP Senior Scientist Award 2017. He has a US patent, Two PCT and 24 Indian patents to his name. He has published more than 300 research and review papers, 12 Book chapters,9 books, He has a total Citations of 7654, H-index of 41 and i-10 index of 164.

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Indian Institutes of Management

Bangalore

Management and Professional Courses

MHRD

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MANAGEMENT ACCOUNTING FOR DECISION MAKING

PROFESSOR M S NARASIMHAN
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 6 weeks (1st June to 28th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : Open to all educational and professional background

OBJECTIVE OF COURSE

This course will explain how accounting information is relevant to managers, and how it can be processed and analyzed for effective managerial decision-making. By examining the costing information that is extensively used across three key managerial functions of planning, decision-making and controlling, the course equips non-finance managers with basic managerial accounting skills. This course provides insight on the cost structure of products and services, costing systems, budgeting and variance analysis techniques.

This course will help learners understand:

- Basics of Accounting
- Process Costing
- Cost Allocation
- Activity-based-costing
- Cost Analysis for Decision Making
- Budgeting
- Variance Analysis

LEARNING OUTCOME

At the end of this course, the learner will be able to understand the basic cost terms and concepts, preparation of cost sheet, costing systems like job costing, product costing, activity based costing, cost allocation techniques, variance analysis. The learner will also explore absorption costing, marginal costing, break even analysis, optimal product mix, budgeting and other techniques and apply this information for effective managerial decision making.

COURSE PLAN

Week 1:- Introduction to Management Accounting

Week 2:- Product Costing

Week 3:- Cost Allocation and Activity Based Costing

Week 4:- Cost Analysis for Decision Making

Week 5:- Budgeting

Week 6:- Variance Analysis

ABOUT INSTRUCTOR

Professor M S Narasimhan teaches courses on Management Accounting, Financial Accounting, Corporate Finance and Investments. His areas of interest include Management Accounting, Corporate Finance and Capital Markets. He is a member of the Institute of Cost and Works Accountants of India. He has received his PhD from University of Madras. He has also completed a study on Corporate Disclosure Practices in India, sponsored under the FIRE project. He has published several articles and research studies in national and international journals and financial newspapers.

FINANCIAL ACCOUNTING AND ANALYSIS

PROFESSOR PADMINI SRINIVASAN
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 6 weeks (1st June to 28th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : Open to all from any background

OBJECTIVE OF COURSE

This course is designed to help learners from all fields to understand financial statements and analyse them for better decisions. This course will help:
1. Understand the various elements of financial statements
2. Identify the accounting principles related to its preparation
3. Explore the accounting rules related to the elements of financial statements
4. Apply tools and techniques to analyse and interpret the key parameters of financial performance for better decision making

LEARNING OUTCOME

At the end of this course, the learners will be able to understand the basic accounting concepts, financial statements and their elements. They will get across various accounting standards with respect to the elements in the financial statements. It will also enable them to apply the tools and techniques for analysing the financial statements and interpret them for better decision-making.

COURSE PLAN

This is a 5-week course, with 1-week of additional content.

Week 1 :- Introduction to Financial Accounting

Week 2:- A Closer Look at the Balance Sheet

Week 3:- Income Statement and Cash Flow Statement

Week 4:- Financial Statement Analysis – I

Week 5:- Financial Statement Analysis – II

Week 6:- Additional Content

ABOUT INSTRUCTOR

Dr. Padmini Srinivasan is an Associate Professor, Finance & Accounting Area at the Indian Institute of Management Bangalore (IIMB).
She is a Chartered Accountant and a Company Secretary by practice. She received her Ph.D. from the National Law School of India University. Her areas of expertise and interests include Financial Accounting, Financial Statement Analysis, Management Accounting and Corporate Governance and Accountability. She has varied professional interests in teaching, research and consulting in the areas of Financial Reporting, Management Accounting, Corporate Governance and accountability.

INTRODUCTION TO STRATEGIC MANAGEMENT

JOSE PD
Professor, IIMB

SAI YAYAVARAM
Professor, IIMB

REGIE GEORGE PALLATHITTA
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG
PRE-REQUISITES : None

COURSE DURATION : 5 weeks (1st June to 28th Dec 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

OBJECTIVE OF COURSE

This course aims to equip you with a good understanding of:
What managing a firm strategically implies?
How one analyzes the industry in which a firm competes?
How does a firm create competitive advantage?
How does a firm sustain its competitive advantage?

LEARNING OUTCOME

- Industry and competitive analysis
- Resource and competency analysis
- Analysing strategy across corporate and business levels

COURSE PLAN

Week 1: INTRODUCTION TO STRATEGIC MANAGEMENT

Week 2: ANALYZING THE EXTERNAL ENVIRONMENT

Week 3: ANALYZING THE INTERNAL ENVIRONMENT

Week 4: COMPETITIVE POSITIONING

Week 5: MANAGING THE MULTI-BUSINESS FIRM

ABOUT INSTRUCTOR

Dr. P D Jose is a Professor at the Indian Institute of Management Bangalore (IIMB), where he teaches core courses on Business and Corporate Strategy and several electives on Sustainability. Prior to joining IIMB, he was a member of the faculty at the Administrative Staff College of India, Hyderabad. He is a Fellow of the Indian Institute of Management Ahmedabad. He also has a Post Graduate Diploma in Forestry Management from the Indian Institute of Forest Management, Bhopal and Bachelors in Physics from the Institute of Science, Mumbai. He has taught classes on Strategy and Sustainability at a number of schools including Cardiff University Business School (UK), the School of Economics and Business at the University of Goteborg, Sweden and Indian Institute of Management at Kozhikode and Ahmedabad. He has also consulted for several government agencies, non-governmental, private sector and international organizations.

Dr Rejie George Pallathitta is an Associate Professor in the Corporate Strategy and Policy area at IIM Bangalore. He is a Ph.D. from Tilburg University in The Netherlands. Professor Pallathitta's interests are in the areas of Corporate Governance, Strategic Management and International Business. He has published papers in the Strategic Management Journal and the Journal of Business Research and has presented his research work at several international conferences.

Dr Sai Yayavaram is an Associate Professor at IIM Bangalore, where he teaches Competition & Strategy. He also conducts executive education programmes on strategic management and management of innovation for senior managers. He is a Ph.D. in Strategic Management from McCombs School of Business, The University of Texas at Austin and holds a Post Graduate Diploma in Management from the Indian Institute of Management, Ahmedabad. His research focuses on technology management, complexity and strategic rents and has been published in Administrative Science Quarterly, Strategic Management Journal and Organization Science.

INTRODUCTION TO INVESTMENTS

S G BADRINATH
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 5 weeks (1st June to 28th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : Introductory corporate finance, High school algebra

OBJECTIVE OF COURSE

When you complete this course, you will become familiar with the general structure of primary and secondary equity markets from a domestic and international perspective. Beginning with introductory finance notions of risk and return, we examine qualitative concepts such as market efficiency and valuation.

These tools should enable you to build valuation models for common stocks. Through this process, you will also learn how professional financial analysts should evaluate companies. The course is suitable for students seeking eventual employment with a brokerage company, investment company or financial services company with responsibilities in evaluating and selecting equity securities for investment portfolios.

LEARNING OUTCOME

- To advance the understanding of fundamental concepts of financial markets and market participants.
- To explain the structure of global markets in which equities trade.
- To evaluate the economic and industry environment in which companies operate.
- To develop and employ tools of financial analysis for examining company fundamentals.
- To understand techniques for valuing equity securities.
- To link theories of valuation to practical aspects of investing.

COURSE PLAN

WEEK 1: INTRODUCING MARKETS, PARTICIPANTS AND PERFORMANCE

WEEK 2: MARKET STRUCTURE

WEEK 3: TRADING LOCATIONS AND PRACTICES

WEEK 4: BASICS OF VALUATIONS

WEEK 5: FUNDAMENTAL VALUATION ANALYSIS

ABOUT INSTRUCTOR

Professor Badrinath is currently the Chairperson of the Centre for Capital Markets and Risk Management at IIM Bangalore. He is on leave from San Diego State where he teaches in the Investments and Risk Management areas. His Ph.D. is in Finance from the Krannert Graduate School of Management, Purdue University. He has a PGDM in Finance from IIMB, and an M.A from St. Stephen's College. His research has appeared in leading academic publications such as the Journal of Finance, The Journal of Financial Economics, The Review of Financial Studies, the Journal of Risk and Insurance, the Journal of Banking and Finance and the Journal of Business. Collectively, these papers have been cited several hundred times. Additionally, some of his research has been funded by the Fulbright Foundation, the U.S. Environmental Protection Agency and the Financial Executives Research Foundation. At Rutgers, he received college wide and University-wide teaching awards. At San Diego, he has received awards for Outstanding faculty and for Outstanding faculty contributions to the College of Business. He has served as the faculty advisor to the Aztec Equity Fund -- a student managed equity portfolio. He has also served as a consultant in cases involving utility rate setting and in anti-takeover legislation.

CUSTOMER RELATIONSHIP MANAGEMENT

PROFESSOR SHAINESH
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 5 weeks (1st July to 20th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : Familiarity with marketing concepts will be helpful.

LEARNING OUTCOME

- The meaning and application of CRM
- Benefits of CRM to companies and consumers
- How to implement CRM best practices
- The importance of bonding and building loyalty with customers
- How to build long term customer relationships

COURSE PLAN

WEEK 1: INTRODUCTION TO CRM

WEEK 2: BUILDING CUSTOMER RELATIONSHIPS

WEEK 3: ECONOMICS OF CRM

WEEK 4: Break week

WEEK 5: CRM APPLICATIONS

WEEK 6: CRM IMPLEMENTATION

ABOUT INSTRUCTOR

Shainesh is Professor of Marketing at the Indian Institute of Management Bangalore. He has conducted research and teaching assignments at various universities abroad. His book titled Customer Relationship Management – A Strategic Perspective (Macmillan India) is a prescribed textbook for CRM courses at several business schools. He is also the co-author of a book on CRM titled Customer Relationship Management – Emerging Concepts, Tools and Applications (15th Reprint 2011, Tata McGraw Hill, New Delhi).

INTRODUCTION TO MARKETING ESSENTIALS

DR. ASHIS MISHRA
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG
PRE-REQUISITES : None

COURSE DURATION : 5 weeks (1st July to 28th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

OBJECTIVE OF COURSE

You will learn the theories of marketing through practice (examples and illustrations). This course will explain what marketing management is all about in the simplest of terms and lay the foundation to your pathway to excellence in the wonderful world of marketing.

LEARNING OUTCOME

- Basic concepts of marketing
- Segmentation, targeting, differentiation and positioning
- Marketing strategy
- 4Ps of marketing: product, price, place and promotion

COURSE PLAN

WEEK 1: WHAT IS MARKETING

WEEK 2: SEGMENTATION AND TARGETING

WEEK 3: DIFFERENTIATION AND POSITIONING

WEEK 4: MARKETING STRATEGY - PRODUCT AND PRICE

WEEK 5: MARKETING STRATEGY - PLACE AND PROMOTION

ABOUT INSTRUCTOR

Dr. Ashis Mishra is a faculty member in the Marketing Area at the Indian Institute of Management Bangalore (IIMB). Dr. Mishra teaches marketing management and retail management. His area of research involves Retail Productivity Analysis, Retail Atmospherics and Retail Consumer Behaviour. He has successfully developed and applied many quantitative models and business model frameworks in solving marketing/retailing-related problems. He has published over 10 papers in various national and international journals of repute.

STRATEGY AND THE SUSTAINABLE ENTERPRISE

P D JOSE
Professor, IIMB

TYPE OF COURSE : PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 5 weeks
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : No prior knowledge or experience is mandatory. However, prior exposure in the subject areas of management, especially strategic management will help you navigate through course easily.

OBJECTIVE OF COURSE

This course explores the emerging relationships between sustainability issues and competitive advantage. Building on the basic concepts of strategic management, this course will explore how managers may effectively deal with the sustainability challenges that they now encounter.
By encouraging you to reflect on these issues using multiple case studies, discussions and interviews, we will aim to enhance your understanding of alternative models of strategy development in the context of sustainable development.

LEARNING OUTCOME

- The nature of the sustainability problems faced by businesses
- The business case for sustainability: Links between sustainability strategy and corporate performance
- How can firms integrate sustainability concerns into their business strategy? Which tools and techniques may be employed for this?
- Applied understanding of stakeholder management, non-market environment and issues/crisis management

COURSE PLAN

Week 1: WHAT IS SUSTAINABILITY AND WHY SHOULD STRATEGISTS CARE?

Week 2: MANAGING STAKEHOLDERS

Week 3: MANAGING SUSTAINABILITY RISKS

Week 4: TRANSFORMING INTO SUSTAINABLE ENTERPRISE

Week 5: THE ANARCHIST CORPORATION

ABOUT INSTRUCTOR

P D Jose is a professor at the Indian Institute of Management Bangalore, where he teaches core courses on Business and Corporate Strategy and several electives on sustainability. He is a Fellow of the Indian Institute of Management Ahmedabad. He also has a Post Graduate Diploma in Forestry Management from the Indian Institute of Forest Management, Bhopal and Bachelor's in Physics from the Institute of Science, Bombay. He has taught classes on strategy and/or sustainability at a number of schools including Cardiff University Business School (UK); the School of Economics and Business at the University of Goteborg, Sweden; Indian Institute of Management at Kozhikode and Ahmedabad. He has also consulted with several government agencies, non-governmental, private sector and international organizations.

All India Council for Technical Education

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Article Courses

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UNIVERSITY OF DERBY

Professor & University of Derby

TYPE OF COURSE : School

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 6 weeks

EXAM DATE : NA

NO OF CREDITS : NA

OBJECTIVE OF COURSE

This course will help you to improve the lives of people with dementia, adopting a person-centred and integrated approach. It is suitable for anyone interested in dementia or for those caring for people with dementia including partners, families and health and social care practitioners.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Communication and Compassing

Week 02: The Carer's voice

Week 03: Independence, control and Quality of Life

Week 04: Dementia as a Global Health Priority

Week 05: Integrating care

Week 06: End of life care

Week 07: Users of Information Retrieval

ABOUT INSTRUCTOR

The objective of the entire course is to provide the learner an opportunity to get exposed to diverse disciplinary perspectives and concepts related to them. This will equip the learner to develop a holistic perspective on the subjects. Also it will guide the learner to choose the area(s) of specific interest for further learning.

CRITICAL THINKING

PARTHA CHATTERJEE
Assistant Professor & SHIV NADAR UNIVERSITY

TYPE OF COURSE : UG

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 1 weeks

EXAM DATE : NA

NO OF CREDITS : NA

OBJECTIVE OF COURSE

This module introduces the basic of naïve set theory. This allows us to develop a language that can be used to understand various concepts of Logic. This module is of two hours. Students should go through the lecture notes and try to answer the questions provided in the question bank. When students are satisfied with their understanding of the material, then can take the quiz to test their understanding.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Set Theory

Week 02: Set Theory

ABOUT INSTRUCTOR

Ashokankur Datta Assistant Professor Department of Economics, School of Humanities and Social Sciences Email Contact: ashokankur.datta@snu.edu.in

Education Details:

Ph.D. (Economics), Indian Statistical Institute, Delhi. 2012.

M.A. (Economics), University of Delhi. 2005

B.Sc. (Economics-Honours.), University of Calcutta. 2003

CULTURAL STUDIES

SUPRIYA CHAUDHURI
Professor & Jadavpur University

TYPE OF COURSE : UG

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 2 weeks

EXAM DATE : NA

NO OF CREDITS : NA

OBJECTIVE OF COURSE

Course on Evolution of Film Form and Digital Culture

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Evolution of fil form

Week 15 : Digital Cultures

PRABHAKAR RAO JANDHYALA
Professor & University of Hyderabad

TYPE OF COURSE : UG
INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.
PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.
COURSE DURATION : 4 weeks
EXAM DATE : NA
NO OF CREDITS : NA

OBJECTIVE OF COURSE

This module introduces the basic of naïve set theory. This allows us to develop a language that can be used to understand various concepts of Logic. This module is of two hours. Students should go through the lecture notes and try to answer the questions provided in the question bank. When students are satisfied with their understanding of the material, then can take the quiz to test their understanding.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Anthropological Perspectives on Environment 1

Week 02: Anthropological Perspectives on Environment 2

Week 03: Anthropological Perspectives on Environment 3

Week 04: Anthropological Perspectives on Environment 4

INTRODUCTION TO YOGA AND APPLICATIONS OF YOGA

SRIDHAR MELUKOTE
Professor & Swami Vivekananda Yoga
Anusandhana Samsthan

TYPE OF COURSE : Certificate

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 12 weeks (01/08/2018 & 31/10/2018)

EXAM DATE : To be announced

NO OF CREDITS : 4

OBJECTIVE OF COURSE

The course containst Message of Vedas And Upanishads, the Four Streams of Yoga, Shaddarshanas or the SIX systems of Indian Philosophy, Introduction to Hatha Yoga and Patanjali Yoga Sutras. It also includes Life and message of spiritual masters and Indian Culture. In Applications of Yoga, topcis covered include Anatomy and Physiology, Yoga and Exercise Physiology, Concept of Health, both yogic and modern scientific, Yogic Concept Of Health & Disease Principles of Healthy Living, Effect of Diet and Yogic Concept of Diet in Therapeutic Situations, Yoga, Education and Research, Yoga and Stress Management and Yoga and Mental Health.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Message of Vedas and Upanishads (ALL WEEKS)

ABOUT INSTRUCTOR

- Dean of Academics and Dean, Division of Yoga and Humanities, S-VYASA, Bengaluru Registrar of Karnataka Samskrit University, Chamarajapet, Bangalore (June 07, 2014 to December 06, 2015).
- Deputy Director, Publications wing, Karnataka Samskrit University (March 2012 – July 2013) Fulbright Scholar (2000) with South Carolina University, USA (selected by the Indian and US Governments.
- Assistant Professor of Hinduism and Indian Philosophy at Hindu University of America, Orlando (2004 and 2005).
- Adjunct Professor at Union University, Cincinnati, USA (2005-07).

INTERNATIONAL YOUTH FELLOWSHIP

Professor & International Youth Fellowship

TYPE OF COURSE : Certificate

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 7 weeks

EXAM DATE : NA

NO OF CREDITS : NA

OBJECTIVE OF COURSE

In an increasingly globalised world, to stay ahead of competition and succeed, mere knowledge and skill no more suffices. The Mind Education Course aims at creating global leaders in every field who possess the special wisdom that others do not have thereby making them singular individuals who will be much in demand internationally. We wish to mould such leaders who possess the mindset of 'You First' instead of 'Me First'. In every field whether it be education, IT, Medicine etc. such leaders are direly needed. This is why the mind education lectures educate the hearts of people to learn the value of self-control and happiness, creating a much better environment in the class or workplace and building leaders with bright & clean hearts.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Importance and necessity of mind education

Week 02: Knowledge based education and wisdom based education

Week 03: Desires and self control

Week 04: Wounds of the heart: Causes and cure

Week 05: Listening: Wisdom to gain hearts

Week 06: Thinking Power -Importance and necessity of contemplating

Week 07: Change in perspective

ABOUT INSTRUCTOR

Prof. Kim Soo Yeon is the Director of International Youth Fellowship, India. And he is also a Mind Education Specialist. He has been a speaker at various events such as the Atlanta Citizen Camp, USA, National Youth Camp, Burundi, Educational Ministry camp in Zambia. He was also one of the main speakers at the 17th National Jamboree, Karnataka. He has been invited to deliver mind education lectures at the Dept of Prohibition & Excise Office, Telangana, and Dept. of Income Tax (Exemptions) Delhi. He has made significant contribution to the development of youth through his lectures on mindset education at various colleges and universities all over India.

UNIVERSITY OF DERBY

Professor & University of Derby

TYPE OF COURSE : Certificate

INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.

PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.

COURSE DURATION : 6 weeks

EXAM DATE : NA

NO OF CREDITS : NA

OBJECTIVE OF COURSE

This course was developed by the University of Derby to help raise awareness and encourage communication and education about autism, Asperger's and ADHD. One of the most common childhood conditions, ADHD can continue through adolescence and into adulthood (NICE, 2013). In the UK alone, around 700,000 people are on the autism spectrum (National Autism Society,2016).

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Here the course coordinator has to provide the brief course plan covered in the week Example :

Week 01: Symptoms of ADHD

Week 02: what is autism

Week 03: How are psychiatric diagnoses made?

Week 04: Theorising about causation

Week 05: What is comorbidity?

Week 06: Early interventions

ABOUT INSTRUCTOR

This course has been developed by the University of Derby. The University has campuses. in Derby and across the English country Derbyshire.

The University of Derby Online Learning is the thriving distance learning division of the University of Derby.

Since 2001, the University of Derby has offered online distance learning to students who require more-flexible study options. As demand for these popular online distance learning courses increased, we learned to tailor course content specifically for online delivery. In 2011, based on the increasing success of our distance learning courses, we launched University of Derby Online Learning (UDOL).

YOGA PRACTICES 1

DR VIKAS RAWAT
Professor & Swami Vivekananda Yoga
Anusandhana Samsthan

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.
PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.
COURSE DURATION : 12 weeks (01/08/2018 & 31/10/2018)
EXAM DATE : To be announced
NO OF CREDITS : 4

OBJECTIVE OF COURSE

Preparatory practices including Sukshmavyayama, Breathing Exercises, Loosening Practices, Suryanamaskara or Sun Salutation, Asanas, Kriyas, Bandhas, Mudras, Pranayama, Dhyana or Meditation, chanting of shlokas, bhajans and patriotic songs and activities such as krida yoga, karma yoga activities, ananda sabha or happy assembly including presentations and skits, dramas and many more such activities which help a yoga practitioner grow from tamas to rajas to sattva and eventually to gunaathita sthiti or attainment.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Sukshma Vyayama

ABOUT INSTRUCTOR

Dr Vikas Rawat, Phd, is an Assistant Professor, Level 2 at S-VYASA University. He has been doing sadhana for more than 10 years at Prashanti Kutiram, the campus of S-VYASA.

YOGA PRACTICES 2

DR BALARAM PRADHAN
Professor & Swami Vivekananda Yoga
Anusandhana Samsthan

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.
PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.
COURSE DURATION : 12 weeks (01/08/2018 & 31/10/2018)
EXAM DATE : To be announced
NO OF CREDITS : 4

OBJECTIVE OF COURSE

Preparatory practices including Sukshmavyayama, Breathing Exercises, Loosening Practices, Suryanamaskara or Sun Salutation, Asanas, Kriyas, Mudras, Pranayama, Dhyana or Meditation, chanting of shlokas, bhajans and patriotic songs and activities such as krida yoga, karma yoga activities, ananda sabha or happy assembly including presentations and skits, dramas and many more such activities which help a yoga practitioner grow from tamas to rajas to sattva and eventually to gunaathita sthiti or attainment.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Sukshma Vyayama (ALL WEEKS)

ABOUT INSTRUCTOR

Dr Balaram Pradhan, Phd, is an Assistant Professor, Level 2 at S-VYASA University. He has been doing sadhana for more than 15 years at Prashanti Kutiram, the campus of S-VYASA.

YOGA PRACTICES 3

DR KASHINATH MHETRE
Professor & Swami Vivekananda Yoga
Anusandhana Samsthan

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : It is an open platform so anyone can enroll and consume the course.
PRE-REQUISITES : It is an open platform so anyone can enroll and consume the course.
COURSE DURATION : 12 weeks (01/08/2018 & 31/10/2018)
EXAM DATE : To be announced
NO OF CREDITS : 4

OBJECTIVE OF COURSE

Preparatory practices including Sukshmavyayama, Breathing Exercises, Loosening Practices, Suryanamaskara or Sun Salutation, Asanas, Kriyas, Mudras, Pranayama, Dhyana or Meditation, chanting of shlokas, bhajans and patriotic songs and activities such as krida yoga, karma yoga activities, ananda sabha or happy assembly including presentations and skits, dramas and many more such activities which help a yoga practitioner grow from tamas to rajas to sattva and eventually to gunaathita sthiti or attainment.

LEARNING OUTCOME

Leaner will have good command in this Subject.

COURSE PLAN

Week 01: Sukshma Vyayama (ALL WEEKS)

ABOUT INSTRUCTOR

Dr Kashinath Mhetre, MD (Yoga and Rehabilitation), Phd (Yoga), is an Assistant Professor, Level 2 at S-VYASA University. He has been doing sadhana for more than 8 years at Prashanti Kutiram, the campus of S-VYASA.

Consortium for
Educational Communication

Non-Technology Under-Graduate Courses

MHRD

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Arts Literature and Language Courses

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ANCIENT GREEK AND MEDIEVAL PHILOSOPHY

DR. BABU M. N
Asst Professor, Department of Philosophy, Sree Sankaracharya
University of Sanskrit, Kalady, Kerala

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (July 30 to Oct 27, 2018)
EXAM DATE : November 12, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Those who passed Plus two

OBJECTIVE OF COURSE

- Students will learn to recognize, understand and interpret philosophical concepts which were developed by great philosophical Schools.
- Students closely analyze and engage, read and write with original philosophical texts.
- They can understand and evaluate the rational inquiry of Medieval thinkers on religious philosophy
- They consider the important relevant ideas and methods of great Greek philosophers, especially Socrates and take the ideas of philosophy to their own thinking

LEARNING OUTCOME

The course enables the students to master all the basic ideas of Classical Greek and Medieval philosophy. This is a part of approved curriculum for B. A. Philosophy Course of University of Calicut that can be applicable in all Indian Universities. The purpose of this course is to study the important concepts in Ancient and Medieval philosophy. We will concentrate on the dominant figures of philosophy, and their thought on cosmology, metaphysics, epistemology, logic, ethics, and religion.

COURSE PLAN

Week 01: 1.History of Greek Philosophy, 2.Greek School Of Thought, 3.Pre-Socratic Philosophy

Week 02: 4.Pre-Socratic Thinkers- the Ionian, 5.Thales of Miletus, 6.Anaximander

Week 03: 7.Anaximenes, 8.Pythagoras, 9. Heraclitus

Week 04: 10. Parmenides, 11. Zeno, 12. Anaxagoras

Week 05: 13. Leucippus, 14. Democritus, 15. The Sophist Philosophy

Week 06: 16. Protagoras, 17. Socrates' theory of knowledge, 18. Socrates' method

Week 07: 19. Plato's theory of knowledge, 20. Doctrine of Ideas/ forms, 21. Concept of the soul

Week 08: 22. Aristotelian Epistemology, 23. Logic, 24. Substance, matter and form

Week 09: 25. The process of Change: The Four Causes, 26. Nicomachean ethics,27. Epicureanism

Week 10: 28. Stoicism, 29. A Historical Overview of Medieval Philosophy, 30. Features and Characteristics of Medieval Philosophy

Week 11: 31. Major Phases and Important Thinkers of Medieval Philosophy, 32. Central Themes and Philosophical Concerns of Medieval Philosophy, 33. Medieval Philosophers:Boethius, 34. Medieval Philosophers:Anselm of Canterbury, 35. Great Medieval Philosophers:St. Augustine of Hippo, 36. Medieval Philosophers: Saint Thomas Aquinas

Week 12: Evaluation

ABOUT INSTRUCTOR

- PhD, May 2006,Univ. of Calicut, Dept. of Philosophy,
- PhD thesis : A Study on Heidegger's Thinking and Hermeneutical Phenomenology
- M.Phil, May 1992, Pondicherry Central University, Dept.of Philosophy M.Phil thesis Heidegger's Treatment of Thinking.
- M .A Philosophy,1991 ,University of Calicut,Dept.of Philosophy University Campus
- B.A Philosophy,1988, Sree Kerala Varma college, Thrissur

VISION TO MISSION INDIAN PHILOSOPHY

DR. M. RAMAKRISHNAN
Visiting Professor at the International Centre for Spiritual Studies,
Amrita Vishwa Vidyapeetham, Kollam, Kerala.

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (July 9, 2018 to Sep. 30, 2018)
EXAM DATE : 15 October , 2018
NO OF CREDITS : 4

PRE-REQUISITES : Pass in Plus two or equivalent course

OBJECTIVE OF COURSE

- The main aim is to enable the learners to analyze and synthesize the developments in the philosophical thinking and system building in India pertaining to the classical and contemporary times.
- The modules in this course cover a variety of topics including the philosophical heritage of ancient India, the systems of thought and their practical applications in the contemporary socio-economic and cultural context of modern India.

LEARNING OUTCOME

- Develop close familiarity with the developments in classical and contemporary Indian Philosophy
- Trace the positive transition in Indian philosophy from the ancient to modern times
- Analyze and synthesize the developments in the philosophical thinking and system building in India pertaining to the classical and contemporary times
- Create the awareness of the philosophers' task of leading India into a glorious future

COURSE PLAN

Week 01: Introduction To Philosophical Studies- Part-I, Introduction To Philosophical Studies- Part-II, The Salient Features Of Indian Philosophy

Week 02: Origin and development of Philosophy in India, Carvaka Materialism, Nyaya – Vaiśeṣika

Week 03: Samkhya Theory Of Evolution, Jainism – Epistemology, Ethics And Atheism, Jainism Metaphysics: Substance And Jiva

Week 04: Jainism – Ajiva,Syad Vada and AnekantaVada, Buddhism Part I, Buddhism – Part II

Week 05: Vedanta Part – I, The Vedanta Part II - The Upanishads, The Upanishads – Brahman

Week 06: Introduction To Contemporary Indian Philosophy, Humanism, Neo-Vedanta

Week 07: Swami Vivekananda, Freedom And Equality - Swami Vivekananda, State, Nationalism, Freedom And Society - Rabindranath Tagore

Week 08: Sri. Aurobindo Evolution And Involution, Integral Yoga - Sri Aurobindo, Nationalism And Human Unity – Sri Aurobindo

Week 09: Mahatma Gandhi Part I, Mahatma Gandhi Part II, Social and Ethical Issues of Sarvodaya

Week 10: Globalization, Exploitation by Domination, Political Issues: Terrorism, Violence and War, M. N. Roy- The Philosophy of New Humanism

Week 11: B. R. Ambedkar: Crusade Against Casteism, B. R. Ambedkar: The Ideal Of Constitutional Democracy, Sree Narayana Guru: Vedanta For Human Liberation

Week 12: Sree Narayana Guru:Crusade Against Casteism, Contemporary Indian Philosophy as a Critique of Social Reality, Classical **and** Contemporary Indian Philosophy - Vision and Mission

ABOUT INSTRUCTOR

- Former Head of the Department of Philosophy, Govt. Brennen College, Thalassery, Kerala.
- Presently Visiting Professor at the International Centre for Spiritual Studies, Amrita Vishwa Vidyapeetham, Kollam, Kerala.
- PhD in Philosophy. Post-doctoral research as Associate of the Indian Institute of Advanced Study, Shimla and as a National Fellow of the Indian Council of Philosophical Research.
- Completed UGC Minor Project on 'Production and Evaluation of Computational Teaching Modules for Philosophy of Values'.
- Authored books in English and Malayalam. Contributed articles to anthologies on philosophical themes. Also published and presented many research papers in various journals and conferences.

DR. P. K. SASIDHARAN
Associate Professor in Philosophy.
Sree Sankaracharya University of Sanskrit, Kalady.
Kerala.

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 16 weeks (July 16 to Nov 3, 2018)
EXAM DATE : November 14, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Students who passed Plus Two

OBJECTIVE OF COURSE

To give a detailed exposure to every stream of thoughts and authors in the modern and and contemporary western philosophy, with sufficient background informations on the pre-modern philosophical developments.

LEARNING OUTCOME

A successful learning will be able to keep track of each and every trends in the history of modern and contemporary western philosophy.

COURSE PLAN

Week 01: 1. Introduction to Philosophical Studies, 2. Introduction to Philosophy – Metaphysics – Themes And Concerns, 3. Introduction to Philosophy-Epistemology

Week 02: 4. Rene Descartes, 5. Philosophical Methods-Cartesian Method, 6. Interactionism

Week 03: 7. Psycho-physical Parallelism, 8. Spinoza, 9. Doctrine of Modes

Week 04: 10. The Doctrine of Substance, 11. Leibniz – The Doctrine of Substance, 12. Leibniz – Pre-established Harmony

Week 05: 13. Leibniz – Doctrine of Monads, 14. Empiricism, 15. John Locke

Week 06: 16. Rejection of Innate ideas, 17. Simple and complex ideas, 18. Primary and secondary qualities

Week 07: 19. George Berkely, 20. Rejection of Abstract Ideas, 21. Esse ist Percipi

Week 08: 22. Rejection of matter, 23. Subjective idealism, 24. David Hume

Week 09: 25. Association of Ideas, 26. Theory of causation, 27. Scepticism

Week 10: 28. Immanuel Kant, 29. Kant's Epsitemology, 30. Immanuel Kant's Analytic of Principles

Week 11: 31. George Wilhelm Friedrich Hegel, 32. Hegel – The Real is Rational and the Rational is Real, 33. Absolute Idealism of Hegel

Week 12: 34. Marxian Dialectical Method, 35. Features of Dialectical Method, 36. An Introduction to Existentialism

Week 13: 37. Nietzsche And Existential Philosophy, 38. Existential Philosophy of Jean-Paul Sartre, 39. An Introduction to Phenomenology

Week 14: 40. Phenomenology, 41. History of Ideas Leading Up To Intentionality: From Aristotle in Antiquity to Ockham in The Middle Ages, 42. Intentionality

Week 15: 43. Philosophical Skepticism And Its Contributions To The Development of Intentionality, 44. Early Analytical Philosophy Of Language, 45. Logical Positivism – An Introduction

Week 16: 46. Central Tenets Of Logical Positivism, 47. Logical Positivism – Verifiability Principle, 48. Pragmatism – Origins And Concept

ABOUT INSTRUCTOR

- Mphil (1990) and PhD (1996) in Philosophy, from Madras University and Calicut University respectively
- Specialised in the area of twentieth century analytic philosophy
- At present engaged in theorising cultural practices, and cultural Buddhism.

INTRODUCTION TO AESTHETICS

PROF. M. V. NARAYANAN
Professor, Department of English, University of Calicut

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 13 weeks (July 16 to Nov 9, 2018)
EXAM DATE : November 18, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Pass in plus two or equivalent

OBJECTIVE OF COURSE

Develop a historical understanding of different theories, theoreticians and concepts in Aesthetics; Create an awareness of the artistic and historical contexts of different aesthetic theories; Develop knowledge of the interfaces between aesthetic theories and artistic practice; Create a grasp of the different trends in the field of aesthetics and their connections with artistic movements; Develop an analytical perspective towards different artistic movements and practices in the light of aesthetic theories; Create an understanding of the basic principles that inform art criticism; Develop an understanding of the connections between aesthetics and new/contemporary socio-political perspectives on art.

LEARNING OUTCOME

- Familiarity with the history and development of the field of Aesthetics;
- Understanding of the basic principles that inform art criticism;
- Historical understanding of different theories and concepts in Aesthetics and their connections/associations with one another;
- Historical understanding of different schools of thought and of specific art movements, artists and practices.

COURSE PLAN

Week 01: 1. Introduction to Aesthetics - 1, 2. Introduction to Aesthetics – 2, 3. Classical & Western Aesthetics – Plato

Week 02: 4. Classical & Western Aesthetics - Aristotle, 5. Classical & Western Aesthetics - Byzantine Art, 6. Classical & Western Aesthetics - Early Christian Art

Week 03: 7. Classical & Western Aesthetics - Romanesque Art, 8. Modern Aesthetics- Kant 1, 9. Modern Aesthetics- Kant 2, 10. Modern Aesthetics – Hegel

Week 04: 11. Modern Aesthetics – Romanticism, 12. Modern Aesthetics – Formalism, 13. Modern Aesthetics - Expressionism

Week 05: 14. Modern Aesthetics – Existentialism, 15. Modern Aesthetics – Surrealism, 16. Modern Aesthetics – Cubism

Week 06: 17. Modern Aesthetics – Dadaism, 18. Modern Aesthetics – Realism, 19. Modern Aesthetics - Fauvism, 20. Late Modernist Aesthetics – Abstract Art

Week 07: 21. Late Modernist Aesthetics – Marxist Aesthetics, 22. Late Modernist Aesthetics – Feminist Aesthetics, 23. Late Modernist Aesthetics – Frankfurt School

Week 08: 24. Late Modernist Aesthetics – Cultural Studies, 25. Late Modernist Aesthetics - Psychoanalysis, 26. Late Modernist Aesthetics – Postmodernism

Week 09: 27. Late Modernist Aesthetics – Contemporary Aesthetics, 28. Non-western Traditions of Aesthetics – Aesthetics of Indian Miniature Tradition, 29. Non-western Traditions of Aesthetics – Mughal Art

Week 10: 30. Non-western Traditions of Aesthetics – Egyptian Art 1, 31. Non-western Traditions of Aesthetics – Egyptian Art 2, 32. Non-western Traditions of Aesthetics – Egyptian Art 3

Week 11: 33. Non-western Traditions of Aesthetics – Far Eastern Art – Japan, 34. Non-western Traditions of Aesthetics – Far Eastern Art – Chinese Art, 35. Non-western Traditions of Aesthetics – Far Eastern Art – Korea & South East Asia

Week 12: End-term discussion/interaction, End-Term Assessment

Week 13: Final Examination

ABOUT INSTRUCTOR

English Professor at the University of Calicut. Ph.D. from University of Exeter, UK, and has taught at the University of Sharjah, Miyazaki International University, Japan, and the University of Calicut. Major areas of research are Cultural Studies, Theatre & Performance and traditional Indian Theatre. He has been on the curatorial committees of the International Theatre Festival of Kerala and the Ekaharya Solo Theatre Festival and has done extensive documentation of Kathakali and Kutiyattam in association with UNESCO, CDiT, and VEDIKA.

DR. HARISH CHANDRA TIWARI
Associate Professor, Uttarakhand Sanskrit University,
Haridwar, Uttarakhand

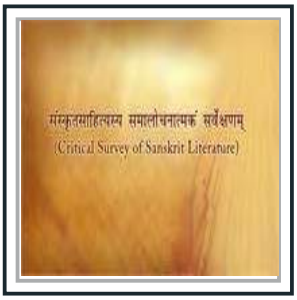
DR. PRAKASH CHANDRA PANT
Assistant Professor, Uttarakhand Sanskrit University,
Haridwar, Uttarakhand

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
PRE-REQUISITES : उत्तरमाध्यमिककक्षायाम् 10+2 द्धसंस्कृतमेकंविषयमादाय उत्तीर्णः संस्कृतभाषायांभाषणेबोध्ने च समर्थः छात्राः छात्राा वा पाठ्यक्रमेभागंस्वीकर्त्तुं शक्नोति ।

COURSE DURATION : 6 weeks (8/6/2018 to 11/18/2018)
EXAM DATE : Approximately 10 days after completion of the course
NO OF CREDITS : 6

OBJECTIVE OF COURSE

सी.बी.सी.एस.इत्याधरितो{यम् ष्तपजपबंस ैनतअमल वि ैदोतपज स्पजमतंजनतमष ;संस्कृतसाहित्यस्य समालोचनात्मकंसर्वेक्षणम्द्ध इतिनामकःपाठ्यक्रमः स्नातक/बी.ए. कक्षायाःद्वितीयसत्रास्य कृतेविद्यते । अस्य पाठ्यक्रमस्य उद्देश्यमस्तिसरसतयासरलतया च संस्कृतानुरागिणांजिज्ञासूनांछात्राणांवैदिकसाहित्य–रामायण–महाभारत–पुराण–व्याकरण–दर्शन–साहित्यादिग्रन्थाध्ययने अभिमुखीकरणम् । अस्य पाठ्यक्रमस्य यथाविधि अध्ययनेनजिज्ञासवः छात्राःअल्पेनैवप्रयासेनसंस्कृतभाषायां निब(ानां ग्रन्थानांप्रमुखसि(ान्तान् ज्ञातुं सक्षमास्तुभविष्यन्त्येवसहैव अमूल्यसि(ान्तरत्नाकराणां संस्कृतग्रन्थानाम् अध्ययने गवेषणे च सहजतयाप्रवृत्ताअपिभविष्यन्ति ।



LEARNING OUTCOME

अस्य पाठ्यक्रमस्य उद्देश्यमस्तिसरसतयासरलतया च संस्कृतानुरागिणांजिज्ञासूनांछात्राणांवैदिकसाहित्य–रामायण–महाभारत–पुराण–व्याकरण–दर्शन–साहित्यादिग्रन्थाध्ययने अभिमुखीकरणम् । अस्य पाठ्यक्रमस्य यथाविधि अध्ययनेनजिज्ञासवः छात्राःअल्पेनैवप्रयासेनसंस्कृतभाषायां निब(ानां ग्रन्थानांप्रमुखसि(ान्तान् ज्ञातुं सक्षमास्तुभविष्यन्त्येवसहैव अमूल्यसि(ान्तरत्नाकराणां संस्कृतग्रन्थानाम् अध्ययने गवेषणे च सहजतयाप्रवृत्ताअपिभविष्यन्ति । पाठ्यक्रमस्य सफ्रफलसमाप्तेरनन्तरंछात्राः स्नातकोपाधि तुलप्स्यन्त एव सहैवअन्यप्रतियोगिपरीक्षास्वपिसाफ्रफल्यंलप्स्यन्ते ।

COURSE PLAN

Week 01:- Vaidic Samhita_Episode – (1,2,3,4)
Week 02:- Vaidic Samhita_Episode – (5,6,7,8)
Week 03:- Vaidic Samhita_Episode – (9,10,11)
Week 04:- Brahmangrantha_Episode (1,2,3,4,5)
Week 05:- Aranyak &Upnishad_Episode (1,2,3,4,5)
Week 06:- Aranyak &Upnishad_Episode (6,7)
Vedanga (Brief Introduction) – 1,2
Week 07:- Ramayana_Episode (1,2,3,4)
Week 08:- Ramayana_Episode (5,6,7)
Week 09:- Mahabharata _Episode (1,2,3,4)
Week 10:- Puranas -1 _Episode (1,2,3)
Week 11:- Puranas -1 _Episode (4,5,6)
Week 12:- General Introduction to Vyakaranasastra _Episode (1,2)
General Introduction to Darshana_Episode (1,2)
Week 13:- General Introduction to Darshana _Episode (3,4,5,6)
Week 14:- General Introduction to Poetics _Episode (1,2,3)
Week 15:- General Introduction to Poetics _Episode (4,5,6)

ABOUT INSTRUCTOR

- डॉ- हरीशचन्द्रतिवाड़ी सम्प्रति हरिद्वारस्थ-उत्तराखण्डसंस्कृतविश्वविद्यालयस्य साहित्यविभागे सहाचार्यो{ध्यक्षश्च विद्यते।
- अयं वाराणसीस्थसम्पूर्णानन्दविश्वविद्यालये गुरुपरम्परया शिक्षां लब्ध्वा दिसम्बर 2006 तः अगस्त 2016 यावत् उत्तरप्रदेशीयमैनपुरीजनपदस्थे श्रीएकरसानन्द-आदर्शसंस्कृतमहाविद्यालये सहायकाचार्यसाहित्यपदे प्रभारिप्राचार्यपदे च कार्यं कृतवान्।
- ततः परम् अगस्त 2011 तः अगस्त 2016 यावत् नवदेहलीस्थराष्ट्रियसंस्कृतसंस्थानस्य मानितविश्वविद्यालयस्य जयपुरपरिसरे साहित्यविभागे सहायकाचार्यपदे अध्यापनं कृतवान्।
- अनेन प्रणीताः नैके शोधलेखाः, पाठाः, सम्पादिता नैकाःपत्रिकादयश्च सन्ति प्रकाशिताः।
- विविधासु राष्ट्रियसघष्ठीषु शोधपत्रण्यपि अनेन पठितान्यभवन्।
- साम्प्रतमयं साहित्य-व्याकरण-दर्शनादीनि शास्त्राणि आश्रित्य अध्ययनेध्यापने च प्रवर्तते।

CLASSICAL SANSKRIT LITERATURE (DRAMA)

PROF. PIYUSHKANT DIXIT
VC, Uttarakhand Sanskrit University, Haridwar, Uttarakhand

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 5 weeks (8/6/2018 to 4/11/2018)
EXAM DATE : 15/11/2018 (TENTATIVE)
NO OF CREDITS : 6

PRE-REQUISITES : उत्तरमाध्यमिककक्षायाम् (10+2) संस्कृतम् एकं विषयमधिकृत्य उत्तीर्णः एवं च उत्तरमाध्यमिकस्तरीयसंस्कृतव्याकरणस्य सामान्यरूपेण ज्ञाने समर्थः छात्रः अत्रार्हः ।

OBJECTIVE OF COURSE

CBCS इत्याधारितोऽयं Classical Sanskrit Literature (Drama) इति नामकः पाठ्यक्रमः स्नातककक्षायाः (प्रतिष्ठायाः) तृतीयसत्रपूरकः अर्थात् बी. ए (ऑनर्स) इत्यस्याः तृतीयसत्रस्य कृते वर्तते । अत्र अध्यापनसंरचनादिविषयकम् एतत्सम्बद्धान्यविषयकं च शिक्षणं बोधनं वा पाठ्यक्रमे निर्धारितग्रन्थानुसारं भविष्यति ।

LEARNING OUTCOME

- पाठ्यक्रमस्य सफलसमाप्तेरनन्तरं छात्राः निर्धारितपाठ्यक्रमानुसारं तत्सम्बद्धान्यविषयांश्च सम्यग् ज्ञातुं प्रयोक्तुं च समर्थाः भविष्यन्ति ।
- अयं पाठ्यक्रमः स्नातकक्षायां पठतां छात्राणां कृते तु वर्तत एव, स्नातककक्षां समुत्तीर्णानाम् अन्यप्रतियोगिपरीक्षायाः सन्नद्धतां कुर्वाणानां जिज्ञासूनां छात्राणां च कृतेऽपि उपयोगी भविष्यति ।

COURSE PLAN

Week 01:- Svapnavasavadattam- Bhasa Act I &VI_Episode(1,2,3,4)

Week 02:- Svapnavasavadattam- Bhasa Act I &VI_Episode (5,6,7,8,9)

Week 03:- Svapnavasavadattam- Bhasa Act I &VI_Episode (10,11,12,13,14)

Week 04:- Abhijnnanasakuntalam-Kalidasa I & IV_Episode (1,2,3,4,5)

Week 05:- Abhijnnanasakuntalam-Kalidasa I & IV_Episode (6,7,8,9)

Week 06:- Abhijnnanasakuntalam-Kalidasa I & IV_Episode (10,11,12,13,14)

Week 07:- Mudraraksasam- Visakhdatta - I _Episode (1,2,3)

Week 08:- Mudraraksasam- Visakhdatta - I _Episode (4,5,6)

Week 09:- Mudraraksasam- Visakhdatta - II_Episode (1,2,3,4)

Week 10:- Mudraraksasam- Visakhdatta - III _Episode (1,2,3,4,5)

Week 11:- Sanskrit Drama – 1_Episode (1,2,3,4)

Week 12:- Some important dramatists and Dramas – 1 Episode (1,2,3,4)

Week 13:- Some important dramatists and Dramas – 1 Episode (5,6,7)

ABOUT INSTRUCTOR

- प्रो. पीयूषकान्तदीक्षिताः सम्प्रति हरिद्वारस्थ उत्तराखण्डसंस्कृतविश्वविद्यालयस्य कुलपतयो वर्तन्ते ।
- वाराणस्यां यथाप्राचीनगुरुपरम्परं स्वनामधन्येभ्यः प्रो. सुधाकरदीक्षितप्रभृतिभ्यः आचार्येभ्यः समधिगतन्यायादिशास्त्राः यथाकालं समस्तपरीक्षासु लब्धप्रथमस्थाना एते प्राचीनभारतीयविद्यासंरक्षणसंवर्धनतत्परा वर्तन्ते ।
- सम्पूर्णानन्दसंस्कृतविश्वविद्यालय - राष्ट्रियसंस्कृतसंस्थान - लालबहादुरशास्त्री - राष्ट्रियसंस्कृतविद्यापीठप्रभृतिसंस्थानेषु त्रिंशदधिकवर्षात्मकोऽध्यापनानुभवो वर्तते एतेषाम् ।
- अध्यापनेन सह NCC सम्बद्धानि नैकपदानि यथाकालं व्यभूषयन् ।
- एतेषाम् अनेकानि पुस्तकानि शोधपत्राणि च प्रकाशितानि सन्ति । न्यायपञ्चाननप्रभृतिभिः अनेकैः सम्मानैः विभिन्नसंस्थानद्वारा सम्मानिताः सन्ति एते
- वैदुष्येण सह प्रशासनकौशलम् मणिकाञ्चनसंयोग इव वर्तते ।
- एते भारतीयदर्शनशास्त्रस्य विशेषरूपेण न्यायशास्त्रस्य प्रसिद्धा विद्वांसो वर्तन्ते

STUDY OF PROSE AND POETIC FORM IN URDU LITERATURE

DR. MUSHTAQ HUSSAIN MAGLOO
Sr. Assistant Professor, Post Graduate Department of Urdu,
University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (02/07/2018 to 11/08/2018)
EXAM DATE : 18/08/2018
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 with knowledge of Urdu

OBJECTIVE OF COURSE

- Basics of Urdu Poetry
- Orgin and Development of Urdu Ghazal, Nazm, Mathnavi, Qaseedah and Marsiya
- Poetic Techniques and Craftsmanship
- Basics of some important Prose Genres of Urdu Litetrature viz Afsana, Novel and Maktoob Nigari
- Origin and Development of Afsana, Novel and Maktoob Nigari in Urdu

LEARNING OUTCOME

The course "Study of Prose and Poetic Forms in Urdu Literature" is a Discipline Centric Courses in B.A(Prog.) under the Choice Based Credit System (CBCS). The course is specially designed to supplement and enhance the understanding of students about different dimensions of Urdu Prose and Poetry. To make the students understand basic features of some important poetic genres of Urdu like Ghazal and Nazm, Qaseedah, Mathnavi and Marsiya, and to give them an overview of some important Poetic Techniques used there.

COURSE PLAN

1. Urdu Marsiyae Ka Aagaz Wa Irtiqa
2. Afsanay ki sinfi shinakt
3. Deccan mein urdu masnavi ka agaz wa irtiqa
4. Drama Ka Fun
5. Gazal ki tareef wa takneeq
6. Maktoob Nigari aur is ki mukhtasar tareekh
7. MasnaviKiSenfieShinakhat
8. Noval ka Fun
9. Qaseedah ka fun
10. Rubayee ka fun
11. Shumaali hind main urdu masnavi ka aagaz wa irtiqa
12. Urdu afsanay ka Aagaz wa irtiqa
13. Urdu drama ka agaz wa irtiqa
14. Urdu Gazal Ka Aagaz Wa Irtiqa
15. Urdu main Qassedah nigaari ka aagaz wa irtiqa
16. Urdu marsiya ki sinfi shinakht
17. Urdu mein sinfi Rubayi ki Riwayat
18. Urdu Nazam Ka Aagaz Wa Irtiqa
19. Urdu Nazm Ki Sinfi Shinakhat
20. Urdu NovelKaAagazWaIrtiqa

ABOUT INSTRUCTOR

- Assistant Professor, Department of Urdu, University of Kashmir
- Master's degree in Urdu from the University of Kashmir
- M.Phil and Ph.D under the supervision of (Late) Professor Majeed Muzmar.
- Possesses Degree in Education and Diplomas in IT and Urdu Journalism as well.

STUDY OF URDU CLASSICAL GHAZAL

DR. MUSHTAQ HUSSAIN MAGLOO
Sr. Assistant Professor, Post Graduate Department of Urdu,
University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (16/07/2018 to 25/08/2018)
EXAM DATE : 08/09/2018
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 with knowledge of Urdu

OBJECTIVE OF COURSE

- Basics of Urdu Classical Ghazal
- Origin and Development of Urdu Ghazal
- Poetic Techniques and Craftsmanship used in Urdu Ghazal.
- Biographical information about Selected Poets of classical Urdu Ghazal.
- Distinctive features of the poetry (Ghazals) of Selected poets.

LEARNING OUTCOME

The course "Study of Urdu Classical Ghazal" is a Discipline Centric Courses in B.A (Prog.) under the Choice Based Credit System (CBCS). The Ghazal originated in Arabia in the 7th century and later spread throughout the Middle East and South Asia. It was famous all around the Indian subcontinent in the 18th and 19th centuries. A Ghazal may be understood as a poetic expression of both the pain of loss or separation and the beauty of love in spite of that pain. It is derived from the Arabian panegyric qasida.

COURSE PLAN

1. Dard Ki Gazal Goyee
2. Dhaag Delhlvi Ki Gazal Goyee
3. Faani Badayoni Ki Shaire
4. Faiz Ahmad Faiz Ki Gazal Gaoyee
5. Firaaq Ki Gazal Goyee
6. Gawasi Ki Gazal Goyee
7. Gazal Kay Maqbooliyat Kay Asbab
8. Gazal ki tareef wa takneeq
9. Ghalib Ki Gazal Goyee
11. Jigar Muradabad Ki Gazal Goyee
12. Mir Taqi Mir Ki Shairi
13. Momin Khan Momin Ki Shairi
14. Nasir Kazmi Ki Gazal Goyee
15. Quli Qutub Shah Ki Gazal Goyee
16. Siraj Ki Gazal Goyee
17. Urdu Gazal Ka Aagaz Wa Irtiqa
18. Wali Dacanni Ki Gazal Goyee
19. Yagana Changeezi Ki Gazal Goyee

ABOUT INSTRUCTOR

- Assistant Professor, Department of Urdu, University of Kashmir
- Master's degree in Urdu from the University of Kashmir
- M.Phil and Ph.D under the supervision of (Late) Professor Majeed Muzmar.
- Possesses Degree in Education and Diplomas in IT and Urdu Journalism as well.

Management and Professional Courses

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Management and Professional Courses

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PSYCHOLOGY OF DEVELOPMENT AND LEARNING PROCESS

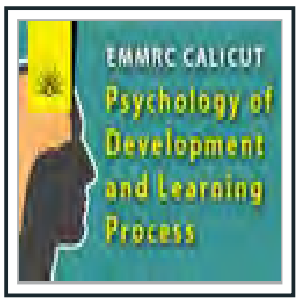
DR. A. HAMEED
Assistant Professor, Department of Education,
University of Calicut

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 13 weeks (9th July to 6th October 2018)
EXAM DATE : 13th October 2018
NO OF CREDITS : 4

PRE-REQUISITES : Student who is passed any degree or students of D.El.Ed. Course can join this course.

OBJECTIVE OF COURSE



- Acquaint with the meaning, nature and scope of educational psychology.
- Understand the growth and development of the learner and its importance in the learning process.
- Understand the developmental processes and needs of children and adolescents and role of teachers in facilitating development.
- Understand the factors affecting individual differences and the special problems of exceptional children.
- Acquaint with the prominent theories of learning, retention, and transfer of training and the strategies to facilitate each one of these.

LEARNING OUTCOME

After learning the Course, the student teacher will be able to:
1. Get acquainted with the meaning, nature and scope of educational psychology.
2. Understand the growth and development of the learner and its importance in the learning process.
3. Understand the developmental processes and needs of children and adolescents and role of teachers in facilitating development.
4. Understand the factors affecting individual differences and the special problems of exceptional children.
5. Understand the concept of intelligence and the process of memory.
6. Understand the various theories of personality
7. Acquaint with the prominent theories of learning,, retention, and transfer of training and the strategies to facilitate each one of these.

COURSE PLAN

Week 01: 1. Introducing Educational Psychology, 2. Introduction to Development and Principles of Development, 3. Biological Aspects of Development

Week 02: 4. An Introduction to the Concept of Developmental Tasks, 5. Adolescence, 6.Personality: Concept and Definition

Week 03: 7. Sigmund Freud's Psychoanalytic Theory, 8. Gordon Allport: A Trait Theory of Personality, 9. Carl Jung's Analytic Theory of Personality

Week 04: 10. Personality Theories of Cattell and Eysenck, 11. The Psychology Of Adjustment, 12. Mental Health

Week 05: 13. Characteristics of integrated personality , 14. Projective Techniques, 15. Theories of Intelligence

Week 06: 16. Gardner's' Theory of Multiple Intelligences, 17. Creativity, 18. Aptitude

Week 07: 19. Exceptional Children, 20. Gifted And Mentally Retarded Children, 21. Learning Disability

Week 08: 22. Types of Learning Disabilities, 23. Introduction to Learning and Factors affecting Learning, 24. Motivation

Week 09: 25. Abraham Maslow's Hierarchical Theory of Motivation, 26. Behaviourist Theories of Learning – Pavlov And Thorndike, 27. Behaviourist Theories of Learning – Skinner

Week 10: 28. Cognitive Theories of Learning - Gestalt Theory, Lewin's Field Theory, 29. Jean Piaget's Cognitive Learning Theory, 30. Learning Theories of Bruner, Ausubel and Gagne

Week 11: 31. Social Learning Theory and Social Constructivism, 32. Transfer of Learning, 33. Remembering/ Memory

Week 12: 34. Forgetting, 35. Introduction to Counselling,

Week 13: 36. Introduction To Guidance

ABOUT INSTRUCTOR

- Resource person in UGC-Academic Staff Colleges & Expert in Doctoral Committee Meeting.
- Published research articles in reputed International and National Peer reviewed Journals.
- Chaired International and National Seminars.
- Academic profile include MA (History), M.Ed (Social Studies), MA (Sociology), MSc Applied Psychology, PG Diploma in Guidance and Counselling, Ph.D. (Education) and NET (Education).

PSYCHOLOGY THROUGH SPECIAL REFERENCE TO PHYSICAL EDUCATION

DR. JAGDISH SINGH
Associate Professor, College of Physical Education,
Punjabi University, Patiala (Pb.)

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG
PRE-REQUISITES : 10+2

COURSE DURATION : 6 weeks (07-09-2018 to 22-10-2018)
EXAM DATE : 06-11-2018 (Tentative)
NO OF CREDITS : 2

OBJECTIVE OF COURSE

- Acquaint with Psychology through special reference to Physical Education.
- To understand about psychological change and limitations.
- Discuss about growth and development at different stages with special reference to adolescence
- To understand the relationship between body and mind.
- Appreciate influence of heredity and environment on child's development.

LEARNING OUTCOME

After going through this course students shall be able to:

- Know about the Psychology with special reference to Physical Education.
- Understand psychological change and limitations.
- Know about the instinct and mental health.
- Differentiate stages adolescence on the basis of growth and development.
- Understand the relationship between body and mind.
- Appreciate the influence of heredity and environment on child's development.
- Understand the relationship between body and mind.

COURSE PLAN

Week 01: Psychology & Its usefulness in Physical Education, Emotion, Instinct

Week 02: Motivation in Physical Education, Relationship between body & Mind, Learning

Week 03: Learning Curves, Growth and Development, Adolescence

Week 04: Heredity and Environment, Infancy and Childhood, Mental Health

Week 05: Play, Group Formation, Leadership and its Qualities

Week 06: Guidance and its Importance Personality

ABOUT INSTRUCTOR

- Working as Associate Professor, College of Physical Education, Punjabi University, Patiala and served as Badminton coach for 8 years with sports department Chandigarh.
- Has 21 year teaching experience.
- Presented more than 15 research papers in National and International conferences.

PERSPECTIVES ON EDUCATION

DR.UMER FAROOQUE. T.K.
Assistant Professor of Education
University of Calicut

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 15 weeks (16/07/2018 & 21/10/2018)
EXAM DATE : 05/11/2018 Tentative
NO OF CREDITS : 4

PRE-REQUISITES : Any Graduation

OBJECTIVE OF COURSE

- This course offers an overview of the education under colonial rule and in independent India.
- In the course, the concept of education and its aims and functions will be discussed based on the Indian and western philosophical thoughts.
- It is organized to understand the universal ideas about education, aims, methods, curriculum and teacher taught relationship.
- The course is discussed the major contributions of great thinkers in India and the world.
- The course also offers the sociological basis of education and the relationship between education and sociology.

LEARNING OUTCOME

Clear understanding about the conceptual aspects of education, philosophical and sociological foundations of education. Get an an overview of the education under colonial rule and in independent India. Analysis the concept of education and its aims and functions based on the Indian and western philosophical thoughts. Through this course student-teachers are able to look at, understand, interpret the universal ideas about education, aims, methods, curriculum and teacher taught relationship. Students can understand the major contributions of great thinkers in India and the world. The course also offers the sociological basis of education and the relationship between education and sociology. Understand various factors responsible for development of personality.

COURSE PLAN

Week 01: meaning, definition and concepts of education, Factors Influencing Education, Aims and Functions of Education

Week 02: Agencies of Education, school as an agency of Education

Week 03: Educational functions of the state and central Government, Free and compulsory Education

Week 04: Education of socially backward classes, constitutional provisions for education in India

Week 05: Philosophy of education meaning, central teachings in Indian philosophy and scope

Week 06: Approaches to Education-Idealism

Week 07: Approaches to Education-Naturalism

Week 08: Approaches to Education- Pragmatism

Week 09: Education in Ancient India, Buddhist Education in Ancient India, History of Indian Education

Week 10: Education during Colonial Rule in India, Some major Education commissions during the colonial period

Week 11: University Education Commission, Secondary education commission, Indian Education Commission

Week 12: National Policy on Education, New Education Policy and NPE Review Committees

Week 13: Great Philosophers of Education

Week 14: Educational Sociology – Theoretical perspective

Week 15: Socialisation and Education, education and social change

ABOUT INSTRUCTOR

- Member, Board of Studies in Education (PG), University of Calicut.
- Published a number of research articles in reputed International and National Peer reviewed Journals.
- Presented many papers in International and National Seminars and also Chaired sessions .
- Academic profile include MA (Arabic), MA (Sociology), MSc Applied Psychology, M.Ed , M.Phil (Educational Technology), Ph.D. (Education) and NET (Education).

ART AND SCIENCE OF TEACHING ENGLISH LANGUAGE

DR MRIDULA K.
Assistant Professor, NSS Training College, Ottapalam
University of Calicut

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
COURSE DURATION : 17 weeks (1 July, 2018 to 25 Oct,2018)
EXAM DATE : On or before October 25,2018 (Tentative)
NO OF CREDITS : 4
PRE-REQUISITES : Teacher aspirants having English Literature background can make use of this course

OBJECTIVE OF COURSE

This course offers an overview of the education under colonial rule and in independent India. In the course, the concept of education and its aims and functions will be discussed based on the Indian and western philosophical thoughts. It is organized to understand the universal ideas about education, aims, methods, curriculum and teacher taught relationship. The course is discussed the major contributions of great thinkers in India and the world.The course also offers the sociological basis of education and the relationship between education and sociology.

LEARNING OUTCOME

The course will enable the learner to :
1. Understand the nature of language as a dynamic entity.
2. Understand why English language learning is important in school education.
3. Develop an insight into the language learners and the learning process.
4. Familiarize with the relevant approaches and methods in English language teaching.
5. Perceive learning as a generative process.
6. Experiment with various learning strategies considering the demands of the context and the needs of each individual learner.
7. Blend technology, pedagogy and content to realize the learning objectives.
8. Develop awareness on modern assessment strategies and design assessment techniques relevant to language learning.
9. Identify and practice micro skills in teaching language.
10. Effectively introduce different genres of literature and to develop the sense of aesthetic appreciation in learners.
11. Explore avenues available for own professional development.

COURSE PLAN

Week 01: Module-1 Language-Definition, Characteristics, Functions and Some Misconceptions., Module -2 Historical development, Status and Functions of English in India, Module- 3 Acquisition and Learning, Factors Influencing Acquisition of a Language and Problems in Acquisition

Week-02: Module-4 Aims and Objectives of English Language Teaching in India, Module-5 Approaches in Teaching English, Module-6 Methods of Teaching English

Week-03: Module -7 Listening and Speaking Skills, Module-8 Reading Skill, Module-9 Writing Skill

Week04: Module-10 Study skill, Module11-Theories of Second Language Acquisition /Learning Behaviourism, Module12-Theories of second language acquisition-Constructivism

Week-05: Module13-Theories of second Language Acquisition Cognitive, Module14-Multiple Intelligence and Nurturing the Linguistic Capacities

Week-06: Module15- Principles of Language Teaching, Module16-English Language Curriculum

Week-07: Module17-Micro Teaching in English, Module18-Planning for Learning

Week-08: Module19-Process of Planning Lessons, Module20-Teaching of Vocabulary and Grammar

Week-09: Module21-Functional Literature for Language Development, Module22- Models of teaching –an introduction

Week-10: Module23-Synectic Model in Instruction, Module24-Advance Organizer Model in Instruction

Week-11: Module25-Direct Instruction Model in Instruction, Module26- Barriers in the Language Classroom

Week-12: Module27-Humour and Creativity in ELT, Module28- Group Facilitation Skills for Differentiated Learning

Week-13: Module29-Technology in English Language, Module30-Collaborative Online Platforms for Language Learning

Week-14: Module31-E-Learning Resource Development, Module32-Tests and Evaluation in English

Week-15: Module33 -Performance Assessment in Language Learning, Module34-Teacher Development- what and how

Week-16: Module35-A professional English Teacher in a Global context, Module36 Innovations and Researches in ELT

Week -17: Term End Assessment

ABOUT INSTRUCTOR

The major objective of the course is to prepare better English teachers by integrating content and technology to equip them to face the challenges of present day classrooms.

DR. V.P.JOSHITH
Assistant Professor,Department of Education
Central University of Kerala

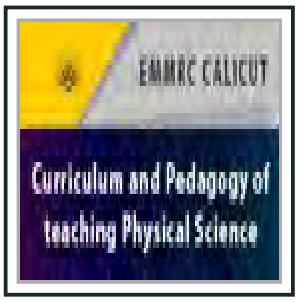
TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 36 weeks (01/07/2018 & 31/12/2018)
EXAM DATE : 25th November 2018
NO OF CREDITS : 4

PRE-REQUISITES : The pre-requisites the learners needs is that, they should have the love for science and science teaching. They should be mentally prepared to extract the importance of technology to their classrooms.

OBJECTIVE OF COURSE

- To understand the importance of science education
- To comprehend the processes and methods in science teaching
- To integrate technology in the modern science classrooms
- To analyse the present science curriculum and to design some innovative strategies for its transaction
- To equip the learners with the latest technological tools and strategies in science teaching
- To inculcate the value addition among science teachers so as to develop a prospective society
- To foster creativity and problem solving approach among science learners
- To redefine science for the development of community, preserving its identity and nature.



LEARNING OUTCOME

The course will enable the student teachers to
1. Acquaint with the meaning and nature of physical science, 2. Comprehend why science is important in school education, 3. Familiarize the various methods and strategies of teaching science, 4. Develop science process skills for lifelong professional competency, 5. Perceive child as a creative learner and device learning goals individually for our children, 6. Design specific instructional strategies for learners accounting their individuality, 7. Explore different ways of creating learning situations considering needs of the learner and the context , 8. Integrate the knowledge in science to devise appropriate assessment techniques, 9.Understand the importance of learning as a generative process, 10. Integrate technology, pedagogy and content for the realization of objectives, 11. Examine the different pedagogical issues in the context of learner and society and to suggest ways for resolving it, 12. Facilitate development of scientific attitudes among learners

COURSE PLAN

Week 1: Nature and Scope of Physical Science
Week 2: Aims and Objectives of Teaching Physical Science
Week 3: Methods of Teaching Physical Science
Week 4: Models of Teaching
Week 5: Individualised and Innovative Methods of Teaching Physical Science
Week 6: Microteaching Instruction
Week 7: Learning as a Generative Process and Process Skills in science
Week 8: Basic Theories of Learning Science
Week 9: Curriculum Development
Week 10: Curricular Reforms in India and Abroad
Week 11: School Science Curriculum
Week 12: National Curriculum Framework NCF 2005
Week 13: Planning Instruction
Week 14: Pedagogic Analysis of Chemistry Class VIII
Week 15: Pedagogic Analysis of Physics Class VIII
Week 16: Pedagogic Analysis of Chemistry Class IX
Week 17: Pedagogic Analysis of Physics Class IX
Week 18: Pedagogic Analysis of Chemistry Class X
Week 19: Pedagogic Analysis of Physics Class X
Week 20: Scientific Method - I
Week 21: Scientific Method - II
Week 22: Evaluation in Science Teaching - I
Week 23: Evaluation in Science Teaching - II
Week 24: The Professional Science Teacher
Week 25: Science Library and Laboratory
Week 26: Resource Materials in Science Teaching
Week 27: Computer and Digital Resources in Science Teaching - I
Week 28: Computer and Digital Resources in Science Teaching - II
Week 29: Co-curricular Activities and Action Research in Science
Week 30: Science Education for Exceptional Children
Week 31: Science for the Better Development of the Society
Week 32: Science Scholarship Programmes for Children
Week 33: ICT for Better Teaching and Learning in Science - I
Week 34: ICT for Better Teaching and Learning in Science - I
Week 35: Techno Pedagogical and Content Knowledge (TPACK)
Week 36: Open Educational Resources (OER) & Free Open Source

ABOUT INSTRUCTOR

- Working as Assistant Professor in the Department of Education, Central University of Kerala, have got more than 13 years of teaching experience in the field of Education.
- Had contributed to the academic literature with many articles in National and international journals.
- Has been associated with many student oriented activities of NSS as Programme officer, Co-ordinator for International students and others.
- Since five years he was associated with CEC, CIET-NCERT for the e-content development process. Designing Courses through MOODLE/SWAYAM is the latest pedagogical practice that he is handling and training at present.

CORE AND PEDAGOGY OF MATHEMATICS

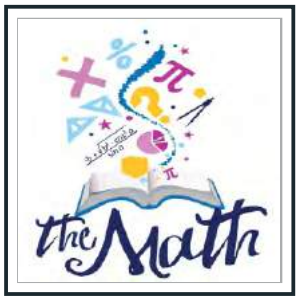
DR. T. ASIR
Assistant Professor and Head i/c Department of Mathematics-DDE,
Madurai Kamaraj University, Madurai, Tamil Nadu.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (16/07/2018 to 24/08/2018)
EXAM DATE : 29/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : 12th Std. Pass, Knowing English and basic Mathematical concepts.

OBJECTIVE OF COURSE



- To improve understanding of some of the mathematical concepts which are important in the school mathematics.
- Enable the students to cope up confidently with the mathematics needed in their future studies, workplaces or daily life in a technological and information-rich society.
- The course aims to develop student's ability to manipulate numbers, symbols and other mathematical objects.
- To provide a clarity about fundamental concepts and processes of mathematics.
- Enable the students to develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics.

LEARNING OUTCOME

- Students will develop a positive attitude towards mathematics and the capability in appreciating the aesthetic nature and cultural aspect of mathematics.
- Applying mathematical knowledge to solve a variety of problems.
- After the course the student will have demonstrate knowledge of the syllabus material.
- The students of mathematics develop the habit of systematic thinking and objective reasoning.
- Students could integrate many concepts and skills that they have learnt into a problem-solving ability.
- Students should be able to use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations including those in real-life contexts.

COURSE PLAN

Week 01: Real numbers system and Measurements

Week 02: 2D/3D objects and linear equations

Week 03: Percentage, Ratio and Proportion concepts

Week 04: Nature of Mathematics

Week 05: Pedagogical considerations and Communicating skills of Mathematics

Week 06: Algebraic Expressions and Mensuration

ABOUT INSTRUCTOR

- Faculty and HOD, Departments of Mathematics at Maduraii Kamraaj University.
- Published 21 research articles in International Journals and served as a referee of several international journals.
- Currently his research work is supported by SERB-MATRICS project and UGC-Startup Grant. Also 2 PhD's and 20 M.Phil's scholars have been awarded under his guidance.
- Further he has delivered 29 invited talks in various National/International conferences in India and 2 talks in abroad countries.

CHILD DEVELOPMENT

DR.S.PRAKASH
Principal, Thiagarajar College of Preceptors,
Madurai

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 8 weeks (16/07/2018 to 07/09/2018)
EXAM DATE : 22/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary

OBJECTIVE OF COURSE

- To describe the concept of human development
- To discuss the theories of Erickson, Piaget and Kohlberg.
- To analyze the physical growth and development of a child.
- To state the concept of special children.

LEARNING OUTCOME

At the end of the course the student will be able to describe the concept of human development state the concept of special children.

COURSE PLAN

Week 01

01 Theories of Human Development

02 Development and developmental principles

03 The Influence of Heredity and Environment on Development

04 Methods Adopted for Developmental Study

Week 02

05 Concept of Socialisation

06 Theories of Erikson, Piaget & Kohlberg

07 Significant Development Periods in the Human Life Span

08 Importance of conception, prenatal development and birth

09 Physical and mental development of infants

Week 03

10 Emotions in Infancy

11 The Infant in the Family and Implications For Personality Development

12 Physical growth and motor development intellectual development

13 Development of Personality with Special Reference to Identification and Child Rearing Techniques

Week 04

14 Gender Stereotyping, Morality

15 Play Patterns of Preschool Children

16 The child 6 to 12 years - General overview

17 Physical growth and development

Week 05

18 The developing mind intelligence

19 Language and thought

20 Social World of the child

Week 06

21 Moral attitudes and Behaviour

22 Development of 'self- identity' 'self-concept' 'gender roles'

Week 07

23 Play, interests and activities of the elementary school child

24 The concept of special children - talented, creative, gifted children

25 Slow learners and under achievers

Week 08

26 Emotionally disturbed children

27 Culturally and socially disadvantaged children

ABOUT INSTRUCTOR

- Working as Principal at Thiagarajar College of Preceptors, Madurai, has 10 years of teaching experience in colleges of Education.
- Published six books edited 19 chapters in 16 books and published 40 research articles in both National and International Journals.
- Presented 18 papers in International, National, State level Seminars.
- An approved senior member of International Society for Research and Development (ISRD), London.

COGNITION AND LEARNING

DR.S.PRAKASH
Principal, Thiagarajar College of Preceptors,
Madurai

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG
COURSE DURATION : 7 weeks (30/07/2018 to 17/09/2018)
EXAM DATE : 27/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary

OBJECTIVE OF COURSE

- To define cognition and learning.
- To describe the theories of intelligence.
- To list the factors contributing to learning.
- To study on the developing child.

LEARNING OUTCOME

- At the end of the course the student will be able to define cognition and learning
- list the factors contributing to learning

COURSE PLAN

Week 01

01 Cognition – An Introduction

02 Definition of general intelligence & 5 Factors of IQ

03 Theories & Measurement of Intelligence

04 Individual Differences in Cognitive Abilities

Week 02

05 Shaping of Cognitive Abilities

06 Sensation

07 Attention, Association and Perception

08 The Learning process and Theories of Learning

Week 03

09 Types of learning & Techniques of learning

10 Knowledge Organization Handling Remembering and Recall

11 Knowledge organization – Facilitating/guiding for optimal knowledge organization

Week 04

12 The Developing mind - Piagetian paradigm

13 Concept Formation

14 Relationship

Week 05

15 The Process of Problem Solving from Identification to Solution

16 Kinds of Problems and Approaches to Problem Solving

17 Lateral Thinking, Making choices, Development of creative thinking

Week 06

18 Factors contributing to learning - Personal - Motivations and Inclinations, Physical and Mental health

19 Factors contributing to learning - Environmental and Interpersonal

20 Environmental factors that influence learning

21 Alternative conceptions

Week 07

22 Parameters of Individual Development - Erick Erickson Paradigm

23 Developing hobbies and interest of children

24 Moral Development and handling emotions

25 Personality Development

ABOUT INSTRUCTOR

- Working as Principal at Thiagarajar College of Preceptors, Madurai, has 10 years of teaching experience in colleges of Education.
- Published six books edited 19 chapters in 16 books and published 40 research articles in both National and International Journals.
- Presented 18 papers in International, National, State level Seminars.
- An approved senior member of International Society for Research and Development (ISRD), London.

LEARNING, TEACHING AND ASSESSMENT

DR. G. VICTORIA NAOMI
Professor, Department of Special Education,Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 8 weeks (16/07/2018 to 07/09/2018)
EXAM DATE : 30/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary, Should posses a basic interest towards children with visual impairment

OBJECTIVE OF COURSE

- Comprehend the theories of learning and intelligence and their applications for teaching children
- Analyze the learning process, nature and theory of motivation
- Describe the stages of teaching and learning and the role of teacher

LEARNING OUTCOME

- Develop skills to situate self in the teaching learning process.
- Describe the stages of teaching and learning and the role of teacher.
- Analyze the scope and perspective of assessment in teaching learning process in the school system towards enhanced learning

COURSE PLAN

Week 01

01. Definition, Meaning & Learning and Concept formation - 1

02. Definition, Meaning & Learning and Concept formation - 2

03. Learning theories: a. Behaviourism: Pavlov, Thorndike, Skinner, b. Cognitive: Piaget, Bruner, c. Social Constructism: Vygotsky, Bandura

04. Intelligence

Week 02

05. Creativity I

06. Learning, Teaching & Assessment

07. Sensation

08. Sensation: Definition and Sensory Process

Week 03

09. Attention: Definition and Affecting Factors

10. Perception: Definition and Types

11. Memory, Thinking, and Problem Solving

12. Motivation: Nature, Definition and Maslow's Theory

Week 04

13. Individualized instruction. Interactive Learning

14. Styles of Learning/Teaching or Individualized Educational Programme

15. TLM - Importance and needs

16. Programmed Instruction

Week 05

17. Creativity II

18. Creativity III

19. Meaning, Nature and Scope of Guidance

20. Guidance in Classroom

Week 06

21. Guiding Students with Special Needs

22. Meaning, Nature and Scope of Counselling - I

23. Meaning, Nature and Scope of Counselling - II

Week 07

24. Formative and summative evaluation, Curriculum Based Measurement

25. Revisiting key concepts in school evaluation: filtering learners, marks, credit, grading, choice, alternate certifications, transparency, internal-external proportion, improvement option

26. Management of Classroom Behaviour - I

27. Management of Classroom Behaviour - II

Week 07

28. Assessment of diverse learners: Exemptions, concessions, adaptations and accommodations;

29. School examinations: Critical review of current examination practices and their assumptions about learning and development; Efforts for exam reforms: Comprehensive and Continuous Evaluation (CCE), NCF (2005) and RTE (2009)

ABOUT INSTRUCTOR

- Has an experience of over three decades having wide and rich experience in teaching children with visual impairment in inclusive settings.
- Undertaken various researchers in the field of special education.
- Has authored nine books and published over 100 articles in the field of Special Education.
- Coordinated Indo-US Research Project on Response to Intervention Model in Indian Context.

BRAILLE & ASSISTIVE DEVIACES

DR. G. VICTORIA NAOMI
Professor, Department of Special Education,Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 8 weeks (1/08/2018 to 20/09/2018)
EXAM DATE : 07/12/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary, Should posses a basic interest towards children with visual impairment

OBJECTIVE OF COURSE

- Acquire basic information about Braille, its relevance and important functional aspects
- Gain information on types and significance of different Braille devices
- Familiarize with Mathematical devices in teaching children with visual impairment
- Get acquainted with the types and significance of basic devices relating to Science, Geography and Low Vision

LEARNING OUTCOME

- Help the learners to understand the evolution of Braille and its relevance to children with visual Impairment
- Familiarize with the different types of devices available for children with visual impairment

COURSE PLAN

Week 01

01. Louis Braille and the Evolution of Braille

02. Continuing Relevance of Braille vis-a-vis Audio Material

03. raille Signs, Contractions and Abbreviations--English Braille

Week 02

04. Braille Signs and Symbols-Hindi/Regional Language

05. Braille Reading and Writing Processes

06. Slate and Stylus & Braille Writer

Week 03

07. Learning media assessment

08. Braille reading readiness

09. Techniques of teaching Braille

10. Interaction

Week 04

11. Techniques of Teaching print to children with low vision

12. Braille aids and devices, optical devices for print reading and writing

13. Assistive Technology for People with Disabilities

Week 05

14. Screen Readers with Special Reference to Indian Languages; Magnifying Software, and Open Source Software.

15. Braille Note takers and Stand-alone Reading Machines

16. Braille Translation Software with Particular reference to Indian Languages and Braille Embossers

Week 06

47. On-Line Libraries and Book share

18. Daisy Books, Recordings, and Smart Phones.

19. Thermoform and Swell Paper technology and Software's for developing tactile diagrams

Week 07

20. Mathematical Devices: Taylor Frame and Types, Abacus, Geometry Kit, Algebra Types

21. Geography: Maps-Relief, Embossed, Models

22. Science Material

Week 08

23. Low Vision Aids-Optical, Non-Optical, Vision Training Material

24. Electronic Devices- Note takers and Refreshable Braille Displays, Braille Embossers & Braille Translation Software

25. Schemes and Sources of Availability

ABOUT INSTRUCTOR

- Has an experience of over three decades having wide and rich experience in teaching children with visual impairment in inclusive settings.
- Undertaken various researchers in the field of special education.
- Has authored nine books and published over 100 articles in the field of Special Education.
- Coordinated Indo-US Research Project on Response to Intervention Model in Indian Context.

INTRODUCTION TO SENSORY DISABILITIES

MRS. R.SHANTHI
Assistant Professor (SG)Department of Special Education Avinashilingam Institute for Home Science and Higher Education for Women Coimbatore

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 8 weeks (9 July to 31 August, 2018)
EXAM DATE : 04/12/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary, Should posses a basic interest towards Disabilities related information

OBJECTIVE OF COURSE

- Will classify different types of sensory impairments and its prevalence and describe the process of hearing & implications of various types of hearing loss.
- Will explain the issues & ways to address challenges in educating students with hearing loss.
- Will describe nature, characteristics & assessment of students with low vision & visual impairment.
- Will Suggest educational placement and curricular strategies for students with low vision & visual impairment.
- Will Explicate the impact of deaf-blindness & practices for functional development.

LEARNING OUTCOME

•Help the learners to understand the population information and its sources, composition, components etc.
•Assist the students to further their specialization in the field of Population Studies or Social Demography.

COURSE PLAN

Week 01: Introductory Note

01. Concept of Impairment

02. Importance of Hearing

03. Definition and Identification of Hearing Impairment- 1

04. Definition and Identification of Hearing Impairment- 2

Week 02:

05. Incidence and Prevalence of Hearing Impairment

06. Types and Characteristics of Hearing Impairment

07. Challenges arising due to congenital and acquired hearing loss

08. Types and Characteristics of Hearing Loss

Week 03:

09. Language & communication issues attributable to hearing loss and need for early Intervention

10. Issues & measures in literacy development and scholastic achievement of students with hearing loss

11. Restoring techniques using human (interpreter) & technological support (hearing devices)

Week 04:

12. Blindness and Low Vision--Definition and Classification

13.Causes of Blindness and Low Vision

14.Effects of Blindness on Growth and Development Physical, Social, Intellectual and Emotional

Week 05:

15. Effects of Visual Impairment on Personality Development - Verbalism & Mannerism

16. Psychological and Sociological Implications of Visual Impairment –I

17. Psychological and Sociological Implications of Visual Impairment –I

18. Importance of Early Identification and Intervention

Week 06:

19. Educational Problems of Low Vision children

20. Selecting Educational Placement

Week 07:

21. Definition, causes, classification, prevalence and characteristics of deaf-blindness

22. Screening, assessment, identification & interventional strategies of deaf-blindness

23. Effects and implications of deaf-blindness on activities of daily living & education

Week 08:

24. Fostering early communication development: Methods, assistive devices and practices including AAC

25. Addressing orientation, mobility & educational needs of students with deaf-blindness

ABOUT INSTRUCTOR

- Has 23 years of experience in the field of special education, especially in the area of teaching children with hearing impairment.
- Published 2 books and 10 articles in International journals and 26 at National level.
- Developed Finger spelling for 247 Tamil alphabets.
- Worked in the Indo - US Research Project on Response to Intervention Model in Indian Context.

NEURO-DEVELOPMENTAL DISABILITIES

DR. K.SAMBATH RANI
Asst. Professor (SG) Dept. of Spl Education Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 8 weeks (16/7/2018 to 7/9/2018)
EXAM DATE : 06/12/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed Higher secondary.
Should posses a basic interest towards serving children with Neuro Developmental Disorder.

OBJECTIVE OF COURSE

- Will explain the various needs of children with learning Disability and acquire the skills in training them.
- Will distinguish between mental illness and mental retardation
- Will describe the nature, causes, prevention of intellectual Disability and strategies for teaching functional academics for children with Intellectual Disability.
- Will help to acquire skills in training and rehabilitating children with multiple Disabilities.
- Will enable to handle children with Autism Spectrum Disorder.

LEARNING OUTCOME

The students will be able to identify, classify and Rehabilitate children with Learning Disability, Intellectual Disability, Multiple Disability, and Autism Spectrum Disorder. In addition they will be able to differentiate various types of disabilities. Understand the various approaches and methods that can be used for Rehabilitating children with Neuro Developmental Disabilities.

COURSE PLAN

Week 01:

01.Concept and Definition of Learning Disabilities

02.Stratergies to develop Reading skills

03.Strategies to Develop Spelling Skills

Week 02:

04.Strategies to develop Writing Skills (Maths)

05.Strategies to develop Number skills (Maths)

06. Learning Disabilities - Types and Associated Conditions-I

Week 03:-

07. Learning Disabilities - Types and Associated Conditions-II

08. Learning Disabilities - Types and Associated Conditions-III

09. Mental Illness - Definition and Identification

10. Mental Illness - Types

Week04 :

11.Mental Retardation - Definition and Identification

12.Mental Retardation - Types

13. Mental Retardation - Levels

14.Mental Retardation - Causes

Week05:

15.Mental Retardation - Incidence and Prevalence

16.Mental Retardation - Prevention

17. Strategies for Functional Academics and Social Skills

Week06:

18. Mental Retardation-Intervention and Educational Programmes-Part-1

19. Mental Retardation intervention and educational programmes 2

20.Multiple Disabilities - Definition and Identification

Week07:-

21. Autism Spectrum Disorder

22. Autism Spectrum Disorder - Needs & Intervention of Children with Autism

23.Tools and Areas of Assessment

Week08:-

24. Instructional Approaches & Teaching Methods

25. Vocational Rehabilitation for Individual with ASD

ABOUT INSTRUCTOR

- Has 28 years of experience in the field of Special Education.
- Specialized in two Major areas Visual Impairment and Mental Retardation.
- She had authored Two Books and written Course Material in Special Education to Tamil Nadu Open University.

TELEVISION JOURNALISM

SUBHA DAS MOLLICK
Visiting faculty ILead College, Kolkata

TYPE OF COURSE : UG/PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 14 weeks (6th Aug, 2018 to 7th Nov, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 4

PRE-REQUISITES : Class XII pass preferably with English as the medium of instruction

OBJECTIVE OF COURSE

- To Put television in India with a historical perspective
- Orient the students to the power and importance of television as a medium of communication
- To Make the student aware of the skills to be acquired for television production, particularly news production
- To Sensitize the student to "television culture"

LEARNING OUTCOME

The modules in this course cover all aspects of television programming, with special emphasis on crafting news for television. On one hand there are lecture demonstrations on practical aspects of crafting news, on the other hand there are theoretical discourses on the cultural impact of television.

COURSE PLAN

Week 1:
Module 1 : History of Broadcasting
Module 2 : The First Two Decades of Indian Television
Module 3 : Satellite Instructional Television Experiment (SITE)

Week 2:
Module 4 : The Asian Games and Setting up of National Network
Module 5 : Initiation of Private News Coverage in India
Module 6 : The Language of Television

Week 3:
Module 7 : Cultural Theory and its Applications Part 1
Module 8 : Cultural Theory and its Applications Part II
Module 9 : Audience segments and cultural impact Theory of visual literacy: Gestalt

Week 4:
Module 10 : Introduction to Videography
Module 11 : Types of Video Camera and Their Selection
Module 12 : Lighting techniques

Week 5:
Module 13 : Digital Video Tape Recording Formats
Module 14 : Microphone and its Uses
Module 15 : Writing the Audio Visual script

Week 6:
Module 16 : Television News Production
Module 17 : Television News Anchoring
Module 18 : Writing for News and Current Affairs 1

Week 7:
Module 19 : Writing for News & Current Affairs II: Writing to Pictures
Module 20 : Packaging, Use of Graphics and Special Effects For TV Journalism
Module 21 : Indian Constitution and Article 19A

Week 7:
Module 19 : Writing for News & Current Affairs II: Writing to Pictures
Module 20 : Packaging, Use of Graphics and Special Effects For TV Journalism
Module 21 : Indian Constitution and Article 19A

Week 8:
Module 22 : Censorship and control of the press and other media
Module 23 : Press Council of India
Module 24 : Common Legal Issues

Week 9:
Module 25 : Codes of journalistic ethics and professional morality
Module 26 : Semiotics I
Module 27 : Semiotics II

Week 10:
Module 28 : Multi Camera Set Up
Module 29 : Reporting Skills
Module 30 : Digital Editing: Software and Equipment

Week 11:
Module 31 : Colour Correction & Chroma Keying
Module 32 : News Editing
Module 33 : Analysis of Reality Television

Week 12:
Module 34 : Trends of non-fiction television in India Part 1
Module 35 : Trends of non-fiction television in India Part II
Module 36 : Television Audience Measurement

Week 13
Module 37 : Honing Your Interview Skills
Module 38 : Analysis of Advertisement Part I
Module 39 : Analysis of Advertisements Part II

Week 14:
Module 40 : Breaking News
Module 41 : Scripting for Soaps and Serials

ABOUT INSTRUCTOR

- A media teacher and a documentary filmmaker, has made more than 50 documentary films on a variety of subjects.
- Headed Film Studies and Mass Communication Deptt. At the St. Xavier's College, Kolkata.
- Currently Secretary of Bichitra Pathshala.

ORIENTATION AND MOBILITY

MRS. R. NAGOMI RUTH
Assistant Professor Department of Special Education Avinshilingam Institute for Home Science and Higher Education for Women
Coimbatore

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 8 weeks (16/07/2018 to 07/09/2018)
EXAM DATE : 6/12/2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : ·Should have completed higher secondary
Should posses a basic interest towards visual impairment & special education

OBJECTIVE OF COURSE

- Comprehend the concept and meaning of Orientation & Mobility
- Acquire skills in O& M teaching
- Able to demonstrate Sighted guide technique, protective technique and Cane technique
- Analyze various mobility techniques

LEARNING OUTCOME

- Conceptualize the Effect of Visual impairment in Physical growth & development
- Be able to demonstrate the O & M skills in terms of sighted guide techniques, pre cane skills and cane technique
- Describe the concept of Orientation & Mobility to the visually impaired
- Able to train Mobility skills to visually impaired people

COURSE PLAN

Week 01:

1. Effect of visual impairment on growth and development: Physical, Motor, Language, Socio-emotional, and Cognitive development

2. Effects of Visual Impairment on Personality Development - Verbalism & Mannerism

3. What is Orientation and Mobility?

Week 02:

4. Orientation and Mobility -- Definition, Importance and Scope

5. Basic Terminologies Associated with O&M: Trailing, Landmarks, Clues, Cues, Shoreline, Squaring Off, Clockwise Direction, Sound Masking, Sound Shadow

6. Roles of Other Senses in O&M Training

Week 03:

7. Orientation and Mobility for low vision children

8. Addressing orientation, mobility & educational needs of students with deaf-blindness

Week 04:-

9. Special Responsibilities of Special Teacher/Educator with reference to O&M Training

10. Blindfold -- Rationale and Uses for the Teacher

Week 05:

11. Sighted Guide Technique - Grip, Stance, Hand Position, Speed Control, Negotiating: Narrow Spaces, Seating Arrangements, Staircases, & Muddy paths

12. Pre Cane Skills - Upper and Lower Body protection, Room Familiarization, Using Oral Description for Orientation, Search Patterns, Building Map Reading Skills

Week 06 :

13. Cane Travel Techniques and Devices - Canes -Types, Parts, Six Considerations, Cane Travel Techniques: Touch Technique, Touch and Drag Technique, Diagonal Cane Technique, Use of Public Transport, Asking for Help: When and How & Electronic Devices, Tactile and Auditory Maps -- Description and Uses

Week 07:

14. Independent living skills - Meaning, Importance, Components

15. Training in Independent Living Skills - Self Care, Gait and Posture, Personal Grooming, Eating Skills and Etiquette, Identification of Coins and Currency Notes & Basics of Signature Writing

16. Daily living skills - assessment of needs and techniques of teaching age appropriate daily living skills

17. Sensory efficiency - importance and procedures for training auditory, tactile, olfactory, gustatory, kinesthetic senses and residual vision

Week 08:-

18. Techniques of teaching social interaction skills, leisure and recreation skills and self -determination

19. Adaptation of Physical education activities and Yoga

20. Adaptation of Games and Sports - both Indoor and Outdoor

21. Agencies/Organisations promoting - Sports, Culture and Recreation activities for the Visually Impaired in India - Indian Blind Sports Association, Chess Federation of India, Paralympic Committee of India, Abilympics, World Blind Cricket

ABOUT INSTRUCTOR

- Master degree in Mathematics, Master of Special Education and Master of Philosophy in Education.
- Has 15 years of teaching experience both in inclusive school and at higher educational institution.
- Worked as project staff in the Indo-US Research Project on Response to Intervention Model in Indian Context.
- Has published 15 articles in both National and International level.

INTRODUCTION TO AUDIO-VISUAL MEDIA

DR.KRISHNA SANKAR KUSUMA
Assistant Professor (Sr.Grade), AJKMCRC, Jamia Millia Islamia, N. Delhi

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 15 weeks (17/ 08/ 2018 to 30/ 11/ 2018)
EXAM DATE : December 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : 1. UG students of any discipline for credit purpose. Students can choose this as part of CBCS.
2. The course is also open to lifelong learners who want to enrich knowledge can also enrol; upon completion, participation certificate will be provided.

OBJECTIVE OF COURSE

- Introduction to Audio-Visual Media is, designed to impart knowledge on three components of audio-visual media a) Radio b) Television c) Cinema/Film.
- The course covers both theory and practical elements of the three mediums.
- The lectures and supported text will help the students get not only the awareness of art and creation of media production but also various theories and issues in media studies.
- This course will help them to get the basic understanding of the above media.

LEARNING OUTCOME

The Introduction to Audio-Visual Media course will orient the students to the aesthetic requirements of effective audio-visual communication.
After completing this course, students will be acquainted with the concepts of visual media from a critical point of view. Students are introduced to the necessary equipment and terminology of various stages of audio-visual production.
The course will equip the students to be familiar with the knowledge about audio-visual production techniques.

COURSE PLAN

Week 01:

Historical Perspective of Radio, Characteristic of Radio, Amplitude Modulation and Frequency Modulation

Week 02:

Community Radio (Part–1), Community Radio (Part-2), Commercial Radio

Week 03:

Writing for Radio and Production Method, Cinema: Historical Perspective (Part-1) , Cinema: A Historical Perspective (Part-2)

Week 04:-

Golden Age Golden Age of Indian Cinema of Indian Cinema, Regional Cinema

Week 05:

Film Language and Grammar, Sound in Cinema, Film Industry in India Status Issues and Problems

Week 06:

Satellite and Cable Television, Broadcast Formats, Trends in Broadcasting

Week 07:

Commercial Television, Writing for Television News, Writing for Television (Documentaries, Interviews and Short Talks)

Week 08:-

Different Stages of TV and Film Production Process (Part-1), Different Stages of TV and Film Production Process (Part-2), Different Stages of TV and Film Production Process: Pre-Productio (Script Writing)(Part-3)

Week 09:

Making of Documentary Film, Edit Points: Linear vs Non-Linear Editing

Week 10:

Basics of video editing, Chroma Key

Week 11:

Introduction to Digital video production, Mobile filming, Introduction to streaming media and live production

Week 12:

Images for the multiple digital media productions, Transmedia, storytelling, Immersive media AR/VR/MR

Week 13:-

User-generated Media content, Ethics of media production in digital domains

Week 14:

Media and Violence, Social Media and its impact

Week 15:

Media and Gender, Impact of Media on Children

ABOUT INSTRUCTOR

- Working as a Sr.Assistant Professor at AJKMCRC, Jamia Millia Islamia and has 14 years of teaching experience in the field of Mass Communication.
- Teaches Science Documentary, Communication Research, Theory, Mobile cinema, Advertising and Public Relations, Performance media and South Indian Cinema, New Media at AJK MCRC.
- He was also in charge of the CEC-UGC Educational programme production, MOOC's and Pathshala, SwayamPrabha (Channel-5).
- Completed Masters from Hyderabad Central University and his PhD from JamiaMilliaIslamia and worked with AJKMCRC, he worked with CEDEC-NISWASS in Bhubaneswar, Orissa, Tezpur central university.

RADIO PRODUCTION

LABANYA DATTA
Radio Jockey, Voiceover artist

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 6 weeks (6/8/2018 to 11/9/2018)
EXAM DATE : Tentatively Dec 2018.
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 with any background

OBJECTIVE OF COURSE

- Structural understanding of the Broadcasting medium.
- Development and growth of Radio broadcasting in India: pre and post independence
- Learning the language used in the specific medium
- Technical knowledge regarding sound
- Digital technology
- Pre and post production
- Radio advertising

LEARNING OUTCOME

The course has been drawn to provide the students the knowledge of Radio, as a medium. It provides understanding and concept development about Radio Broadcasting which includes the growth of radio, Grammar & aesthetics, understanding sound and production.

COURSE PLAN

Week 1

Module 1 : Wireless communication

Module 2 : Development of Radio in India before Independence

Module 3 : Development of AIR after Independence

Module 4 : Coming of FM in India & Starting of Private FM channels

Week 2

Module 5 : HAM Radio & Community Radio

Module 6 : Comparative Analysis : All India Radio & Pvt FM channels

Module 7 : Language of Radio

Module 8 : Radio Journalism and its language

Week 3

Module 9 : Genres of radio programmes

Module 10 : Analysis of Spoken words

Module 11 : Speak into me

Module 12 : Expanding Circles

Week 4

Module 13 : The Human Ear

Module 14 : The Hearing Environment

Module 15 : History of Sound Recording I

Module 16 : History of Sound Recording II

Week 5

Module 17 : Understanding the Digital Technology

Module 18 : Radio pre- production & Radio advertising

Module 19 : Digital Audio Recording

Module 20 : Mixers

Week 6

Module 21 : Creative use of sound for radio production

Module 22 : Setting up of radio station : FM & Community

ABOUT INSTRUCTOR

- Post Graduate from the department of Journalism and Mass Communication, University of Kolkata.
- Worked as a Radio Jockey for Radio Mirchi and currently works as a presenter for FM Rainbow and Gold (Western Music), All India Radio.
- Worked in Radio for nearly seven years.
- Worked as a sports journalist, and written for magazines.
- Completed Vani Certification from All India Radio, under (Ministry of Information & Broadcasting.

IPSITA BARAT
Prof-in-charge Film Studies Dept. Assistant Professor,
St. Xavier's College Kolkatta

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

PRE-REQUISITES : 10+2

COURSE DURATION : 7 weeks (6th Aug, 2018 to 21st Sep, 2018)
EXAM DATE : Tentatively Dec 2018
NO OF CREDITS : 3

OBJECTIVE OF COURSE

- The course is an enriching and exciting journey, delving into various aspects of documentary cinema theory and filmmaking – ideation, research, scripting, and execution.
- The students will undergo an intensive creative process wherein the course will mentor their journey into the fascinating world of documentary cinema; learning through lectures and discussions that are formulated to develop a larger understanding of filming reality.

LEARNING OUTCOME

Besides Mass Communication, the course is designed keeping in mind students from diverse humanities background. After successful completion of this course, students will be enriched, enlightened and more confident about the subject.

COURSE PLAN

Week 1:

Module 01: Defining Documentary Films

Module 02: Modes of Documentary -Part I

Module 03: Modes of Documentary -Part II

Module 4: Modes of Documentary-Part III

Week 2:

Module 5: Documentary Kino-Eye

Module 6: British Documentary Movement

Module 7: Films of Pare Lorentz

Module 8: Approaches to Documentary Film Making-Part 1

Week 3:

Module 09: Approaches to Documentary Film Making-Part 2

Module 10: New Directions in 50s & 60s - (Part 1)

Module 11: New Directions in 50s & 60s - (Part 2)

Module 12: Documentary Part I

Week 4:

Module 13: Documentary Part 2

Module 14: Activism Documentary 1

Module 15: Activism Documentary 2

Module 16: Researching the Documentary

Week 05:

Module 17: Getting Ideas for Your Films

Module 18: Horning Your Interview Skills

Module 19: Storytelling in a Documentary

Module 20: Treatment

Week 6:

Module 21: Proposal Outline

Module 22: Preparing the Budget

Module 23: Scripting a Documentary

Module 24: Writing Narration

Week 7:

Module 25: Raising funds for A Film

Module 26: Production process - Requirements & Stages

Module 27: Overview of the Production Process

Module 28: Fine Cut–Editing Documentary

ABOUT INSTRUCTOR

- Registered as a PhD. scholar at Film Studies Dept. Jadavpur University, Kolkata.
- Holds a master degree from AJK Mass Communication and Research Centre (MCRC), Jamia Millia Islamia.
- Presented papers at various national and international conferences/ seminars.
- Research interest area is Media Industries, Production Cultures, Globalization and digital media.
- Expertise in Documentary Cinema.

MAJOR FILM MOVEMENTS & THE AUTEURS

NILANJAN BANERJEE
Assistant Professor, Satyajit Ray Film & Television Institute Of India Department Of Producing For Film & Television.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
PRE-REQUISITES : 10+2

COURSE DURATION : 9 weeks (06/08/18 to 06/10/18)
EXAM DATE : NA
NO OF CREDITS : 4

OBJECTIVE OF COURSE

This particular MOOC is a self-learning module and the students are expected to devote 10 hours approximately per week, which will include thorough understanding of the module, participation in the discussion with the subject expert and also going through the list of papers and other references.

LEARNING OUTCOME

- This course will orient the students with the basics of Film Movements.
- The students will be able to understand how cinema as an art form developed over the years.
- The course will enable the students to write a review on allied fields and that may be suitable for publication.

COURSE PLAN

Week 01

1)Hollywood Classical: Continuity, 2) Hollywood Studio System

3) D. W. Griffith, 4) The Road to Citizen Kane, 5) Examining the Narrative

Week 02

6)Structuring with Music and Visual, 7) Citizen Kane and beyond

8) Time & Film Form, 9) Realism & Cinematic Narrative: Introduction

10) German Expressionism

Week 03

11) Italian Neo Realism, 12) Aesthetic of Neo-Realism, 13) The Cinema of Vittorio Dicica, 14) The Cinema of Roberto Rossellini

Week 04

15) The Cinema of Luchino Visconti, 16) French New Wave: Rewriting Conventions, 17) The Rise of Nouvelle Vague, 18) Renoir & Bresson

Week 05

19) Jean Luc Godard : A New Wave, 20) Truffaut: The Innovator, 21) Concept of Auteur, 22) Akira Kurosawa

Week 06

23) A Phenomenon called Akira Kurosawa, 24) A Master arrives, 25) A complex narrative, 26) Narrative and beyond

Week 07

27) Realism of Satyajit Ray: Apu Trilogy, 28) Realism of Satyajit Ray: Urban Trilogy, 29) Envisioning Pather Panchali, 30) Analysing the Narrative

Week 08

31) Triumph of Collective Creativity, 32) Locating Pather Panchali in History, 33) Concept of Third Cinema, 34) Solanas & Getino: Towards a Third Cinema

Week 09

35) Feminist Film Theories - Basic Ideas, 36) Types of Non-Fiction Film Part-I, 37) Types of Non-Fiction Film Part-II

ABOUT INSTRUCTOR

- A post graduate (diploma) in Direction & screenplay Writing from Satyajit Ray Film & Television Institute Of India.
- Teaching in SRFTI for last few years.
- Has been working in the film industry for last 17 years.
- Directed feature film, short films and documentaries.
- Has launched two production houses and produced and directed number of shows.

COMMUNICATION, MEDIA & SOCIETY: MODELS & PROCESSES

SOUMYA SUVRA DAS
Teaching faculty at NSHM, Kolkata

TYPE OF COURSE : UG/PG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 7 weeks (6th Aug, 2018 to 21st Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 3

PRE-REQUISITES : 10+2 with any background

OBJECTIVE OF COURSE

- To give a brief of Communication Theory, Media & Society: Models and Processes' course will orient the students to the processes and socio-cultural, political and technological factors that intervene is disseminating messages.
- After completing this course, students will develop a critical and analytical faculty where they can discern, understand and interpret various media representations like news, films, music and new media messages.
- The course will equip the students to meet the academic demands facilitating in better understanding of the course they are pursuing.

LEARNING OUTCOME

•This course not only makes the curriculum easier to understand, but gives the student an edge as the module can be studies through audio visual representations and interaction with the respective faculty. The course is not only limited to archaic structure of syllabus, but has been updated to match the relevant issues of media and communication throughout the world. A theory presents a systematic way of understanding events, behaviours and/or situations.

COURSE PLAN

Week 1:

Module 1 : Normative Theory

Module 2 : Communicative Action of Jurgen Habermas - 1

Module 3 : Communicative Action of Jurgen Habermas – 2

Module 4 : Agenda Setting Theory

Week 2:

Module 5 : The Hypodermic Needle Theory

Module 6 : Two Step & Multi Step Model of Communication

Module 7 : Play Theory

Module 8 : The Selective Processes

Week 3:

Module 9 : Individual Differences Theory

Module 10 : Cultivation Theory

Module 11 : Spiral of Silence

Module 12 : Colonialism & Communication Part 1

Week 4

Module 13 : Colonialism & Communication Part 2

Module 14 : Key Concepts in Communication: Stuart Hall (Part 1)

Module 15 : Key Concepts in Communication: Stuart Hall (Part 2)

Module 16 : Models of Mass Communication: Aristotle's Classical Model

Week 5:

Module 17 : Models of Mass Communication: Laswell's Model of Communication

Module 18 : Shannon and Weaver's Model of Communication

Module 19 : Wilbur Schramm's Models of Communication

Module 20 : Gate-keeping Model of Communication

Week 6:

Module 21 : Gerbner's Model of Communication

Module 22 : Westley MacLean Model of Communication

Module 23 : Development of Mass Communication

Module 24 : Impact of mass communication

Week 7

Module 25 : Barriers of Communication

Module 26 : Uses and Gratifications Theory

Module 27 : Reception Theory -An Introduction

Module 28 : Reception Theory - Indian Film and Media

ABOUT INSTRUCTOR

- Media and film faculty and a research scholar researching on Indian Cinema and Land Relations from Jadavpur University.
- Teaches at NSHM, St. Xavier's College, The Bhawanipur Education Society College.
- Involved in Film Making.

COMMUNICATION, MEDIA & SOCIETY: KEY THEORETICAL CONCEPTS

SUSHMITA PANDIT
Assistant Professor Future Media School
Kolkata

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 9 weeks (6th Aug, 2018 to 21st Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 3

PRE-REQUISITES : 10+2 with any background

OBJECTIVE OF COURSE

- This course will orient the students with an understanding of media's role in society
- The students will develop a critical perception of basic concepts related to media and communication
- The course will familiarize the students with how media plays a pivotal role in the dissemination of culture.
- The course will enable the students to understand the icons and symbols used by media in influencing the public perception in society.

LEARNING OUTCOME

The course is designed in an interesting way to familiarize a student of mass communication or media studies with the basic concepts related to the discipline, so that, one can develop a critical understanding of media. After completion of the course, the students can automatically apply this knowledge in their fields of media research, higher education and industry.

COURSE PLAN

Week 1

Module 1 : Fundamentals of Communication

Module 2 : Introduction to mass communication

Module 3 : Making meaning: Verbal and nonverbal; connotative & denotative communication; Intra personal, inter personal and group communication

Module 4 : Seven Cs of Communication

Week 2

Module 5 : Language and Communication

Module 6 : Key Concepts in Communication: Marshal McLuhan 1

Module 7 : Marshal McLuhan 2

Module 8 : Dominant Paradigm and Media

Week 3

Module 9 : Dominant Paradigm and Media Part – 2

Module 10 : Diffusion of Innovation Theory

Module 11 : Functionalism and Marxist Media Theory Part – I

Module 12 : Functionalism and Marxist Media Theory Part – II

Week 4

Module 13 : Marxist Media Theory Part – III

Module 14 : Key Concepts in Communication: Frankfurt School 1

Module 15 : Key Concepts in Communication: Frankfurt School 2

Module 16 : Cultural imperialism theory

Week 5

Module 17 : Cultural Imperialism and Media

Module 18 : Cultural theory & its application (Part 1)

Module 19 : Cultural theory & its application (Part 2)

Module 20 : Index, icon, symbol, codes of visual representation

Week 6

Module 21 : Paradigmatic & syntagmatic

Module 22 : Key Concepts in Communication: Ideological State Apparatus 1

Module 23 : Key Concepts in Communication: Ideological State Apparatus 2

Module 24 : New Media-I

Week 7

Module 25 : New Media-II

Module 26 : The New Information Age

Module 27 : New Media the Indian Perspective

ABOUT INSTRUCTOR

- Serving as Assistant Professor in the department of Media Studies at Future Media School under West Bengal University of Technology.
- Cleared UGC -NET in Mass Communication and Journalism and is currently pursuing her doctoral research on television studies in the department of Film Studies, Jadavpur University.
- Has more than 7 years' experience as full time faculty in academics and more than 8 years, is actively engaged with the media industry.
- Working as a radio presenter at All India Radio.

ADVERTISING AND PUBLIC RELATIONS

DR. KRISHNA SANKAR KUSUMA
Assistant Professor (Sr.Grade), AJKMCRC,
Jamia Millia Islamia, N. Delhi

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 15 weeks (17/08/2018 to 07/12/2018)
EXAM DATE : December 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : 1. UG students of any discipline for credit purpose. Students can choose this as part of CBCS. 2. The course is also open to lifelong learners who want to enrich knowledge can also enrol; upon completion, participation certificate will be provided.

OBJECTIVE OF COURSE

- The primary objective of the MOOC on Advertising and Public relations is to introduce the learners to the basic concepts, tools, campaigns, strategies, application and many more aspects of fields of advertising and public relations.
- Students will be introduced to creating an adverting campaign and other relevant creative tools.
- Students will be given exposure to the various issues of advertising related to society.
- Students will also be given exposure to the role of PR in various organizations.

LEARNING OUTCOME

Able to learn the concepts of Advertising and Public Relations, Able to identify tools and strategies of Public Relations, Learner will be able to understand advertising effectiveness and its impact on society, Understand the Advertising and Public Relations Campaign

COURSE PLAN

Week 01:

Advertising Agency, An Introduction to Advertisement, Advertising and Market Research

Week 02:

Product Advertising, Target Audience, Brand Image Positioning, Types of Media and their selection in Advertising, Strategy Planning, Campaign Planning and Media Budgets

Week 03:

Advertising Strategies, Types of Advertising and Copywriting and Advertising Production Techniques, Legal and Ethical Issues in Advertising

Week 04:

How Different Types of Advertising Impact the Consumer, Integrated Marketing Communication, Copywriting Techniques for Different Media

Week 05:

Social Marketing and Advertising, Social Marketing and Advertising History of Advertising in India

Week 06:

History of Advertising in India, Campaign and their Evaluation, Advertising and Mass Media

Week 07:

Emerging Trends in Advertising, Copywriting and Advertising, Social and Economic Effects of Advertising

Week 08:

Public Relations, Definitions, Functions, History and Growth in India, PR Publicity Propaganda and Public Opinion, Public Relation Techniques

Week 09:

Public Relations and Crisis Management, Public Relation and Advertising, Tools of PR for Interaction with Media

Week 10:

Defence PR (Public Relations) 1, Defence PR (public Relations) 2

Qualities of PRO

Week 11:

Financial PR and investor relations, PR Management and Organizational Structures, Campaign planning for Public Relations

Week 12:

Customer and Employee Relations and PR, Shareholder relations and dealer relations, PR for Political Party

Week 13:

Stages of Public Relation, PR and new media technology, Emerging Trends in PR

Week 14:

PR as a Management Function, PR and NGO Management, Corporate Social Responsibility, PR in Hospitals

Week 15:

International Public Relation, Tools and Techniques in PR, Code and Ethics for Public Relations

ABOUT INSTRUCTOR

- Working as a Sr. Assistant Professor at AJKMCRC, Jamia Millia Islamia.
- Expertise Science Documentary, Communication Research, Theory,Mobile cinema, Advertising and Public Relations, Performance media and South Indian Cinema, New Media at AJK MCRC.
- Has 14 years of teaching experience in the field of Mass Communication.
- Served as In-charge of the CEC-UGC Educational programme production, MOOC's and Pathshala, Swayam Prabha (Channel-5).
- Completed his Masters from Hyderabad Central University and PhD from Jamia Millia Islamia.
- Worked with CEDEC-NISWASS in Bhubaneswar, Orissa, Tezpur central university.
- Taught at College of Applied Sciences, Oman.

HINDI CINEMA

SAAYAN CHATTOPADHYAY
Assistant Professor Department of Journalism & Mass Communication
Baruipur College

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 5 weeks (6th Aug, 2018 to 7th Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 in any stream

OBJECTIVE OF COURSE

- The course will develop a critical understanding of Hindi cinema.
- The students will learn about the early history of Hindi films and the historical significance of the Studio Era in India.
- The course will help students to understand the ideology behind popular cinema.
- The students will become familiar with particular cinematic style and thematic concerns in Hindi cinema.
- The course will facilitate the students to appreciate the films of eminent Hindi filmmakers.

LEARNING OUTCOME

This course critically analyses Hindi films and discusses the historical, technical and aesthetic aspects of Hindi cinema. Hindi cinema, as an archetype of popular cinema, not only enjoys a wide national and international distribution but also dominate the discourse about Indian cinema globally. This course, with reference to a wide range of Hindi films and filmmakers, will prepare the students to a more nuanced understanding of popular Hindi films.

COURSE PLAN

Week 1

Module 1 : Historical Overview: Studios in India

Module 2 : V Shantaram and Prabhat Studios

Module 3 : Indian Cinema: From Madan to Phalke

Module 4 : Early Indian Silent Cinema

Module 5 : Studio Era and Talkies -- Pre- independence period

Week 2

Module 6 : Indian Cinema: Cinemas of 1940s

Module 7 : Mehboob Khan

Module 8 : Post- independence Hindi Cinema- Cinema of Raj Kapoor & Guru Dutt)

Module 9 : Raj Kapoor

Module 10 : Guru Dutt

Week 3

Module 11 : The Angry Young Man

Module 12 : Rise of a New Hero

Module 13 : Bimal Roy

Module 14 : Hrishkesh Mukherjee

Module 15 : Shyam Benegal

Week 4

Module 16 : Kumar Sahani

Module 17 : Saeed Mirza

Module 18 : Mani Kaul

Module 19 : Cinema Post Liberalization: What is Bollywood?

Module 20 : Bollywood & Liberalization

Week 5

Module 21 : Bollywood Narratives

Module 22 : Bollywood: Diversity in Narrative & Form under Globalization

Module 23 : Melodrama & Cinematic Narrations

Module 24 : Melodramatic Imagination in Indian Cinema

Module 25 : Reception Theory: Indian Film & Media

ABOUT INSTRUCTOR

•Assistant Professor and Head of the department of Journalism and Mass Communication at Baruipur College, affiliated to Calcutta University, Kolkata.
•Has more than ten years experience in teaching film and media studies.
•Has published articles in Studies in South Asian Film and Media, Journalism Practice, South Asia Research.
•Has also contributed chapters on film and media in books published from Palgrave Macmillan, Routledge, Springer, Sussex Academic Press, among others.

LANGUAGE OF CINEMA

ANINDYA SENGUPTA
Assistant Professor,Department of Film Studies,
Jadavpur University,Kolkata

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 7 weeks (6th Aug, 2018 to 21st Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 3

PRE-REQUISITES : 10+2 (any stream)

OBJECTIVE OF COURSE

- This course will introduce the student to important aspects of film-art and film-language.
- On successful completion of the course, the student will be able to appreciate the cinematic medium in a more knowledgeable way.
- This course will also enable them to apply the acquired knowledge in the fields of narrative and visual arts.
- It will enable them to write reviews of films and research-essays on allied fields and that may be suitable for publication.

LEARNING OUTCOME

This course will introduce the students to the language of cinema, one of the younger and probably most dynamic and eclectic art-form of the modern eras. Cinema is particularly unique as simultaneously being a scientific innovation, an medium of artistic expression, an important component of culture industry and a dominant mode of entertainment. It is also a precursor of sorts, because later media like television, video-games, virtual reality and audio-visual media in the internet is also highly derivative of it.

COURSE PLAN

Week 1

Module 1 : Language of Cinema: An Introduction

Module 2 : Basic Components in Film Language: Shot, Scene, Sequence

Module 3 : Shot Scale and the Use of Lens

Module 4 : Camera Position & Camera Angle

Week 2

Module 5 : Film Editing

Module 6 : Continuity Editing Part -I

Module 7 : Continuity Editing Part - II

Module 8 : Shot Breakdown & Storyboarding

Week 3

Module 9 : Eisenstein: Montage of Attractions

Module 10 : Eisenstein: Montage of Collision

Module 11 : Mise-en-Scene

Module 12 : Composition: Normative

Week 4

Module 13 : Mise-en-Scene & the Auteurs

Module 14 : Components of Film Sound

Module 15 : Sound and Image

Module 16 : Music and Image

Week 5

Module 17 : Theory of Film Sound

Module 18 : Sound & Continuity

Module 19 : Coming of Sound Part I

Module 20 : Coming of Sound Part II

Week 6

Module 21 : Colour and Meaning in Cinema

Module 22 : Lighting and Graphics

Module 23 : Approaches to Film Genre

Module 24 : Genre Bending, Genre Mixing: An Introduction

Week 7

Module 25 : Idea to Script Part - I

Module 26 : Idea to Script Part - II

Module 27 : Script for Feature Film

ABOUT INSTRUCTOR

- Assistant Professor at the Department of Film Studies, Jadavpur University.
- Post-graduation in English, second post-graduation degree in Film Studies at Jadavpur University.
- Pursing PhD dissertation on the Cinematic Authorship and Cinema of Satyajit Ray.
- Regular contributor of essays on cinema, culture and media in different academic and semi-academic journals.

INTRODUCTION TO MASS COMMUNICATION

PROF. FARHAT BASIR KHAN
Professor, AJK MCRC, Jamia Millia Islamia, N. Delhi

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Under Graduate, Post Graduate, Diploma
COURSE DURATION : 37 Modules (6th Aug to 30th Nov, 2018)
EXAM DATE : Yet to be decided
NO OF CREDITS : 4
PRE-REQUISITES : Good command on English language to follow video lectures in English and comprehend the study material; access to internet; interest in mass media. Students have to devote 6 to 8 hours of study time per week, which would include time for assignments and quizzes composed of multiple choice questions.

OBJECTIVE OF COURSE

- To educate students about the evolution and growth of print, broadcast and new media in India and simultaneously give insights about the models, theories and practices prevalent in the fields of mass communication.
- To facilitate a comprehensive understanding of the dynamics of mass media and applicability of mass communication models and theories in praxis.
- To create a rich knowledge base about the media laws like intellectual copy rights with special emphasis on copyright laws, right to free press and rights given to the journalists.

LEARNING OUTCOME

- This course is designed to create a foundational theoretical base about the historic and contemporary developments in the field of mass communication in India and the world at large.
- The discourse will allow students to delve into history of print, broadcast and new media in India as well as techniques of researching audiences using qualitative and quantitative methodological tools.

COURSE PLAN

Module 01:- History of Communication in India
Module 02:- Early Communication Systems in India
Module 03:- Introduction to Communication
Module 04:- Communication Functions
Module 05:- Types of Communication
Module 06:- Nature of Mass Communication
Module 07:- Mass Communication Audience
Module 08:- Linear Communication Models
Module 09:- Non-Linear Communication Models
Module 10:- Theory and Research Traditions
Module 11:- Mass Communication Theories
Module 12:- Media Effects Theories
Module 13:- Normative Theories of Press
Module 14:- Mass Media and Society
Module 15 :- Role of Media in Democracy
Module 16:- History of Writing
Module 17:- History of Printing (Newspapers)
Module 18:- History of Indian Print Media
Module 19:- Print Media in 19th century
Module 20:- Print Media in India
Module 21:- Starting a Newspaper
Module 22:- Types of Newspapers
Module 23:- Organizational Structure of Newspapers
Module 24:- Newspaper Ownership in India
Module 25:- Critical Issues in Newspaper Ownership
Module 26:- Newsroom Functioning
Module 27:- Types of Magazines
Module 28:- Books and Communication
Module 29:- Book Publishing in India
Module 30:- Public Information Agencies
Module 31:- Press Commissions & Agencies
Module 32:- Press Information Bureau
Module 33:- Media Unions in India
Week 34:- Marketing Practices in Print
Module 35:- Indian Print Media: Overview
Module 36:- Introduction to Media Research
Module 37:- Media Research Methodologies

ABOUT INSTRUCTOR

- Senior faculty of AJK MCRC.
- Served on several prestigious positions including the Maulana Abdul Kalam Azad Chair Professor of Media and Communication, Professor and coordinator of Mass Communication.
- Has served as a member of IBC Amsterdam & Indian National Photo Awards.
- Has been instrumental in bringing the prestigious Sony World Photography Award to India, beating 60 global universities across the world.
- Has the unique distinction of producing the fifty-year commemorative audio-visual for UNICEF India and WHO.

DR. JAGDISH SINGH
Associate Professor, College of Physical Education,
Punjabi University, Patiala (Pb.)

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (07-09-2018 & 22-10-2018)
EXAM DATE : 06-11-2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE

- To throw light on the risk of injury and augments recovery for ailments including stress, lower back pain and tension.
- To discuss the features of different Yoga and Yoga Asana.
- To enable the student to have good health.
- To practice mental hygiene.
- To possess emotional stability.

LEARNING OUTCOME

Students shall be able to improve the health, performance and mental acuity of athletes or individuals interested in improving their level of fitness. With the help of this course students can reduces the risk of injury and augments recovery for ailments including stress, lower back pain and tension. Yoga is a gift for body and mind. It can prepare the students physically and mentally for the integration of their physical, mental and spiritual faculties so that the students can become healthier, saner and more integrated members of the society and of the nation.

COURSE PLAN

Week 01:-

Introduction of Yoga

Types of Yoga

Ashtang Yoga-1

Ashtang Yoga-2

Week 02:-

Pranayam -1

Pranayam -2

Pranayama-Suryabhedi,Ujjai Bhastrika

Pranayams

Week 03:-

Pratyahara and Dhayan

Niyama

Yoga Asana Part-1

Yoga Asana Part-2

Week 04:-

Yoga Asana Part-3

Yoga Asana Part-4

Yoga Asana Part-5

Yoga Asana Part-6

Yoga Asana Part-7

Week 05:-

Yoga Asana Part-8

Hath Yoga and Dhauthi Kriya

ShudhiKriya – Part 1

ShudhiKriya – Part 2

Bandha and Mudra Part-I

Week 06 :-

Bandha and Mudra Part-2

Educational Values of yoga

Role of Physical Education and Sports

Relevance of Yoga in the Modern

Difference Between Yoga and Non- Yogic Exercise

ABOUT INSTRUCTOR

- Working as Associate Professor, College of Physical Education,
- Punjabi University, Patiala.
- Has 21 year teaching experience.
- Served as Badminton coach for 8 years with sports department Chandigarh and produces many players of National and International fame.
- Has presented more than 15 research papers in National and International conferences.

BASICS OF MANAGEMENT

DR. (CS) RAVI AHUJA
Assistant Professor, Skill Development Centre,
SavitribaiPhule Pune University

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 10 weeks (2 July to 8 Sept. 2018)
EXAM DATE : 30 Sept. 2018
NO OF CREDITS : 4

PRE-REQUISITES : 1.Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
2. Any citizen of India keen to learn about Management.

OBJECTIVE OF COURSE

- The Objectives of the programme are to acquaint -:
- Learners about the concept of business management.
- Learners about the various function of management.
- Learners about the recent trends in business management

LEARNING OUTCOME

This course of basics in management is aimed to orient learners about management and its various functions. After completing the course participants will be able to –
Understand the concept of Management and its various functions. Plan and execute effectively. Understand the need of forecasting. Visualize the organization structure, its need and importance. Learn importance of communication, leadership and motivation.

COURSE PLAN

Week 01:- Concept, Nature, Terms and Levels of Management, Management Skills

Week 02:- Professional Management, Scientific Management, Contribution by Henry Fayol to Management thoughts, Planning

Week 03:- Business Forecasting, Techniques of Forecasting, Decision Making

Week 04:- Types of Organizational Structure, Delegation of Authority, Centralization Vs Decentralization

Week 05:- Need of Staffing, Concept of Recruitment, e- Recruitment,

Week 06:- Directing & Communication in Organization, Techniques, Process of Communication as Management Function, Barriers to Communication, Motivation

Week 07:- Leadership: Meaning and Nature, Effective Leadership, Leadership Styles

Week 08:- Mahatma Gandhi - An Efficient Manager, Pandit Jawaharlal Nehru - The Journey of a Prime Minister, Dr B R Ambedkar's Contribution to Indian Constitution, Co-ordination

Week 09:- Techniques of Co- ordination, Control, Control Function, Business Ethics

Week 10:- Corporate Social Responsibility, Corporate Governance, Disaster Management, Management of Change

ABOUT INSTRUCTOR

- Faculty at Skill Development Centre,
- Savitribai Phule Pune University.
- M.Com, SET (Commerce), MBA (Operations Management), GDC& A, CS, Ph.D.
- Designed 4 credit skilled based syllabuses for faculty of commerce
- Coordination of Conduction of Skill based activities at affiliated colleges.
- Coordinator, Departmental Internal Quality Assurance Cell (IQAC)
- University Representative, Community Colleges affiliated to University
- Project Coordinator-"Free Coaching and Allied Scheme for Minority students" for offering skill based courses for employment in private sectors.
- Coordinator: Soft Skills Development Programme of SPPU for three affiliated district colleges.
- Project Coordinator: "DeenDayalUpadhayKaushal Kendra" UGC funded scheme.
- Involved in development of e-content for commerce and management subjects. Till date 100+ programmes have been scripted and recorded with support of EMRC, Pune and CEC, New Delhi

BUSINESS PLANNING AND PROJECT MANAGEMENT

DR. RAVI AHUJA
Assistant Professor, Skill Development Centre,
SavitribaiPhule Pune University

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 8 weeks (10 Sep to 03 Nov 2018)
EXAM DATE : 30 Sept. 2018
NO OF CREDITS : 4

PRE-REQUISITES : 1.Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
2.Any citizen of India keen to learn about Business Planning and Project Management.

OBJECTIVE OF COURSE

- This Course of Business Planning and Project Management aim to sensitize learners about the concept of planning in general and business planning specifically.
- The course would also give insights the learners about successfully managing projects.

LEARNING OUTCOME

This course of business planning and project management is aimed to orient learners about planning process in businesses and familiarize them with the concept and functions of project management along with various good practices in the domain. After the completion of course participants will be able to Understand the concept of Planning and its importance for Businesses, Understand the concept of Project and importance of its management, Critically examine which project needs to be undertaken using various models, Understand the importance of human resources for the projects, Learn the concept of project audit, project life cycle and project termination process.

COURSE PLAN

Week 01:- Introduction to Planning, Advantages and Limitations of Planning, Essentials and Obstacles in Business Planning

Week 02:- Forecasting: Definition, Importance and Techniques, Introduction to Project Management and Project Life cycle

Week 03:- Project Management Maturity, Project Selection Models, Types and Criteria of Choice, Project Portfolio Process

Week 04:- Project Manager and Organisation Structures for Project Management

Week 05:- Choosing the Project Team in Functional Organisation, Project Organisation and Matrix Organisation, The Nature of Negotiation, Conflict and Project Life Cycle, Estimating Project Costs

Week 06:- PERT and CPM – Part 1 and 2, Risk Analysis Using Simulation, Critical Path Method & Crashing the Project, Resource Allocation Problem, The Planning - Monitoring - Controlling Cycle, Information Needs and the Reporting Process

Week 07:- Earned Value Analysis, Fundamental Purposes of Project Control, Three Types of Control Processes, Design of Control Systems, Purposes of Evaluation

Week 08:- Organisational Goals & Control System, Audit: Construction and Uses, Some Essentials of an Audit, Project Audit Life Cycle, Varieties of Project Termination, Termination Process

ABOUT INSTRUCTOR

- Faculty at Skill Development Centre,
- Savitribai Phule Pune University.
- M.Com, SET (Commerce), MBA (Operations Management), GDC& A, CS, Ph.D.
- Designed 4 credit skilled based syllabuses for faculty of commerce
- Coordination of Conduction of Skill based activities at affiliated colleges.
- Coordinator, Departmental Internal Quality Assurance Cell (IQAC)
- University Representative, Community Colleges affiliated to University
- Project Coordinator-"Free Coaching and Allied Scheme for Minority students" for offering skill based courses for employment in private sectors.
- Coordinator: Soft Skills Development Programme of SPPU for three affiliated district colleges.
- Project Coordinator: "DeenDayalUpadhayKaushal Kendra" UGC funded scheme.
- Involved in development of e-content for commerce and management subjects. Till date 100+ programmes have been scripted and recorded with support of EMRC, Pune and CEC, New Delhi

COMMUNICATION AND BUSINESS CORRESPONDENCE

MRS. BAGESHREE DEO
faculty, Brihan Maharashtra College of Commerce
(BMCC)Pune

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 10 weeks (02-07-2018 to 08-09-2018)
EXAM DATE : 30 September 2018
NO OF CREDITS : 3

PRE-REQUISITES : ·Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
Any citizen of India keen to learn about various aspects of Business Communication.

OBJECTIVE OF COURSE

- Will acquaint learners with the basic skills and techniques of business communication.
- To explain learners with the importance of a good body language.
- To introduce learners about use of various new technologies in communication in different sectors.
- To enable learners with good writing skills for business correspondence.

LEARNING OUTCOME

A. Enable the student to recognize the relationship of effective communications skills to success in academic, work and social environments.
B. Develop both written and oral communication skills to produce clear, complete, accurate messages.
C. Understand message strategies and formats appropriate for professional communication situations.
D. Develop and apply critical thinking skills when determining solutions for communication-related problems.

COURSE PLAN

Week 01:- Introduction to Communication

Week 02 :- Types of Office Communication

Week 03 :- Business Correspondence

Week 04 : - Business Correspondence

Week 05 : - Business Letters

Week 06 : - Business Letters

Week 07 : - Business Letters

Week 08 : - Business Letters

Week 09 : - Office Meetings

Week 10 : - e-Communication

ABOUT INSTRUCTOR

- Working as a faculty of BBA, BCA, BBM at BMCC, Pune.
- Worked as MCM faculty and Placement Officer at Marathwada MitraMandal's IMERT- B school, Pune.
- Worked as a faculty at Indsearch, Pune.
- Presented papers at International and National Research Conferences.

BANKING AND INSURANCE

DR. GIRIJA SHANKAR
Professor, I/C Principal and Head, Dept. of Business Economics at Ness Wadia College of Commerce, Pune, Maharashtra

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 6 weeks (06 Aug to 15 Sep 2018)
EXAM DATE : 07 October 2018
NO OF CREDITS : 2

PRE-REQUISITES : 1.Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
2.Any citizen of India keen to learn about Fundamentals of Banking and Insurance.

OBJECTIVE OF COURSE

- To acquaint the learners about concept of bank and its operations
- To acquaint the learners about use of various technologies used in banking sector.
- To acquaint the learners about the concept of insurance and its various types.

LEARNING OUTCOME

1. Will be equipped with an understanding of the rudimentary aspects of Banking and Insurance.
2. Will be able to engage with one of the fastest growing sectors of the economy.
3. Will kindle interest towards a deeper understanding of Banking and Insurance.
4. Will enable skill enhancement.
5. Will be able to explore various job opportunities.

COURSE PLAN

Week 01:- Introduction

Week 02:- Deposit Accounts

Week 03:- Lending Principles and Negotiable Instruments

Week 04:- Technology in Banks

Week 05:- Introduction to Insurance

Week 06:- Insurance in the Contemporary Context

ABOUT INSTRUCTOR

- Member Board of Studies (Business Economics), S.P. Pune University. [2005 to 2010 and 2010 to 2015.]
- Member Board of Studies (Banking & Finance), S.P. Pune University [2010 to 2015].
- Member Board of Studies (BBA – International Business) February 2016 to 2018.
- Subject Expert (Subject: Banking and Finance) under Faculty of Commerce & Management, Savitribai Phule Pune University, Pune on the Research and Recognition Committee, November, 2017 to October, 2019.
- Member – Board of Studies (2016-2021) – Subject: Research Methodology for Business, St. Mira's College for Girls (Autonomous) Pune.

FINANCIAL ACCOUNTING

DR. SWETA SANJOG METHA
Assistant Professor, Chintamanrao Institute of Management Development and Research (CIMDR), Sangli

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 8 weeks (02 July 2018 to 25 Aug 2018)
EXAM DATE : 02 Sept 2018(Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
Any citizen of India keen to learn about various aspects of Information Technology.

OBJECTIVE OF COURSE

- To introduce learners about the concept of accounting in general and financial accounting in specific
- Disseminating various accounting principles, standards, concepts and conventions.
- Telling Learners about the concept of depreciation and its various facets
- Acquainting Learners about the analysis of financial statements- their purpose and use.

LEARNING OUTCOME

1. To understand systematic process of bookkeeping designed based on Generally Accepted Accounting Principle
2. To learn the procedure of bookkeeping
3. To understand the concept and importance of Bank Reconciliation statement.
4. To understand accounting system followed by consignor and consignee
5. To understand accounting treatment of depreciation and different methods of depreciation

COURSE PLAN

Week 01:- Role of Finance in Business, Basic Concepts and Conventions in Financial Accounting, Accounting Standards

Week 02 :- Generally Accepted Accounting Principles, Accounting Process, Journal Entries, Profit and Loss Accounts, Balance Sheet

Week 03 :- Tally System, Banking Reconciliation Statement

Week 04 : - Consignments, Joint Ventures - Accounting Procedures,

Week 05 : - Inland Branches , Depreciation Accounting,

Week 06 : - Methods of Depreciation, Accounting for Hire Purchase Transactions

Week 07 : - Partnership - Introduction and Types, Accounting for Simple Dissolution, Analysis of Financial Statements

Week 08 : - Common Size Balance Sheet, Ratio Analysis, Cash Flow Statement

ABOUT INSTRUCTOR

- (B.Com, M.B.A., Ph.D)
- Has an expertise in Subjects like Accounting for managers, Financial Management, Marketing Management (compulsory & electives), Research Methodology, Entrepreneurship development, Agriculture Management.
- Has developed and delivered e-content through EMRC, Pune for UGC CEC.

MANAGEMENT CONTROL SYSTEMS

ASHISH ANNASAHEB NIKAM
Programme Coordinator (Equivalent to Assistant Professor)
Skill Development Centre, Savitribai Phule Pune University

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/certificate

COURSE DURATION : 06 weeks (06-Aug-18 to 15-Sep-18)
EXAM DATE : 14 Oct 2018(Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 1. Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
2. Any citizen of India keen to learn about Management.

OBJECTIVE OF COURSE

- To acquaint learners about the concept of management control, its types and characteristics.
- To enable learners about the use of management control systems in various functional areas of businesses.
- To Introduce the learners about the management aspect of control systems.

LEARNING OUTCOME

This course of management control system is to provide learners with concept and function of management control, its nature, functional areas and techniques. This course provides students the opportunity to understand:

- The concept of management control, its types and characteristics.
- The importance of Management Control Systems and its fundamentals.
- The use of management control systems in various functional areas of businesses.
- The management aspect of control systems.
- The Role of Management Information System (MIS) and computers for management control purpose.
- Project control and methodologies for implementing management controls systems for various centres, professional and nonprofessional organizations.

COURSE PLAN

Week 01:- Supervision, Management & Controlling, Control Factors & Managerial Philosophy, Meaning and Designs of MCS

Week 02:- Meaning & Types of Information, MIS in Accounting Information, MIS & Operations Information System, MIS in Marketing Information System

Week 03:- Management Control System: Introduction and Application, Need for Production Control, Classification of Inventory

Week 04:- Marketing Control system, Kind of Control Devices, Computers for Management Control Purposes

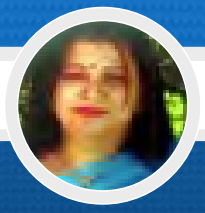
Week 05:- Decision Support Systems, Expert Systems, Management Control of Projects, Project Planning

Week 06:- Project Control, Roles and Responsibilities in Implementing Control Systems, Management Control Structure - Responsibility Centre, MCS in Service and Non Profit Organizations

ABOUT INSTRUCTOR

- B.E (COMP SCIENCE & ENGG), M.TECH (COMPUTER ENGG),
- PH.D (Computer & Information Technology) Pursuing
- Specialization: Computer Engineering
- Total teaching experience: 11 years 10 Months.
- No of Paper Presented /Published in the International Conference/Journals: 03
- Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person.

PRINCIPALS OF MARKETING



DR MEETA NIHALANI
Associate Professor in Faculty of Commerce & Management
Jai Narain Vyas University Jodhpur

TYPE OF COURSE : UG, Certificate
INTENDED AUDIENCE : UG Certificate School
COURSE DURATION : 12 weeks (16-Aug-18 to 16-Nov-18)
EXAM DATE : December 2018(Tentative)
NO OF CREDITS : 4
PRE-REQUISITES : Higher secondary exam in Commerce.

OBJECTIVE OF COURSE

- To bring out the Conceptual framework of marketing, Product and service innovation for development and modification
- To enable decision making ability of students to connect with take ethical aspects of selling products in the interest of society
- Bringing out the Insights of self based assessments to plan personal plans for improving marketing skills.
- To teach Design and manage systems which are responsive to national and international issues of developing global markets in a sustainable way.

LEARNING OUTCOME

After completing this course, the students will be empowered to build an updated ability of taking marketing decisions in a quick way. They will understand the ethical aspects of business and will be able to build sustainability of resources in the interest of environment and ecosystem. The standard of living of any economy can be enhanced if the students are empowered to take right and accurate decisions for connecting with the growth options prevalent in any country.

COURSE PLAN

Week 1:
1. THE IMPACT OF ENVIRONMENT ON MAREKITNG-1 (UNIT 1)
2. THE ADVERTISING PROCESS 3 (UNIT 1)
3. ETHICS OF SALES PRESENTATION 4 UNIT 1

Week 2:
1. CONSUMER BEHAVIOUR – 1 UNIT 2
2. CONSUMER BEHAVIOUR – 2 UNITS 2
3. INTRODUCTION TO MARKETING 2 UNIT 2

Week 3:
1. SALES FORCE -4 UNITS 2
2. MOTIVATION AND SALES 5 UNITS 2
3. TERRITORY MANAGEMENT 6 UNIT 2

Week 4:
1. COMMUNICATION IN SALES -7 UNITS 2
2. PRODUCT KNOWLEDGE 8 UNIT 2
3. CUSTOMER KNOWLEDGE 9 UNIT -2

Week 5:
1. EVALUATING THE PERFORMANCE OF SALES PEOPLE 10 UNIT 2
2. TRAINING GIVEN TO FIELD SALESMAN 11 UNITS -2
3. FACTORS IMPACTING RELATIONSHIP OF CLIENTS WITH AGENCIES 3 UNIT 3

Week 6:
1. PRODUCT - CONCEPT, PLANNING AND PACKAGING UNIT-3
2. PRODUCT LIFECYCLE AND BRAND MANAGEMENT UNIT 3
3. IMPORTANCE OF PRICE AND FACTORS IMPACTING PRICING OF PRODUCTS UNIT 4

Week 7:
1. CHANNELS AND FACTORS IMPACTING CHOICE OF CHANNELS UNIT
2. TRANSPORTATION WAREHOUSING AND INVENTORY MANAGEMENT UNIT 4
3. ADVERTISING UNIT 5

Week 8:
1. LOCATION MANAGEMENT FOR THE RETAIL SECTOR UNIT 5
2. RETAIL TRENDS UNIT 5
3. ADVERTISING AGENCIES UNIT 6

Week 9:
1. ADVERTISING APPEALS UNIT 6
2. PRINT ADVERTISEMENT UNIT 6
3. IMPACT OF ADVERTISING ON SOCIETY UNIT 6

Week 10:
1. CLIENT RELATIONSHIP MANAGEMENT UNIT 6
2. TYPES OF ADVERTISING UNIT 6
3. INTRODUCTION TO ADVERTISING UNIT 6

Week 11:
1. BASICS OF COMMUNICATION UNIT 6
2. ADVERTISING AND COMMUNICATION UNIT 6

Week 12:

Term End Exam & Credit Achievement, Term End Exam will be conducted as the guidelines of Annexure IVth of 95 Co ordination committee Meeting of CEC, The assessment process for achieving credits is as follows:

40 percent marks can be obtained by online assessments and 60 percent by proctored exam

There are 10 marks for each online video. The bifurcation is as follows:

·1 mark for completing reading,

1 mark for watching video,

1 mark for forum participation,

7 marks from MCQ's and assignments given

The 40 percent contribution in credit achievement will be done, averaging the total achieved by watching all the 32 videos at the end of the session

ABOUT INSTRUCTOR

- Completed the prestigious project UGC Major Research Project on Eco tourism.
- Accounted with more than 200 publications in various journals and books.
- Working academically for past 25 years and served as member of academic council of the university, also in Board of Management in EMRC.

Natural and applied science Courses

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CYBER LAW

DR VISHAL GOYAL
Associate Professor, Department of Computer Science,
Faculty of Computing Science,
Punjabi University, Patiala

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 7 weeks (10/09/2018 & 31/10/2018)
EXAM DATE : 1/12/2018
NO OF CREDITS : 2
PRE-REQUISITES : The students should have enough knowledge of English as the teaching pedagogy in the video lectures is in English and comprehend the study material; enough knowledge in English to do the assignments; access to the internet; interest in Cyber Security / Information Security.

OBJECTIVE OF COURSE

This course is designed to provide fundamental skills needed to understand cyber law concepts such as trademark, copyright, patents, digital rights, computer crimes, privacy issues, hacking and prosecution etc. Given the rapid changes in technology, and the corresponding changes in crime and the law, the course will regularly include discussions of current events.

LEARNING OUTCOME

Students who successfully complete this class will be able to:
Describe laws governing cyberspace
Discuss different types of cybercrimes and analyse legal frameworks to deal with these cybercrimes
Identify intellectual property rights issues in the cyberspace
Recognise the importance of digital evidence in prosecution

COURSE PLAN

Here the course coordinator has to provide the brief course plan covered in the week

Week 01: Cyber Crime: An Overview

Week 01: Basic Concepts regarding Computer System

Week 01: Cyber Law and Components of Cyber Law

Week 01: Definitions of Information Technology Act, 2008

Week 01: Internet and its Advantages and disadvantages

Week 02: Network and Network Security

Week 02: Instrument of Trust: Electronic Signature Certificate

Week 02: Interception and Monitoring of Electronic Communication

Week 02: E-Commerce

Week 02: E-Governance

Week 03: E- records and E- contract

Week 03: Regulations of Certifying Authority

Week 03: Cyber Appellate Tribunal

Week 04: Cyber Jurisdiction

Week 04: E- Consumer

Week 04: Threat of Privacy in Cyber Age-Need for an Effective Veil

Week 04: Cyber Crime and Preventive Laws and Appraisal

Week 04: Copyright Issue in Digital Medium

Week 05: Patent Issues in Digital Medium

Week 05: Cyber Crime & The Adequacy of the Existing Laws

Week 05: Security Laws

Week 05: Security Assurance

Week 05: Intellectual Property Rights

Week 06: Intellectual Property Rights and Information Technologies

Week 06: International Standards

Week 06: International Law and jurisdiction in Cyber Space

Week 06: Cyber Criminology

Week 06: Cyber Terrorism

Week 07: Information Technology (Amendments) Act, 2008

Week 07: Grey Area of Information Technology Act, 2000

ABOUT INSTRUCTOR

- Research Contribution -development of technologies related to computerization of Punjabi language.
- Hindi to Punjabi Machine Translation System using Statistical Approach, Hindi to Punjabi Transliteration System, Plagiarism Detection Software for Hindi texts,
- Development of Sentiment analyser for Punjabi, Urdu to Punjabi Machine Translation System using a hybrid approach.
- Technological development of Hindi, Assamese, Dogri , Kashmiri and Gujarati Language, technology development for specially abled People.
- Publication 95

INFORMATION SECURITY

DR MANINDER SINGH
Professor & Head, Department of Computer Science and Engineering,
Thapar Institute of Engineering and Technology (Deemed to be University)
Patiala

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG/Diploma
COURSE DURATION : 8 weeks (10/09/2018 & 5/11/2018)
EXAM DATE : 2/12/2018(tentative)
NO OF CREDITS : 2

PRE-REQUISITES : **The students should have enough knowledge of English as the teaching pedagogy in the video lectures is in English and comprehend the study material; enough knowledge in English and computer networking to do the assignments; access to the internet; interest in Cyber Security / Information Security.**

OBJECTIVE OF COURSE

This course will introduce the basic concepts in Information security in general and system and help know the ways by which our critical information can be sniffed and ways to implement preventive measures. After completing this course, the student will be in position to understand the basics of information security.
The course intends to:
1. Provide an understanding of principal concepts of physical and information security, major issues, technologies and basic approaches in information security.
2. Develop an understanding of information assurance as practiced in computer operating systems, distributed systems, networks and representative applications.
3. Gain familiarity with prevalent network and distributed system attacks, defenses against them
4. Develop a basic understanding of cryptography,
5. Develop an understanding of security policies (such as authentication, integrity and confidentiality), as well as protocols to implement such policies in the form of message exchanges.

LEARNING OUTCOME

After studying this course, the student woulld be able to:
- define what information is
- appreciate the value of information to the modern organisation
- understand the CIA triad of Confidentiality, Integrity and Availability
- appreciate the difficulties that arise when valuable information needs to be shared
- identify the five leading-edge resources that have up-to-date information on information security

COURSE PLAN

Week 01: Information Security
Week 01: Network Security
Week 01: Computer Network Reference Models
Week 01: TCP/IP Reference Model
Week 01: Protocol Stack
Week 02: Transmission Control Protocol
Week 02: Data Link Layer
Week 02: Medium Access Control Protocols
Week 02: TCP/IP Model-IP Addressing – I
Week 02: TCP/IP Model-IP Addressing – II
Week 03: TCP - Connection Management and Flow Control
Week 03: IPV4 & IPV6
Week 03: UDP - User Datagram Protocol
Week 03: IPSec Security Protocol
Week 03: Network Topologies
Week 04: Animated Cursor Vulnerability - Proof of Concept - I
Week 04: Animated Cursor Vulnerability - Proof of Concept - II
Week 04: Electronic Mail
Week 04: Email Security Protocols
Week 04: WWW Security
Week 05: Mobile Code Security
Week 05: Transmission Media
Week 05: Ethernet and Fast Ethernet
Week 05: Ethernet Security
Week 05: Gigabit Ethernet
Week 06: 10 Gigabit Ethernet
Week 06: ISDN
Week 06: Stream Control Transmission Protocol
Week 06: ATM Network Security Protocol
Week 06: Wireless Networks
Week 07: Wi-Fi Technology
Week 07: Wi-Fi Security Protocol
Week 07: Bluetooth Networks and Security Protocols
Week 07: Virtual Private Networks
Week 07: WiMAX Technology and its Security
Week 08: Introduction to Mobile IP and Addressing
Week 08: Cloud Computing Architecture
Week 08: Cloud Computing Security
Week 08: GSM Architecture
Week 08: MANET - I
Week 09: MANET – Routing Protocols
Week 09: 3G Network and Security
Week 09: 4G LTE
Week 09: 5G
Week 09: VoIP Protocols
Week 10: Introduction to DDoS
Week 10: Defence to DDoS Attacks

ABOUT INSTRUCTOR

- Educational profile – Bachelor's Degree -Pune University
- Master's Degree, with honours in Software Engineering from Thapar Institute of Engineering & Technology,
- Doctoral Degree specialization in Network Security from Thapar University.
- Expertise- Practical know-how of computer networks and security.
- Certified as Ethical Hacker (CIEH), Security Analyst (ECSA) and Licensed Penetration Tester (LPT). On the Roll-of-honour @ EC-Council USA, being
- Guided 7 Ph.D. and 47 Master's thesis in the area of Network Security and secure coding.
- Linux for You (LFY) magazine from India declared him a 'Tux Hero'.
- Senior Member of IEEE, Senior Member of ACM and Life Member of Computer Society of India. He has been volunteering his services for Network Security community as a reviewer and project judge for IEEE design contests.

PROBABILITY AND STATISTICS

DR.ANEESH KUMAR.K
Associate Professor, Dept. Of Statistics, Mahatma Gandhi College,
Iritty-Kannur; KERALA

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 16 weeks (1 July to 1 November 2018)
EXAM DATE : 15/11/2018
NO OF CREDITS : 4

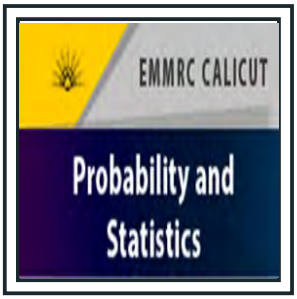
PRE-REQUISITES : Higher secondary Mathematics

OBJECTIVE OF COURSE

To develop a strong foundation for the theory of probability and random variables

LEARNING OUTCOME

1. Familiarize with the various approaches to probability
2. Learn the concept of random variable
3. Understanding mathematical expectation, moments, mgf etc
4. Study to deal with two dimensional random variables
5. Understanding conditional distributions, conditional mean etc
6. Study various discrete probability distributions
7. Study various continuous probability distributions
8. Learn to solve problems using the probability distributions studied.



COURSE PLAN

Week 1

First day: module 1 - video :Introduction

Third day: module 2 – video: PROBABILITY-Frequency and Axiomatic Approach

Fifth day: module 3 – video:

Week 2

First day: module 4 - video : Probability – MORE PROBLEMS

Third day: module 5 – video: Mutual Independence and Bayes' Theorem

Fifth day: module 6 – video: MORE PROBLEMS on Bayes' Theorem

Week 3

First day: module 7 – video: Random variables - Discrete type

Third day: module 8 – video: MORE PROBLEMS on Random variables - Discrete type

Fifth day: module 9 - video: Random variables - Continuous type

Week 4

First day: module 10 - video : MORE PROBLEMS on Random variables - Continuous type

Third day: module 11 – video: Mathematical Expectation

Fifth day: module 12 – video: MORE PROBLEMS on Mathematical Expectation

sixth day: Interaction based on the three modules covered.

VII th day: deadline for submitting assignments.

Week 5

First day: module 13 - video: Moments and Moment Generating Function

Third day: module 14 – video: Characteristic Function

Fifth day: module 15 – video: Discrete Random variables – I

Week 6

First day: module 16 - video : Discrete Random variables –II

Third day: module 17 – video: Discrete Random variables –III

Week 7

First day: module 18 - video: Discrete Random variables –IV

Third day: module 19 – video: MORE PROBLEMS on Bernoulli, Binomial, Discrete Uniform and Negative Binomial distributions

Week 8

First day: module 20 – video: MORE PROBLEMS on Geometric and Poisson random variable

Third day: module 21 – video: Continuous Random variables – I

Week 8

First day: module 20 – video: MORE PROBLEMS on Geometric and Poisson random variable

Third day: module 21 – video: Continuous Random variables – I

Week 9

First day: module 22 – video: Continuous Random variables –II

Third day: module 23 – video: Continuous Random variables –III

Week 10

First day: module 24 – video: Continuous Random variables –IV

Third day: module 25 – video: MORE PROBLEMS on Uniform, Exponential and Gamma Distributions

Week 11

First day: module 26 – video: MORE PROBLEMS on Normal and Standard Normal Distribution

Third day: module 27 – video:Bivariate (Two-dimensional) random variables – I

Week 12

First day: module 28 – video: Bivariate (Two-dimensional) random variables –II

Third day: module 29 – video: MORE PROBLEMS on Bivariate random variables

Week 13

First day: module 30 – video: Bivariate Normal Distribution

Third day: module 31 – video: Correlation and Regression

Week 14

First day: module 32 - video : MORE PROBLEMS on correlation and regression

Third day: module 33- video: Law of Large Numbers and Central Limit Theorem

Week 15

First day: module 34 – video: MORE PROBLEMS on Law of Large Numbers and Central Limit Theorem

Third day: module 35 – video: Markov Chains, Chapman-Kolmogorov equations, classification of states

Week 16

Third day: Term end assessment

ABOUT INSTRUCTOR

- Associate Professor in Statistics
- Ph.D. from University of Calicut in 2007.
- Published papers in reputed journals,
- Prepared study materials for many universities.

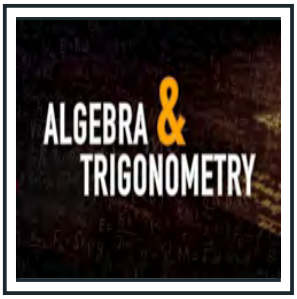
ALGEBRA AND TRIGONOMETRY

DR BIJUMON RAMALAYATHIL
Asst. Professor, PG Department of Mathematics,
Mahatma Gandhi College, Iritty, Keezhur PO,
Kannur Dt, Kerala

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
COURSE DURATION : 13 weeks (1/7/2018 & 27/09/2018)
EXAM DATE : 10-10-2018
NO OF CREDITS : 4
PRE-REQUISITES : Knowledge in Mathematics (Higher Secondary Level)

OBJECTIVE OF COURSE

To develop strong foundations on concepts coming under UG level Algebra and Trigonometry.



LEARNING OUTCOME

Upon successful completion of this course, the students are expected to:
1. Familiarize with the concept of relations and functions.
2. Learn the definition and basic properties of groups.
3. Learn the definition and examples of rings and fields.
4. Study the methods to find the rank of a matrix.
5. Study method of finding solution of homogeneous and nonhomogeneous system of linear equations
6. Study polynomial equations.
7. Study methods to solve polynomials of degree up to 4.
8. Study De-Moivre's Theorem
9. Familarize with Direct and Inverse Circular and Hyperbolic Functions.
10. Study Summation of Series.

COURSE PLAN

36 modules come under the following topics:

1 Relations
2 Equivalence Relations
3 Functions
4 Congruent Modulo n
5 Matrices
6 Adjoint and Inverse of Matrices
7 Rank of a matrix and Elementary Transformations
8 Determination of Rank using transformations
9 Elementary Matrices
10 Fundamental Results Rank and Inverse using transform
11 Solution of Homogeneous System of Equations
12 Method to find solution of Homogeneous System of Equations
13 Non Homogeneous System of Equations
14 Characteristic Roots and Vectors
15 Characteristic Space
16 Cayley Hamilton Theorem
17 Theory of Equations 1
18 Theory of Equations 2
19 Theory of Equations 3
20 Theory of Equations 4
21 Theory of Equations 5
22 Groups
23 Isomorphic Binary Structures
24 Properties of Groups ad Subgroups
25 Cyclic subgroups and Cyclic Groups
26 Permutations
27 Orbits and Cycles
28 Cosets and Theorem of Lagrange
29 Homomorphisms
30 Rings and fields
31 Integral Domains and Characteristic of a ring
32 De Moivres Theorem
33 Direct and Inverse Circular Hyperbolic Functions
34 Logarithm of Complex Quantity Expansion of Trigonometric Functions
35 Summation of Series
36 Summation of Finite and Infinite Series

ABOUT INSTRUCTOR

- 18 years of teaching experience in UG and PG Level.
- PhD from University of Calicut in 2010.
- Area of interest- Functional Analysis.

DISCRETE MATHEMATICS

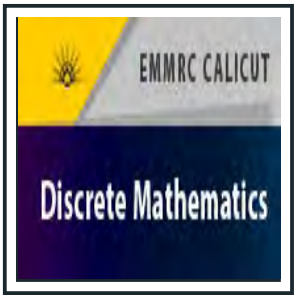
DR. MINIRANI S
Assistant Professor in Mathematics, MPSTME, SVKM's
NMIMS Deemed to be University

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
COURSE DURATION : 12 weeks (15/07/2018 & 06/10/2018)
EXAM DATE : 30/10/2018
NO OF CREDITS : 4

PRE-REQUISITES : Higher Secondary School Mathematics

OBJECTIVE OF COURSE

This is an introductory course in discrete mathematics. This course is designed to provide the mathematical foundations for upper level computer science and mathematics courses. Students should learn the essentials of discrete mathematical structures and also how to think and reason mathematically. To accomplish these objectives, the course emphasizes mathematical reasoning and problem solving techniques. The course will help the students to communicate ideas mathematically and solve problems using the mathematical tools learned.



LEARNING OUTCOME

Upon successful completion of this course, students will be able to:
1. Construct mathematical arguments using logical connectives and quantifiers.
2. Verify the correctness of an argument using propositional and predicate logic and truth tables.
3. Demonstrate the ability to solve problems using counting techniques and combinatorics in the context of discrete probability.
4. Solve problems involving recurrence relations and generating functions.
5. Use graphs and trees as tools to visualize and simplify situations.
6. Perform operations on discrete structures such as sets, functions, relations, and sequences.
7. Construct proofs using mathematical induction.
8. Discriminate, identify and prove the properties of groups and subgroups.
9. Recognize the use of Karnaugh map to construct and minimize the canonical sum of products of Boolean expressions and transform it into an equivalent Boolean expression.

COURSE PLAN

Week 01:- Introduction, Sets and Propositions, Computability and Formal Languages

Week 02 :- Permutations, Combinations and Discrete Probability

Week 03:- Relations and Functions

Week 04:- Graphs and planar graphs

Week 05:- Trees

Week 06-07:- Finite State Machines, Analysis of algorithms

Week 08:- Recurrence relations

Week 09-10:- Groups

Week 11-12:- Boolean Algebra

ABOUT INSTRUCTOR

Dr. Minirani S is currently working as an Assistant Professor in the Department of Basic sciences and Humanities at Mukesh Patel school of Technology Management and Engineering, SVKM's NMIMS Deemed to be University, Mumbai. She has completed her Undergraduate and Master's degree programs in Mathematics from the University of Calicut and her Doctoral Program from National Institute of Technology Calicut in the area of Fractal Geometry.

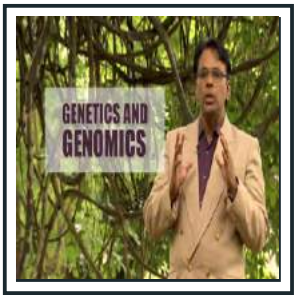
GENETICS AND GENOMICS

DR. JOS T. PUTHUR
Associate Professor, Department of Botany, University of Calicut
Calicut University, Malappuram, Kerala

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
COURSE DURATION : 13 weeks (July 16 & Oct 22, 2018)
EXAM DATE : Nov 12, 2018
NO OF CREDITS : 4
PRE-REQUISITES : Background of the basic science at +2 level

OBJECTIVE OF COURSE

- To develop a strong foundation for the fundamental principles of classical and advanced genetics
- To understand how hereditary information in DNA controls what an organism looks like and how it works
- To impart knowledge of how organisms, populations and species evolve
- To equip the students to undertake advanced courses in the areas of medical genetics, developmental and behavioural genetics, bioinformatics, environmental genetics, genomics etc.



LEARNING OUTCOME

1. Explain the fundamentals of genetics
2. Explain about the control of DNA in functioning of organism
3. Explain about the evolution of populations and species
4. Explain about the medical issues related to chromosomal variations.

COURSE PLAN

Week 01:- History of Genetics, Scope and significance of genetics, Mendels' Experiments, Symbols and terminology, Principle of dominance and segregation, Principle of independent assortment, Mendelian inheritance and probability

Week 2:- Allelic variation and gene function- Incomplete dominance, co-dominance, multiple alleles, Gene action-from genotype to phenotype., Gene interaction, penetrance, expressivity, Epistasis, pleiotropy, interaction with environment.

Week 3:- Continuous variation, Quantitative traits - additive alleles, calculating the number of polygenes, significance of polygenic control.

Heritability in broad sense and narrow sense ; Artificial selection.

Week 4:- Chromosomes – chromosome number, sex chromosome, Chromosome theory of inheritance - Experimental evidence, non-disjunction as proof of, chromosome theory, chromosomal basis of Mendel's principles of segregation and

independent assortment. Sex linked genes in humans - Haemophilia, colour blindness, fragile X. Dosage compensation of X- linked genes. Hyper activation of X-linked gene in male drosophila, Inactivation of X-linked gene in female. Sex chromosome and sex determination - Human, Drosophila, other animals.

Week 5:- Morphology of chromosomes, Structural and Numerical Variations Linkage, Recombination, Crossing over (Mitotic crossing over), Chromosome mapping (two point and three point test cross), Tetrad analysis.

Week 6:- Maternal Inheritance, Mitochondrial- Snail, poky and petite, Chloroplast – leaf variegation in Mirabilis jalapa, Lojap.

Week 7:- Population and gene pool - Allelic frequency, Hardy – Weinberg law - _ Changes in genetic structure of population Mutation, genetic drift (causes and effect), migration, natural selection. Non-random mating (heterosis)

Week 8:- Introduction – Nature of Genetic material- Discovery of DNA as genetic material (Griffith, Avery, Hershey Chase)

Strucutre of nucleic acid (A, B and Z model), Super coiling and Topoisomerase, Types of RNA- Structural and functional.

Week 9:- Salient features of prokaryotic and eukaryotic DNA replication. Homologous recombination, Site specific recombination. Models of recombination (Holiday model, Double strand break, etc.)

Week 10:- Types of mutation, Causes of mutation - Physical and chemical mutagens, Spontaneous and Induced mutations, Molecular basis of mutations

Week 11:- Excision Mechanism – Nucleotide, Base Post Replication Repair- mismatch repair, recombination repair, SOS repair. Central Dogma, Transcription in prokaryotes, eg: Lac, Tryp operon.

Week 12:- Transcription in eukaryotes, RNA processing – nuclear splicing, rRNA and tRNA processing

Week 13:- Salient features of genetic code, Translation in prokaryotes, Translation in eukaryotes, Post-translational modification

ABOUT INSTRUCTOR

2012 - Selected as visiting scientist under INSA-DFG programme of International Scientific Collaboration and Exchange of Scientists for 3 months visit to Institut für Molekulare Physiologie und Biotechnologie der Pflanzen (IMBIO), University of Bonn, Germany.
2008 - Awarded TWAS Research Grant under the category; award for high-level and promising scientific research projects carried out by individual scientists in developing countries.
2007 - Awarded BOYSCAST Fellowship of DST, Govt. of India
2006 - Awarded UGC Fellowship under Indo-Hungarian Educational Exchange programme.
2005 - Awarded TWAS-UNESCO Associateship at centers of Excellence in South (CEFOBI, Rosario, Argentina).
2003 - Awarded Fast Track Young Scientist Project (a grant of Indian Rs. 12 lakhs), by Dept. of Science and Technology, Govt. of India.

1. Programm Director for an electronic programm on the topic "photosynthesis", telecasted by state owned broadcasting corporation (Doordarshan), organized by State Institute of Education and Technology (SIET), a Kerala govt. agency – 2004.
2. Lectured on the topic "Abiotic streses and tolerance mechanisms in plants" for the live lecture series produced by EMMRC, University of Calicut and telecast through the EDUSAT Network/www.webcast.gov.in on 29-05-2014.

RESEARCH PUBLICATIONS
International – 28

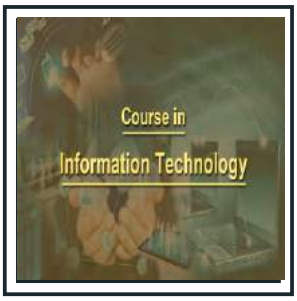
MRS. BAGESHREE DEO
Faculty, Brihan Maharashtra College of Commerce (BMCC), Pune

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/Certificate
COURSE DURATION : 8 weeks (01/10/2018 & 24/11/2018)
EXAM DATE : 30 November 2018 -tentative
NO OF CREDITS : 3

PRE-REQUISITES : Any bonafide student of approved college / institution / university in India (Ideally after Class XII)
Any citizen of India keen to learn about various aspects of Information Technology.

OBJECTIVE OF COURSE

1. Learners about concept of Information Technology.
2. Learners about MS - Office.
3. Learners about the concept of Networking and Internet
4. Learners about concept of System.
5. Learners about use of various new technologies in Information Technology.



LEARNING OUTCOME

·Course in Information Technology will help students to understand the working of a Computer in an easy way as Information Technology is inevitable today. Every person should be Computer literate.
·The syllabus starts from basics and advances to the current technology.
·This course will provide knowledge of MS-Office which is required in our day to day life.
·Learners will know the concept of Operating System behind the Mobile phone, I-Pad that are commonly used by everyone.
The syllabus includes Internet and its utilities as Online transaction is the need of the hour. Hence, after this course students shall learn about Internet and using its various applications.

COURSE PLAN

Week 01:- Basics of IT

Week 02 :- MS - Office

Week 03 :- MS - Office

Week 04 : - Networking

Week 05 : - Internet

Week 06 : - Database Management System

Week 07 : - System Basics

Week 08 : - Cloud Computing

ABOUT INSTRUCTOR

Qualification: MCM, MCA
Career details:

- Worked as MCM faculty and Placement Officer at Marathwada Mitra Mandal's IMERT- B school, Pune.
- Worked as a faculty at Indsearch, Pune.
- Paper Presentations in various forums:
- "Technology Management for Business Enhancement" at the International Research Conference at Kohinoor Business School and Center for Management Research, Khandala.
- "Cyber Security" at the National Level Seminar at the Arihant College of Arts, Commerce and Science, Pune.
- "Data Mining and Data Warehousing"at the National Level Conference on Advancements in IT and Management at MIT, Alandi Pune.

CYTOGENETICS

DR. MD. NIAMAT ALI
Associate Professor, Centre of Research for Development, University of Kashmir, Srinagar-190006, J&K, India

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
PRE-REQUISITES : 10+2

COURSE DURATION : 13 weeks (16/07/2018 & 13/10/2018)
EXAM DATE : 25/10/2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

The objectives of this course are to give the target students/audience an understanding of:
An overview of cells, Tools and techniques in cell biology, Cell wall, extra cellular matrix and cell interactions, Cell membrane, Nucleus, Mitochondria, chloroplasts, lysosomes, gloxysomes and peroxisomes, Cytoskeleton, Protein sorting and transport, Cell signalling, Cancer

LEARNING OUTCOME

- The course "Cytogenetics" is a core course in UGC, B. Sc. (Honours) Biological Sciences, Choice Based Credit System (CBSE).
- The course is specially designed to supplement and enhance the understanding of students about different dimensions of Cytogenetics

COURSE PLAN

Week 01

Historical perspective of cells, cell theory and exceptions to cell theory

A detail classification of cell types within an organism; cell, tissue, organ and organisms as different levels of organization.

Overview of prokaryotic and eukaryotic (plants and aimals) cells

Structure of viruses - general structure, properties of viral envelopes and enzymes (principles of virus taxonomy)

Overview of phages, virioids, mycoplasma and Escherichia coli

Structure, properties and functions of the immune cells & organs - hematopoeisis, T and B lymphocyte, NK cells, monocyte and macrophages

Structure, properties and functions of the immune cells & organs - neutrophils, eosinophils, basophils, mast cells and dendritic cells

Structure, properties and functions of the immune cells & organs - thymus and bone marrow; lymph nodes, spleen, MALT, GALT and SALT

Week 2

Mitosis and meiosis: interrelation between the cell structure and the genetic function, mitosis, meiosis.

Linkage, crossing over and chromosomal mapping

Cytological basis and molecular mechanism of crossing over (recombination frequency as a measure of linkage intensity, two factor and three factor crosses, interferance and coincidence, somatic cell genetics – an alternative approach to gene mapping)

Chromosomal mechanisms and environmental factors determining sex (Barr bodies, dosage compensation)

Gametogenesis and fertilization: structure and production of gametes, zygote formation

Functional organization of the cell nucleus: chromatin movements, nuclear bodies and its significance.

Week 3

Microscopy and its types: principles of light microscopy, phase contrast, confocal microscopy. Electron microscopy (EM) - scanning EM and scanning transmission EM (STEM), fluorescence microscopy

Cytoochemical techniques: spectrophotometery: mass spectrometery, X-ray diffraction analysis. Flow cytometery: flurochromes, fluorescent probe and working principle

Sub-cellular fractionation (differential and density gradient centrifugation)

Cell fixation and staining: freeze-drying and free-substitution, microtomes and embedding, chemical basis of staining, metachromasia

Human karyotype: banding pattern and nomenclature (G and Q banding), common syndromes due to numerical chromosome changes, common syndromes due to structural alterations (translocations, duplications, deletions, microdeletion and fragile sites).

Human cytogenetics technique: Fluorescence In Situ Hybridization (FISH)

Chromatography: paper, TLC, gel-filtration

Week 4

General characteristics of cell differentiation

Molecular mechanism of cell differentiation

Week 5

Chemical composition and properties of membrane components, fluid mosaic model of membrane structure, membrane fluidity and its experimental demonstration, membrane asymmetry,

Selective permeability of the membranes, membrane transport, liposomes, freeze-etching and freeze fracture technique for membrane study.

Cell wall, extracellular matrix and cell interactions; Bacterial and eukaryotic cell wall; the extracellular matrix and cell matrix interactions; cell-cell interactions.

Plasma membrane and membrance permeability: Active transport, passive transport and proton pumps associated (Na-K, Ca calmodulin etc. and their distribution)

Phagocytosis, pinocytosis, exocytosis.

Week 6

Nuclear structure and functions

Nuclear lamina, transport across nuclear envelope, Chromatin: molecular organization

Nucleolus and rRNA processing.

Genome sequence and chromosome diversity, chromosome duplication and segregation, the nucleosome.

Chromatin structure: euchroamtin, heterochromatin-constitutive and facultative heterochromatin

Regulation of chromatin structure and nucleosome assembly, organisation of chromosomes

Human chromosomal abnormalities: aneuploidy, reciprocal translocations, sex chromosomal abnormalities and autosomal abnormalities (mongolism)

Week 7

Structural organization, function and marker enzymes of mitochondria, mitochondrial biogenesis, protein import in mitochondria. Semiautonomous nature of mitochondria and chloroplast, chloroplast DNA, peroxisomes assembly.

Structure and functions of endoplasmic reticulum, Golgi apparatus, Mechanism of vesicular transport and lysosomes

Mitochondria and chloroplast DNA (endosymbiotic hypothesis for the origin of mitochondria and chloroplasts)

Extra-chromosonal inheritance: chloroplast mutation/ variegation in four o' clock plant and Chlymodonas.

Mitochondrial mutations, maternal effects and ineffective heredity

Week 8

Cytoskelton and cell movement

(Structure and organisation of actin filaments, actin, myosin and cell movement)

Structure and organization of intermediate filaments, microtubules and their role

Week 9

Signaling molecules and their receptor; functions of cell surface receptors; Intracellular signal transduction pathway; signaling networks.

Cell cycle: Eukaryotic cell cycle, regulation of cell cycle progression, events of mitotic phase, meiosis and fertilization

Week 10

Characteristics of cancer cells, carcinogenesis: cancer initiation, promotion and progression, termination.

ABOUT INSTRUCTOR

- ACADEMIC HIGHLIGHTS AT A GLANCE
- Education- M.Sc from University of Burdwan, West Bengal, India; M.Phil and Ph.D from Aligarh Muslim University, Aligarh-202002, U. P., India.
- Teaching Experience: 21 years (A. M. U, Aligarh- 06 years and Kashmir University, Srinagar - 15 years)
- Research Experience:26 years
- Major Field of Research and Teaching Interest: Cytogenetics, Molecular Biology and Immunogenetics; Toxicogenomics; Human Genomics and Proteomics; Stem Cell Biology and Regenerative Medicine; Radiation Biology and Gene Therapy; Cell and Tissue Culture Technology and Ageing Biology; PCR and DNA Fingerprinting Technology, FISH Technology and Comet Assay; Biostatistics.

GEOLOGY; BRANCH: METMORPHIC PETROLOGY

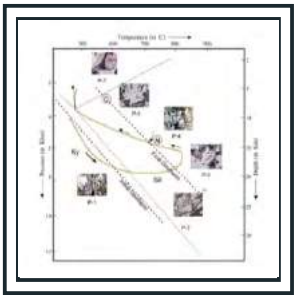
DR. HAREL THOMAS
Professor, Department of Applied Geology
Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.)

TYPE OF COURSE : Science Undergraduate (UG)
INTENDED AUDIENCE : UG

COURSE DURATION : 17 weeks (6th Aug 2018 & 10th Dec.2018)
EXAM DATE : 13/14 December, 2018 - tentative
NO OF CREDITS : 4

PRE-REQUISITES : Graduate Geology Students or any other students within and outside India are interested in course can enroll.

OBJECTIVE OF COURSE



This course is a basic to advance introduction for the undergraduate students pursuing Honours degree in Geology/ B.Sc. Geology/ Engineering Graduate for Civil and Mining. The term petrology comes from the ancient Greek word Petra "rock" and Logos "explanation" that means the study of rocks and their processes of origin. Such study includes description and classification of rocks as well as interpretation of their origin. Petrology is subdivided into three major rock types: sedimentary, igneous and metamorphic. Igneous and metamorphic petrology are combined, due to the similarity of approach and principle involved during their formation. So I highly intended this course is either a combined igneous and metamorphic or two separate ones, for the interest of students, So in this course, I will cover Metamorphic petrology. This course deals with the naturally occurring rocks in field as well as laboratory analysis data that provide sufficient information how they occur in the nature. It gives idea of modern petrological theories which are widely accepted for their origin. The course definitly provides better understanding to students for the processes and principles involved during the origin and evolution of the metamorphic rocks.

LEARNING OUTCOME

The Course aims to make to the students well-versed with the strength of Metmorphic Petrology theory applications in the field of Geology. The course definitly provides better understanding to students for the processes and principles involved during the origin and evolution of the metamorphic rocks. I hope it will be useful for the geology students within and outside India.

COURSE PLAN

Week 01: Geology & its Perspective, Carrier in Geology, Rock Cycle and Structure and classification of the silicate minerals. Daily quiz, assignments along with weekly test

Week 02: Definition of metamorphism and Factors controlling metamorphism Along with daily quiz and assignments along with weekly test.

Week 03: Variables / agents and types / kinds of metamorphism – contact, regional, fault zone metamorphism, impact metamorphism; Along with daily quiz and assignments along with weekly test.

Week 04: Types of metamorphism and classification based on metamorphic agent and Metamorphic facies and metamorphic grade Along with daily quiz and assignments along with weekly test.

Week 05: Index minerals, chemographic projection, graphical representation of metamorphic minerals assemblages; ACF, AKF and AFM etc, Other diagram. Along with daily quiz and assignments along with weekly test.

Week 06: Metamorphic zones, isogrades and reaction isograde and Concept of classification of metamorphic facies, facies-series and grade. Along with daily quiz and assignments along with weekly test.

Week 07: Structure and texture of metamorphic rocks; Description of facies; Along with daily quiz and assignments along with weekly test.

Week 08: Facies of low pressure: Albite epidote facies Hornblende hornfels facies and Pyroxene hornfels facies Along with daily quiz and assignments along with weekly test.

Week 09: Pyroxene hornfels facies; Sanidinite Facies Description of facies; facies of medium to high pressure. Zeolite facies Along with daily quiz and assignments along with weekly test.

Week 10: Green Schist Facies and amphibolite facies. Along with daily quiz and assignments along with weekly test.

Week 11: Ganulite Facies and Description of facies; facies of very high pressure. Blue schist & Eclogite facies.Along with daily quiz and assignments along with weekly test.

Week 12: Regional metamorphism of pelitic rocks – 1. Along with daily quiz and assignments along with weekly test.

Week13: Regional metamorphism of pelitic rocks – 2 and Basic and Ultrabasic rocks. Along with daily quiz and assignments along with weekly test.

Week 14: Thermal metamorphism of pelitic rocks; Thermal metamorphism of calcarious rocks and Different types of Metamorphic reactions. Along with daily quiz and assignments along with weekly test.

Week 15: Petrographic details of some important metamorphic rocks such as - slate, phyllite, schists, gneiss, quartzite, marble, charnockite, Leptynite etc; Along with daily quiz and assignments along with weekly test.

Week 16: Migmatites and Metasomatism & Differentiation. Along with daily quiz and assignments along with weekly test.

Week 17: Final submission of assignment.

Week 18: End Term (Final Exam) and Credits transfer and Result.

ABOUT INSTRUCTOR

- Professor in the Department of Applied Geology, Doctor Harisingh Gour Vishwavidyalaya, Sagar. And also served as a Reader in the Department of Geology, Mizoram Central University, Aizawl in year 2004.
- Supervised many students for Doctorate Degrees.
- Delivered Massive Open Online Course (MOOC) on Petrology for undergraduate students of Geology. The course has successfully completed two cycles with rating of 4.9 out of 5. During first cycle (7th Nov. 2016 to 5th March 2017) more than 706 students were enrolled and in 2nd cycle (24th July to 25th

DR. JAMKHOGINLHUNGDIM
Assistant Professor (Sr. Scale), College of Agriculture,
Central Agricultural University, Imphal

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/ School
PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

COURSE DURATION : 12 weeks (24/09/2018 to 28/12/2018)
EXAM DATE : 12/03/2019
NO OF CREDITS : 5

OBJECTIVE OF COURSE

The course envisages a broad objective of imparting knowledge on how the crops have been cultivated by man from time immemorial. It is also aimed at guiding students to acquire knowledge on the cultivation practices of kharif and rabi crops, their managements including land preparation, seed treatments, right choice of manures and fertilizers and their application methods and rates, weed, insect, diseases and other pest managements, harvesting and threshing techniques, grain storages etc.

LEARNING OUTCOME

After studying this course, students will be able to understand the basic knowledge of Agronomy. They will also learn the basic knowledge on the cultivation practices of kharif and rabi crops, their managements including land preparation, seed treatments, right choice of manures and fertilizers and their application methods and rates, weed, insect, diseases and other pest managements, harvesting and threshing techniques, grain storages etc. Besides these scientific operations, students will have thorough knowledge of water and nutrient managements for a bumper harvest. The knowledge can be applied to achieve maximum crop production.

COURSE PLAN

Week 01:

1. Rice, 2. Maize, 3. Shorgum, 4. Pearl millet

Week 02:

1. Minor millet, 2. Pigeon pea, 3. Mungbean, 4. Urdbean

Week 03.:

1. Groundnut, 2. Seasame, 3. Soybean, 4. Cotton

Week 04:

1. Jute, 2. Sunhemp, 3. Cowpea, 4. Napier Grass

Week 05:

1. Origin, geographic distribution, economic importance, soil and climatic requirement, Varieties of Wheat, 2. Cultural Practices of Wheat, 3. Barley, 4. Chickpea

Week 06:

1. Lentil, 2. Pea, 3. French bean, 4. Rapseed & Mustard

Week 07:

1. Sunflower, 2. Safflower, 3. Linseed, 4. Sugarcane

Week 08:

1. Sugarbeet, 2. Mentha, 3. Lemon Grass, 4. Citronella

Week 09:

1. Palma Rosa, 2. Isabgol, 3. Posta, 4. Potato

Week 10:

1. Tobacco, 2. Berseem, 3. Lucern, 4. Oat,

Week 11:

1. Rice nursery preparation and transplanting
2. Determination of effect of seed size and sowing depth on germination or seedling vigour and sowing method of Kharif crops
3. Calculations on seed rate and yield estimation of Kharif crops
4. Fertilizer calculations and Top dressing of nitrogen in Rice and Maize
5. Study of yield contributing characters, physiological maturity and identification of weeds in different Kharif crops

Week 12:

1. Seed bed preparation and sowing of wheat, sugarcane and sunflower
2. Top dressing of nitrogen in wheat and mustard
3. Identification of weeds and application of herbicide in wheat and grain legumes
4. Calculations on seed rate of rabi crops
5. Morphological characteristics and Yield contributing characters of wheat, sugarcane, chickpea and mustard

ABOUT INSTRUCTOR

Dr. Jamkhogin Lhungdim is an Assistant Professor (Sr. Scale), Department of Agronomy, College of Agriculture, Central Agricultural University, Imphal (Manipur). He finished his PhD. From BHU Varanasi. He has been associated with department of Agriculture since 2004. Dr. Lhungdim published 16 research papers in National & International Journals and 1 Book chapter; 5 course-based Practical/Study Manuals for B.Sc./PG level. He presented 20 research papers (6 International, 10 National & 4 regional/state level) on different Conference, Symposium, Seminar and Workshop. He completed 2 Intramural Research Projects as PI and 3 IRPs as Co-PI; 1 Intramural Research Project going on and one project sanctioned by Dept. of Science & Technology, Govt. of Manipur. He was also the resource person in 15 Technical Training Programmes in different topics/field of agriculture.

DISEASES OF HORTICULTURAL CROPS AND THEIR MANAGEMENT

DR. BIRESHWAR SINHA
Assistant Professor, College of Agriculture,
Central Agricultural University, Imphal

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/ School
PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course
COURSE DURATION : 12 weeks (24/09/2018 to 21/12/2018)
EXAM DATE : 06/03/2019
NO OF CREDITS : 4

OBJECTIVE OF COURSE

To understand about the causes of diseases on horticultural crops, the host-pathogens interaction, favourable condition for disease development.

LEARNING OUTCOME

After learning this course the students will be able
1. To understand about the causes of diseases on horticultural crops.
2. To understand about the host-pathogens interaction, favourable condition for disease development.
3. To understand the management of the diseases on horticultural crops

COURSE PLAN

Week 01:
Potato
1. Diseases cause by fungi, bacteria, viral and nematode
Chilli
2. Diseases cause by fungi, bacteria and virus
Cucurbits
3. Diseases cause by fungi and Bacteria
Week 02:
Crucifers
1. Diseases cause by fungi, bacteria and virus
Bhindi & Brinjal
2. Diseases cause by fungi, bacteria, virus and nematode and phytoplasma
Beans
3.Diseases cause by fungi and virus
Week 03.
Onion
1.Diseases cause by fungi & bacteria
Tomato
2.Diseases cause by fungi
Guava
3. Diseases cause by fungi
Week 04:
Banana
1. Diseases cause by fungi, bacteria
2. virus and nematodes
Grapes
3. Diseases cause by fungi
Week 05:
Pomegranate
1. Diseases cause by fungi, bacteria
Mango
2. Diseases cause by fungi, bacteria and phanerogamic parasites
Apple
3.Diseases cause by fungi
Week 06:
Coconut
1.Diseases cause by fungi, virus and viroid
Citrus
2. Diseases cause by fungi, bacteria and viruses
Oil palm, Betel vine, Mulberry
3.Diseases cause by fungi, Bacteria and nematode
Week 07:
Coffee
19. Diseases cause by fungi & nematode
Tea
20. Diseases cause by fungi and algae
Rose & Chrysanthemum
21.Diseases cause by fungi
Week 08:
Beans
1.Rust of Beans Leaf spot of Beans
2.Citrus
Citrus canker, Citrus greening, Powdery mildew
3.Guava & Papaya
Yellow leaf Spot, Anthracnose Papaya Mosaic, Papaya Leaf Curl
Week 09:
Banana
1. Sigatoka Leaf top, Bunchy top
2. Pomegranate & Ber
Leaf Spot, Fruit Rot
3.Mango
Anthracnose, Powdery Mild Dew Mango Malformation
Week 10:
1.Grapes
Rust Powdery Mild Dew Downey Mild Dew
2.Chilli
Leaf Spot, Anthracnose, Wilt, Leaf Curl
3.Brinjal, Bhindi
Leaf Spot, Wilt, Damping off of seedlings, Root Knot for Brinjal and Yellow vein mosaic
Week 11:
1.Potato, Tomato
Late Blight, Early blight, Leaf Roll Common scab Brown Rot, Late blight, Wilt, Leaf Curl
2.Curcifers and Cucurbits
White Rust, Downey Mild dew, Leaf spot, Mosaic & Powdery Mildew Cucurbit mosaic
3.Onion
Leaf Spot, Onion Smudge, White rot of Onion
Week 12:
1.Rose, and Jasmin
Black Spot, Powdery Mild Dew, Die Back, Rust.

Interactions with students

ABOUT INSTRUCTOR

- Dr. Bireshwar Sinha is an Assistant Professor in the Department of Plant Pathology, College of Agriculture, Central Agricultural University, Imphal, Manipur.
- PhD. from BCKVV, West Bengal.
- Completed many research projects funded by ICAR, DBT Govt. of India, DBT-RA etc.
- Teaching experience- B Sc(Agri), MSc(Plant Pathology), Trainers Training Programme
- Supervising 3 scholars.
- Publications include - Referred Journal with NAAS ID-14, News Letter/ Non referred journal/ Farm Magazine with ISSN -15, Book Chapter-2 and News Paper article-10.
- Submitted 22 Trichoderma spp and one Fusarium to NCBI gene bank with accession number in collaboration with NCIPM, New Delhi (2014-2015).

WEED MANAGEMENT

DR.MOHAN
Former Professor, Agricultural College and Research Institute
Tamil Nadu Agricultural University, Madurai
Tamil Nadu

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG
COURSE DURATION : 6 weeks (16/07/2018 to 24/08/2018)
EXAM DATE : 27/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary(10+2)
Should possess a basic interest towards Agriculture

OBJECTIVE OF COURSE

- To understand the classification of weeds
- To study the life cycle of weeds
- To manage weeds through traditional methods
- Manage weeds through Biological means
- Manage weeds through modern methods and
- To develop Integrated approach to manage weeds

LEARNING OUTCOME

On completion, one can possess sufficient knowledge on the proper management of weeds through integrated approach and thereby boost agricultural yield and minimise loss to great extent.

COURSE PLAN

Week 01

1. Getting to know about weeds
2. Identifying salient features of weeds
3. Classifying attributes of weeds
4. Interacting with crop weeds
5. Analysing life cycle of weeds

Week 02

6. Preventing Controlling and Eradicating Weeds
7. Traditional Methods To Control Weeds
8. Examining Biological Methods To Manage Weeds
9. Analysing Modern Methods to Control Weeds

Week 03

10. Introducing Herbicides
11. Methods of herbicide application
12. Mode of Action and Mechanism of Herbicide

Week 04

13. Identifying Selectivity of Herbicides
14. Identifying the advanced theories of herbicides
15. Weed Management Methods
16. Understanding herbicide - resistant crops

Week 05

17. Absorbing herbicides
18. Translocating Herbicides
19. Shift Of Weed Flora In Cropping Systems.
20. Integrated Weed Management

ABOUT INSTRUCTOR

- 36 years of Teaching and research
- Conducted mushroom research projects with a collaboration of National Centre for Mushroom Research and Training (NCMRT) Solan. Developed low cost technology in mushroom.
- As a first time in the Indian history he released a Newsletter exclusively for Mushroom in Tamil viz; Kalan seithimadal and served as its first editor for a period of five years.
- Conducted more than one thousand mushroom training and created a base for protein revolution.
- Published more than 500 research articles in reputed foreign and and Indian Journals. Written 5 books on mushroom cultivation.
- Guided more than 70 post graduate students

AGRI BUSINESS MANAGEMENT

DR.MOHAN
Former Professor, Agricultural College and Research Institute
Tamil Nadu Agricultural University, Madurai
Tamil Nadu

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG
COURSE DURATION : 6 weeks (09/07/2018 to 24/08/2018)
EXAM DATE : 28/11/2018
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary(10+2)
Should possess a basic interest towards Agriculture

OBJECTIVE OF COURSE

- To know about agri business and its allied sector
- To know major emerging issues in Agri-Business
- To classify types of Agri- Business
- To understand management Stratergy
- To identify basic function of Agri- Business and
- To Exploring policy matters in Agri- Business

LEARNING OUTCOME

On completion, one can possess sufficient knowledge on Agri business, its types, functions, management strategy, emerging issues and policy matters

COURSE PLAN

Week 01

01 GETTING TO KNOW AGRICULTURE

02 INTRODUCING AGRONOMY

03 INTRODUCING SOIL

04 ANALYSING CROPS AND CROP PRODUCTION

Week 02

05 EXPLAINING AGRICULTURAL CONCEPTS

06 INTRODUCING AGRIBUSINESS

07 IDENTIFYING THE STRUCTURE OF AGRIBUSINESS

08 SPECIFYING LEVELS

Week 03

09 OUTLINING EMERGING ISSUES OF AGRIBUSINESS

10 MANAGING AGRIBUSINESS

11 GETTING TO KNOW MANAGEMENT

12 IDENTIFYING COMPONENTS OF MANAGEMENT FUNCTIONS

Week 04

13 CLASSIFYING TYPES OF BUSINESS ORGANISATON

14 UNDERSTANDING PLANNING IN MANAGEMENT

15 DEFINING BASE FOR PLANNING

16 ELABORATING MANAGEMENT BY OBJECTIVES

Week 05

17 UNDERSTANDING ORGANISING IN MANAGEMENT

18 STAFFING IN MANAGEMENT

19 GETTING ACQUAINTED WITH DIRECTING

20 INTRODUCING MOTIVATION AND LEADERSHIP

Week 06

21 DEFINING COMMUNICATION

22 DEFINING CONTROLLING

23 IDENTIFYING THE BASIC FUNCTIONS OF BUSINESS

24 EXPLORING LEGAL AND POLICY MATTERS IN AGRIBUSINESS

ABOUT INSTRUCTOR

- 36 years of Teaching and research
- Conducted mushroom research projects with a collaboration of National Centre for Mushroom Research and Training (NCMRT) Solan. Developed low cost technology in mushroom.
- As a first time in the Indian history he released a Newsletter exclusively for Mushroom in Tamil viz; Kalan seithimadal and served as its first editor for a period of five years.
- Conducted more than one thousand mushroom training and created a base for protein revolution.
- Published more than 500 research articles in reputed foreign and and Indian Journals. Written 5 books on mushroom cultivation.
- Guided more than 70 post graduate students

ADVANCED MICROBIOLOGY

DR. ARUP KUMAR MITRA
Assistant Professor,
St. Xavier's College, Kolkata

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 9 weeks (6th Aug, 2018 to 5th Oct, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE

- 1. This course will orient the students with the basics of viral and fungal classification.
- 2. On successful completion of the course, the student will be able to understand the different antibiotics used in the market and their mechanism of action.
- 3. This course will enable them to apply the acquired knowledge in the field of practical microbiology
- 4. It will enable them to write a review on allied microbiological field and that may be suitable for publication.

LEARNING OUTCOME

Successful completion of this module will enable a student to perform practical hands on basic microbiological techniques that can be quite handy whenever he or she joins any research laboratory or even in industry.

COURSE PLAN

Week1

Module 1: Morphology, Disease and Holmes Classification.

Module 2: Classification of viruses-I

Module 3: Classification of viruses II

Module 4: Classification of fungi: Classical Concept -I

Week 2

Module 5: Classification of fungi: Classical Concept -II

Module 6: Modern Classification of fungi: Modern Concept – I

Module 7: Classification of fungi: Modern Concept – II

Module 8: Classification of fungi: Modern Concept – III

Week 3

Module 9: Classification of yeast-I

Module 10: Classification of yeast-II

Module 11: Application of microbes

Module 12: Antibiotics: The secondary Metabolites

Week 4

Module 13: Role of Staphylococcus in infection

Module 14: Nitrogen fixation & Role of Nif and Nod genes.

Module 15: Microbiology & Human Health

Module 16: Bacterial Diseases

Week 5

Module 17: The pathogenesis of Vibrio cholerae

Module 18: Introduction to Salmonella

Module 19: Preparation of Culture Media: Liquid Medium

Module 20: Preparation of Culture Media: Solid Medium

Week 6

Module 21: Sterilization Techniques

Module 22: Isolation of single colony on solid media

Module 23: Enumeration of bacterial numbers by serial dilution & plating

Module 24: Measurement of fungal biomass

Week 7

Module 25: Animal Handling (Practical)

Module 26: Staphylococcus aureus

Module 27: Isolation of protozoa from soil

Module 28: Antibiotic sensitivity assay: natural Product

Week 8

Module 29: Preparation of culture media for pathogenic bacteria – part 1

Module 30: Preparation of culture media for pathogenic bacteria – part 2

Week 9

Module 31: Albert and Giemsa Staining

Module 32: Determination of Growth Phase of E. coli by Measurement of OD & **Cfu**

Module 33: Preparation of Buffer Solution

ABOUT INSTRUCTOR

- Post Graduate and Ph.D. from Calcutta University, post-doctoral experience from South Bank University, London.
- Presently working as an Associate Professor, P.G Department of Microbiology, St. Xavier's College, Kolkata.
- More than 22 years of teaching experience.
- Founder Head of the Department of Microbiology.
- Presented 41 papers in different National and International Seminars.
- Written 32 different books on Biology, Environmental Science and Microbiology.
- Published 72 papers in different national and international journals.

INDUSTRIAL MICROBIOLOGY AND IMMUNOLOGY

DR. KASTURI SARKAR
Assistant Professor
St. Xavier's College Kolkata

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG

COURSE DURATION : 9 weeks (6th Aug, 2018 to 5th Oct, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE

1. This course will orient the students to Industrial Microbiology and Immunology.
2. The student will have the idea of preparation of different fermented products like yogurt, cheese, alcoholic beverages and the techniques used in the production.
3. The second unit i.e. Immunology will provide with ideas of immune system, different cells or organs of immune system, mechanism of action of immune system, role of immunoglobulins or antibodies in providing protection against foreign molecules etc.
4. It will enable them to write a review on allied field and will help them in further studies.

LEARNING OUTCOME

This course is designed in such a way that students of under-graduation and post-graduation from any discipline of biology will find the course content interesting and will get the tools of understanding microbiology.
After completion of the course, the students can apply this knowledge in their fields of research and higher education.

COURSE PLAN

Week 1

Module 1 : Introduction to Industrial Microbiology

Module 2 : Transcription of Screening & Strain Improvement -1

Module 3 : Transcription of Screening & Strain Improvement - 2

Module 4 : Agenda Setting Theory

Week 2

Module 5 : Fermentation Types - I Batch, Fed-batch & Continuous Fermentation

Module 6 : Fermentation Types - II Submerged, Surface & Solid State Fermentation

Module 7 : Fermentation Equipment & Uses

Module 8 : Asepsis, Filtration, Centrifugation & Drying

Week 3

Module 9 : Acetic Acid Bacteria & Other Bacteria [General Characteristics & Uses]

Module 10 : Acetic Acid Bacteria & Other Bacteria [General Characteristics & Uses]

Module 11 : Vinegar

Module 12 : Fermented Oriental Foods - I

Week 4

Module 13 : Transcription of Fermented Oriental Products - II

Module 14 : Introduction & General Concept

Module 15 : Yoghurt & Some More Products

Module 16 : Microbes as Single Cell Protein

Week 5

Module 17 : Fermented beverages (Beer & Wine)

Module 18 : Introduction to Industrial Fermentation

Module 19 : Industrial Enzymes

Module 20 : Fermentative Products

Module 21 : Production of Antibiotic

Week 6

Module 22 : History of Immunology - I

Module 23 : History of Immunology - II

Module 24 : History of Immunology - III

Module 25 : History of Immunology - IV

Module 26 : Natural Barriers in Human Body

Week 7

Module 27 : Cells, Organs and Receptors of Immune System

Module 28 : Antigen Antibody & Immunogenicity

Module 29 : Immunoglobulin Types, Structure & Function-1

Module 30 : Immunoglobulin Types, Structure & Function-II

Module 31 : Isotype Switching & Antibody Diversity

Week 8

Module 32 : MHC and Monoclonal Antibody

Module 33 : Cell-mediated Immunity

Module 34 : Humoral Immunity

Module 35 : Types & Function

Module 36 : Vaccines

Week 9

Module 37 : Recombinant Vaccines

Module 38 : Single Radial Immunodiffusion

Module 39 : Hem agglutination &Haemolysis Module

40 : Separation Of Serum Proteins By Electrophoresis

Module 41 : Enzyme Linked Immunosorbent Assay (ELISA)

ABOUT INSTRUCTOR

- Teacher and researcher in the Department of Microbiology, St. Xavier's College.
- Teaching in the field of immunology, virology, biochemistry etc.
- Graduate in Chemistry and post-graduation in Biochemistry from Calcutta University. PhD in Biochemistry from Bose Institute, Kolkata.
- Involved in the E-content development of UGC Microbiology syllabus in 2012-2013 in association with Educational Multimedia Research Centre (EMMRC), Kolkata.

MOLECULAR BIOLOGY

DR. MAHASWETA MITRA GHOSH
Assistant Professor,
St. Xavier's College Kolkata.

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (6th Aug, 2018 to 26th Oct, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE

1. This course will orient the students with the basics of microbiology and its associated subjects.
2. On successful completion of the course, the student will be able to understand the diversity of microbes and their application.
3. This course will enable them to apply the acquired knowledge in the fields of other biological science.
4. It will enable them to write a review on allied field and that may be suitable for publication.

LEARNING OUTCOME

- This course is designed in such a way that students from any disciplines of Life Sciences will find the course content interesting and will get the tools of understanding Molecular Biology.
- After completion of the course, the students can automatically apply this knowledge in their fields of research and higher education.

COURSE PLAN

Week 1
Module 01: Basics of Molecular Biology
Module 02: DNA-I
Module 03: DNA-II

Week2
Module 04: RNA-I
Module 05: RNA-II
Module 06: Nucleic acids I:Composition & the Different Bonds

Week 3
Module 07: Nucleic acids II Secondary Structures of Nucleic Acids
Module 08: Nucleic Acids III [DNA Noncanonical Structures]
Module 09: Nucleic Acids IV [Tertiary and Higher Order Structure of Nucleic Acids]

Week 4
Module 10: Model Organisms-I
Module 11: Model Organisms-II
Module 12: Model Organisms-III

Week 5
Module 13: Model Organisms-IV
Module 14: Heredity in Prokaryotes
Module 15: DNA replication: An Overview

Week 6
Module 16: Replication of chromosomes and cell division
Module 17: DNA Damage Repair Systems-I
Module 18: DNA Damage Repair Systems: II

Week 7
Module 19: DNA Damage Repair Systems: III
Module 20: Eukaryotic Transcription
Module 21: Translation - 1

Week 8
Module 22: Translation-II
Module 23: Translation-III
Module 24: Eukaryotic Translation

Week 9
Module 25: The Genetic Code
Module 26: Gene Expression-I
Module 27: Gene Expression-II

Week 10
Module 28: Prokaryotic Gene Regulation-III
Module 29: Gene Regulation-II
Module 30: Isolation of Genomic DNA from Gram Negative Bacteria E.coli

Week 11
Module 31: Isolation of Genomic DNA from Plants Fungi
Module 32: Isolation of Genomic DNA from Whole Blood
Module 33: Isolation of Plasmid DNA

Week 12
Module 34: Gene Cloning Using Plasmid DNA Vector
Module 35: Induction by IPTG Leading to Overexpression of Protein in E.coli

ABOUT INSTRUCTOR

- 14 years teaching experience and presently teaches Molecular Biology, Microbial Genetics and Chemotherapeutic Agents.
- Publications in peer reviewed international journals and books.
- Successfully completed major and minor Research grants from prestigious funding agencies like CSIR and UGC.
- Has been the Head Examiner, Moderator and Examiner of different theoretical and Practical examinations in Microbiology (Honours) and Post Graduate courses under Calcutta University, Kalyani University, West Bengal State University, and West Bengal University of Technology.

MICROBIAL CYTOLOGY, PHYSIOLOGY AND RECOMBINANT DNA

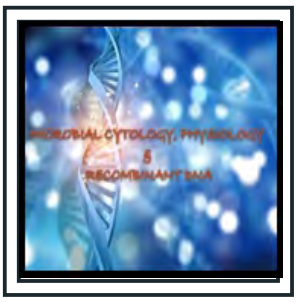
DR. ANINDITA BANERJEE
Assistant Professor,
St. Xavier's College Kolkata.

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (6th Aug, 2018 to 26th Oct, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE



The objectives of this course are to acquaint students with:
1. The course will help the students to have an in-depth knowledge about the thriving field of Microbiology.
The discourse of knowledge will help them to provide good prospects for qualified workers.
2. The students will know about the basic concepts of bacterial growth, cell division, growth kinetics and measurement.
3. They will learn about the different physiological phenomenon occurring in bacteria.
4. This course will help them to learn about the different techniques of RDT.
5. The course will equip the students to meet the industry demands for Microbiologists.

LEARNING OUTCOME

- Besides Microbiology, students of any discipline of life sciences will also find this course helpful.
- The course will help them to develop a basic concept about different branches and future aspects and prospects of the subject.
- After successful completion of this course, students will be enriched, enlightened and more confident about the subject.

COURSE PLAN

Week 1

Module 01: Prokaryotic Cell Division

Module 02: Physiology and Phases of Bacterial Growth

Module 03: Factors affecting cell growth

Week 2

Module 04: Mathematics and measurement of cell growth

Module 5: Carbohydrate Metabolism –Part I

Module 6: Carbohydrate Metabolism-Part II

Week 3

Module 07: Carbohydrate Metabolism-Part III

Module 08: Carbohydrate Metabolism – Part IV

Module 09: Carbohydrate metabolism – Part V

Week 4

Module 10: Protein Metabolism –Part I

Module 11:Protein Metabolism Part II

Module 12: Protein Metabolism Part III

Week 5

Module 13: Cell wall

Module 14: Cell Membrane and Surface Projections.

Module 15: Structure of Prokaryotic Cell

Week 6

Module 16: Eukaryotic cell structure and their variations.

Module 17: Eukaryotic cell structure –(double membrane structures) Part II

Module 18: Eukaryotic cell structure and their variations (single membrane bound and membraneless organelles)- Part III

Week 7

Module 19: Structure and function of cell membrane

Module 20: Structure of plasma membrane: Proteins and carbohydrates.

Module 21: Introduction to transport across the plasma membrane.

Week 8

Module 22: Active transport across plasma membrane.

Module 23: Historical Perspective- I

Module 24: Historical perspectives-II

Week 9

Module 25: Historical Perspectives III

Module 26: Bacteriophage Lambda-I

Module 27: Bacteriophage lambda-II

Week 10

Module 28: Filamentous phage M13

Module 29:Restriction Enzymes-Part I

Module 30: Restriction enzymes-Part II

Week 11

Module 31: Restriction enzyme and its functional use.

Module 32: Gene cloning with different vectors.

Module 33: Gene cloning with different vectors –II

Week 12

Module 34: Restriction and Ligation of vectors.

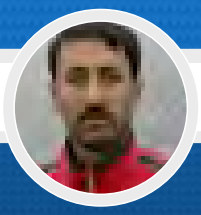
Module 35: Selection and screening of recombinant colonies.

Module 36: DNA sequencing and its applications.

ABOUT INSTRUCTOR

- Teaches different fields of Microbiology both undergraduate and post graduate levels in of Microbiology since 2011.
- Publications in peer reviewed international journals and books.
- Experience as National Media Resource Person: delivered lectures on different topics of Microbiology for the UGCs Country Wide Classroom programme, which are being telecasted on National Television.
- Acted as a resource person on DST sponsored "Skills and training programme in science and technology" (STST) in 2011 on selected topics on plant biotechnology.

PLANT SYSTEMATICS



DR. ANZAR A. KHUROO
Sr. Asstt. Professor, Department of Botany,
University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 13 weeks (16/07/2018 to 13/10/2018)
EXAM DATE : 25/10/2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with knowledge of Science

OBJECTIVE OF COURSE

The objectives of this course are to give the target students/audience an understanding of:

- Introduction about plant systematics
- Principles of plant systematics
- Basic components of plant systematics
- Phases in plant systematics
- Contributions of plant systematics to biological sciences and to human society

LEARNING OUTCOME

The course "Plant Systematics" is a course in the subject of Botany (BSc Hons).

- The course is specially designed to give an in-depth knowledge of plant diversity, structure and evolution, from a comparative and phylogenetic perspective.
- The students will be able to divide plants into taxonomic groups, using morphological, anatomical, embryological, chromosomal and chemical data. In order to reconstruct the evolutionary history of plant life.

COURSE PLAN

Week 01:-

Introduction to Plant Systematics, Aims and Objectives of Taxonomy, Fundamental Components of Taxonomy, Palynology

Week 02:-

Cytology, Phytochemistry (Chemotaxonomy), Molecular data (Molecular taxonomy), Field inventory

Week 03:-

Herbarium, Botanical Gardens, Taxonomic literature, Identification keys

Week 04:-

Leaf arrangement, Diversity in leaf size and shape, Flower structure, variations, Types of inflorescences

Week 05:-

Types of fruits, Placentation and its types, Taxonomic Hierarchy and Ranks

Species concept

Week 06:-

Botanical Nomenclature, Typification and kinds of Types, Nomenclature of Hybrids, Identification: Procedure and Methods

Week 07:-

Contribution of Theophrastus, BauhinandTournefort toplant systematics

Contribution of Linnaeus toplant systematics, Major contributions of Adanson, de Candolle and Hutchinson to plant systematics, Major contributions of Bessey and Cronquist to Plant Systematics

Week 08:-

Major contribution of Takhtajan to plant systematics, Salient Features of Classification system by Bentham and Hooker, Salient Features of Classification system by Engler and Prantl, Angiosperm Phylogeny Group (APG) Classification

Week 09:-

Numerical Taxonomy, Cladistics: concept and terminology, Methodology of Cladistics, Origin of Angiosperms

Week 10:-

Evolution and Diversification of Angiosperms, A General account on primitive angiosperms, Co-evolution of flower and insects,Taxonomy and Diversity of Apiaceae

Week 11:-

Taxonomy and Diversity of Asteraceae, Taxonomy and Diversity of Brassicaceae, Taxonomy and Diversity of Fabaceae, Taxonomy and Diversity of Lamiaceae

Week 12:-

Taxonomy and Diversity of Malvaceae, Taxonomy and Diversity of Orchidaceae, Taxonomy and Diversity of Poaceae, Taxonomy and Diversity of Solanaceae

ABOUT INSTRUCTOR

- Ph.D from University of Kashmir.
- 15 years in teaching and research.
- Area of Interest - Plant Taxonomy, Biodiversity and Conservation Biology, Plant Systematics and Phylogenetics, Biological Systematics and Biodiversity and Biogeography.
- 75 publications (Research papers and book chapters) including 39 in SCI journals.

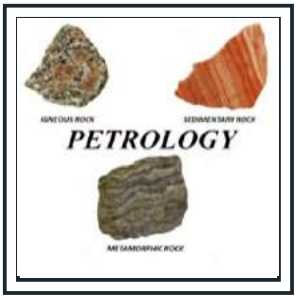
PETROLOGY

DR. HAREL THOMAS
Professor, Department of Applied Geology
Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.)

TYPE OF COURSE : Science Undergraduate (UG)
INTENDED AUDIENCE : UG
COURSE DURATION : 17 weeks (30th July & 2nd Dec 2018)
EXAM DATE : 29/30 November, 2018
NO OF CREDITS : 4
PRE-REQUISITES : Graduate Geology Students / Engineering graduate in Civil / Mining Engineering or any other students within and outside India are interested in course can enrolled for the this course .

OBJECTIVE OF COURSE

This course is a basic to advance introduction for the undergraduate students pursuing Honours degree in Geology/ B.Sc. Geology/ Engineering Graduate for Civil and Mining. The term petrology comes from the ancient Greek word Petra "rock" and Logos "explanation" that means the study of rocks and their processes of origin. This course deals with the naturally occurring rocks in field as well as laboratory analysis data that provide sufficient information how they occur in the nature. It gives idea of modern petrological theories which are widely accepted for their origin. The course definitly provides better understanding to students for the processes and principles involved during the origin and evolution of the rocks



LEARNING OUTCOME

- The Course aims to make to the students well-versed with the strength of Petrology theory applications in the field of Geology.
- The course definitly provides better understanding to students for the processes and principles involved during the origin and evolution of the rocks i.e. (Igneous, Sedimentary, and Metamorphic rocks).
- I hope it will be useful for the geology students within and outside India.

COURSE PLAN

Week 01: Geology & its Perspective, Carrier in Geology, Rock Cycle and Structure and classification of the silicate minerals. Daily quiz, assignments along with weekly test

Week 02: Internal structure & chemical composition of various layers of the Earth, interior of earth, Formtion of crust and mantle, formation of core -01. Along with daily quiz and assignments along with weeekly test.

Week 03: Formation of core – 02; Magma: definition, composition, types and origin; Forms of igneous rocks and Texture of igneous rocks – 01 Along with daily quiz and assignments along with weeekly test.

Week 04: Texture of Igneous rocks – 02; Texture of Igneous rocks – 03; Structure igneous rocks and Bowen Reaction Series and Reaction Principle. Along with daily quiz and assignments along with weeekly test.

Week 05: Crystallization of unicomponent and bicomponent (mix-crystals); igneous rocks and Intrusive igneous rocks. . Along with daily quiz and assignments along with weeekly test

Week 06: Mineralogical and chemical classification of igneous rocks; Detailed petrographic description of Granite, Granodiorite, Rhyolite, Syenite, Phonolite, Diorite, Gabbro and Mineralogical characteristics of acid igneous rocks and alkaline rocks. Along with daily quiz and assignments along with weeekly test.

Week 07: Mineralogical characteristics of basic igneous rocks and ultramafic rocks; origin of sediments and Processes of formation of sedimentary rocks. Along with daily quiz and assignments along with weeekly test.

Week 08: Lithification and Diagenesis; Sedimenatry rocks; Classification of sedimentary rocks and Classification of sedimentary rocks based on grain size. Along with daily quiz and assignments along with weeekly test.

Week 09: Structure of sedimentary rocks, Texture of sedimentary rocks, Petrographic details of important siliciclastic and carbonate rocks such as - conglomerate, breccia, sandstone, greywacke, shale, limestones; Definition of metamorphism and Factors controlling metamorphism. Along with daily quiz and assignments along with weeekly test.

Week 10: Variables / agents and types / kinds of metamorphism – contact, regional, fault zone metamorphism, impact metamorphism; Types of metamorphism and classification based on metamorphic agent and Metamorphic facies and metamorphic grade. Along with daily quiz and assignments along with weeekly test.

Week 11: Index minerals, chemographic projection, graphical representation of metamorphic minerals assemblages; ACF, AKF and AFM etc, Other diagram.; Metamorphic zones, isogrades and reaction isograde and Concept of classification of metamorphic facies, facies-series and grade. Along with daily quiz and assignments along with weeekly test

Week 12: Structure and texture of metamorphic rocks; Description of facies; facies of low pressure: Albite epidote facies Hornblende hornfels facies and Pyroxene hornfels facies. Along with daily quiz and assignments along with weeekly test.

Week13: Pyroxene hornfels facies; Sanidinite Facies Description of facies; facies of medium to high pressure Zeolite facies and Green Schist Facies. Along with daily quiz and assignments along with weeekly test.

Week 14: Amphibolite facies; Ganulite Facies and Description of facies; facies of very high pressure. Blue schist & Eclogite facies. Along with daily quiz and assignments along with weeekly test.

Week 15: Regional metamorphism of pelitic rocks – 1; Regional metamorphism of pelitic rocks – 2 and Basic and Ultrabasic rocks. Along with daily quiz and assignments along with weeekly test.

Week 16: Thermal metamorphism of pelitic rocks; Thermal metamorphism of calcarious rocks and Different types of Metamorphic reactions. Along with daily quiz and assignments along with weeekly test.

Week 17: Petrographic details of some important metamorphic rocks such as - slate, phyllite, schists, gneiss, quartzite, marble, charnockite, Leptynite etc; Migmatites and Metasomatism & Differentiation. Along with daily quiz and assignments along with weeekly test.

ABOUT INSTRUCTOR

- Served as a Reader in the Department of Geology, Mizoram Central University, Aizawl in year 2004.
- Supervised Doctorate Degrees.
- He has been instrumental in the publication of one volume on Metamorphism and Crustal Evolution in year 2005.
- Delivered Massive Open Online Course (MOOC) on petrology for undergraduate students of Geology. The course has successfully completed two cycles with rating of 4.9 out of 5. During first cycle (7th Nov. 2016 to 5th March 2017) more than 706 students were enrolled and in 2nd cycle (24th July to 25th Nov. 2017) nearly 464 students were enrolled. The course has completed both cycles with examination and result declaration.

STRATIGRAPHY AND PALAEONTOLOGY

DR. GAURAV K.SINGH
Assistant Professor of Applied Geology

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 16 weeks (31/07/2018 to 20/11/2018)
EXAM DATE : will be conducted on fifth day of every week.
NO OF CREDITS : 4
PRE-REQUISITES : The only Pre-requisite of this course is that the candidate should be familiar with basic terms of geology and be attentive with the course.

OBJECTIVE OF COURSE

We are going to tell you through science of layers and biology of rocks that the past events on earth can at least be partially traced. Sediments are usually laid down in rivers, oceans and lakes as strata preserving hard and sometimes even soft and delicate parts of the life forms that can in turn be visualised as space-time slices. These preservations reveal many interesting features related to evolution of living creatures and their billions of descendents. Now, you can have a chance to think like who saw the world for the first time and how the present life forms were evolved.

LEARNING OUTCOME

The entire core course in to eight units, the successful completion of which will not only enrich learners knowledge of the Science of layers and Palaeontology but will also train young minds to think which is an essential aspect of any education in the world.

COURSE PLAN

Week 01 : Day 1-Introduction to Stratigraphy and Geological Time Scale, Day 2-Physical and Structural subdivisions of India, Day 3-Schist Belts of Dharwar, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 02 : Day 1-Cuddapah Super Group of Rocks, Day 2-Vindhyan Supergroup, Day 3-Stratigraphy of Delhi Supergroup, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 03 : Day 1-Palaeozoic of NW Himalaya, Day 2-Triassic of Spiti, Day 3-Mesozoic type section of Kutch and Rajasthan, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 04 : Day 1-Cretaceous of Trichinopoly, Day 2-Study of Gondwana Super Group, Day 3-Deccan Trap, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 05 : Day 1-Palaeogene succession of India, Day 2-Neogene succession of India, Day 3-Basic idea of Palaeontology, Evolution and Origin of life, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 06 : Day 1-Identification of fossils and Codes of Systematic Nomenclature, Day 2-Preservation Potential of Organisms and Morphology of Gastropoda, Day 3-Applications of Palaeontological data in Palaeoecology and a brief idea of Palaeogeography, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 07 : Day 1-Morphology and Geological Distribution of Brachiopoda, Day 2-Morphology and geological distribution of Pelecypods, Day 3-Morphology and geological distribution of Cephalopoda, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 08: Day 1-Morphology and geological distribution of Trilobites, Day 2-Morphology and geological distribution of Echinoides, Day 3-Evolutionary history of Horse, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 09 : Day 1-A brief study of Plant Fossils, Day 2-Type localities of Gondwana succession and morphology, distribution & significance of Gondwana flora, Day 3-Basic Principles of Palaeoenvironment and Palaeoclimate Analysis, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 10 : Day 1-The Elements of Sequence Stratigraphy-1, Day 2-The Elements of Sequence Stratigraphy-2, Day 3-Introduction to Microfossils, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 11 : Day 1-Stratigraphic Correlation, Day 2-Evolution and Stratigraphy-I Day 3-Evolution and Stratigraphy-II, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 12 : Day 1-Career in Geology, Day 2-Guides and criteria for locating ore deposits: stratigraphic, lithological, structural, geomorphological, palaeogeographic and palaeoclimatic criteria, Day 3-Distribution of some fossil groups, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 13 : Day 1-Life through Ages, Day 2-Study of Aravalli Group, Day 3-PHYSIOGRAPHIC DIVISIONS OF INDIA, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 14 : Day 1-A Brief idea about Vertebrate Fossils-I, Day 2-A Brief idea about Vertebrate Fossils-II, Day 3-Earth's History: Ontogeny and variation in fossil assemblages, Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 15 : Day 1-Morphology and Distribution of Anthozoa, Day 2-Morphology and Distribution of Arthropoda, Day 3-Palaeozoic of NW Himalaya,Day 4-Self Reading Material, Day 5-Assignment and Interaction/Forum activity

Week 16 : Day 1-Cretaceous of Trichinopoly, Day 2-Identification of fossils and Codes of Systematic Nomenclature, Day 3-Introduction to Microfossils, Day 4Text for self reading, Day 5-Final Assignment and Interaction/Forum activity

ABOUT INSTRUCTOR

- BSc. MSc. And PhD.: University of Lucknow.
- Two years experience in Geological Survey of India (GSI) and three years research experience from Birbal Sahni Institute of Palaeobotany, Lucknow (U.P.).
- Joined Sagar University as an Assistant Professor of Applied Geology in December 2013.

ATOMIC STRUCTURE & CHEMICAL BONDING

(DR.) SANJIV KUMAR
Professor, School of Sciences, Indira Gandhi National Open University (IGNOU),
Maidan Garhi, New Delhi

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 5 weeks (06/08/2018 & 31/12/2018)
EXAM DATE : 10 /01/2019(10 days after end date of course
NO OF CREDITS : 2

PRE-REQUISITES : Student must have 10+2 passed with science stream. Students must have basic understanding of inorganic chemistry of 10+2 level.

OBJECTIVE OF COURSE

The Course is aimed to:

- Demonstrate the inadequacy of classical mechanics and argue for the need of a new theory.
- Explain the concept and consequences of quantisation and outline the postulates of quantum mechanics.
- Describe the quantum mechanical approach for H-atom and discuss the results obtained. State rules for filling of electrons in different orbitals and discuss the electronic configurations including the anomalous ones.
- Discuss the classical theories of Chemical Bonding and outline their limitations.
- Explain the valence bond and molecular orbital theories of chemical bonding and differentiate between them.
- Describe the process of formation of ionic compounds, their lattice energy and dissolution process.
- Give an account of weak interactions

LEARNING OUTCOME

The learner should be able to:

- List the inadequacy of classical mechanics and discus about the new theories.
- Know the concept and consequences of quantisation and the postulates of quantum mechanics.
- Understand the quantum mechanical approach for H-atom. Will be able to fill electrons in different orbitals and discuss the electronic configurations and anomalous examples
- Understand the classical theories of Chemical Bonding and outline their limitations. Explain the valence bond and molecular orbital theories of chemical bonding and differentiate between them.
- Understand the process of formation of ionic compounds, their lattice energy and dissolution process.

COURSE PLAN

Week 1: Inadequacy of Classical Mechanics and Origin of Quantum Mechanics

Week 2: Wave Mechanics: application to model systems and hydrogen atom

Week 3: Chemical Bonding 1: Classical theories and Valence bond theory

Week 4: Chemical Bonding 2: Molecular orbital theory and metallic bonding

Week 5: Chemical Bonding 3: Ionic bonding

ABOUT INSTRUCTOR

- Over 27 years teaching experience and has been associated with teaching at undergraduate and postgraduate level.
- Associated with the Coordination and development of e-content modules under NMEICT project for the B.Sc. Chemistry courses as per the UGC's Model Curriculum.
- Areas of interest are Quantum chemistry, Spectroscopy, Biochemistry and Analytical Chemistry.

QUANTUM CHEMISTRY, SPECTROSCOPY _ PHOTOCHEMISTRY

DR AMAR BALLABH
Assistant professor, Department of Chemistry, Faculty of Science, The Maharaja Sayajirao Univ. of Baroda, Vadodara

PROF.PRASANNA S. GHALSASI
Professor, Department of Chemistry, Faculty of Science, The Maharaja Sayajirao Univ. of Baroda, Vadodara

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 14 weeks (6th Aug & 18th Nov, 2018)
EXAM DATE : 28th November 2018 (Approximately)
NO OF CREDITS : 4

PRE-REQUISITES : **Students must have the basic understanding of Quantum Chemistry, Spectroscopy & Photochemistry.**
This course is intended to 5th semester students of B.Sc. Chemistry and B.Sc. Physical Science (Physics, Chemistry and Mathematics).
This course will also be beneficial for those students who have completed their BSc and are preparing for certain competitive examinations.
The advantage of the course may be taken by those students also who are pursuing Master's degree in Chemistry and intend to brush up their basics.

OBJECTIVE OF COURSE

This course will cater to 3rd semester of CBCS based curricula of B.Sc. Chemistry and B.Sc. Physical Science (Physics, Chemistry and Mathematics) under the Discipline Specific Elective paper 'Chemistry-DSE "QUANTUM CHEMISTRY, SPECTROSCOPY & PHOTOCHEMISTRY"

LEARNING OUTCOME

After successfully completing this course,
students will be able to understand and comprehend: Quantum Chemistry, Chemical Bonding, Molecular Spectroscopy, Nuclear Magnetic Resonance (NMR) Spectroscopy, Electron Spin Resonance (ESR) Spectroscopy, Photochemistry.

COURSE PLAN

The course is divided in three parts i.e. Quantum Chemistry, Spectroscopy and Photochemistry

Week 01: -i)Postulates of Quantum Mechanics, ii) Particles in One-dimensional Box, iii) Particles in One-dimensional Box & its applications

Week 02: - i) Particle in Three-dimensional Box and Separation of Variables, ii) Quantum Mechanical Treatment of Simple System (simple harmonic oscillator model), iii) Quantum Mechanical treatment of simple system (Angular Momentum)

Week 03: - i) Quantum Mechanical Treatment of Simple System (Rigid Rotator model of diatomic molecule), ii) Hydrogen Atom-I : Designing and Processing the Schrodinger Wave Equation(SWE), iii) Hydrogen Atom-II : Solutions of R, Θ and Φ Equations

Week 04: - i) Hydrogen Atom-III : Shapes of Orbitals, ii) Hydrogen Molecule ion, iii) Energy expressions and wave functions for hydrogen molecule ion

Week 05: - i) Molecular orbital theory, ii) Valence Bond Theory, iii) Valence Bond Theory - Hybridisation

Week 06: - i) Nature of radiation, ii) Nature of Matter and its Interaction with Radiation, iii) Types of spectra and their characteristics

Week 07: - i) Basic Aspects of Instruments for Molecular Spectroscopy, ii) Different types of detectors used in instruments used for spectroscopic measurements, iii) Origin and Nature of Rotational Spectra

Week 08: - i) Non-rigid and Isotropic Substitution, ii) Origin of Vibrational Spectrum, iii) Nature and Polyatomic Molecules

Week 09: - i) Group frequencies and Factors Affecting them, ii) Origin of Raman Effect, iii) Pure Rotational and Vibrational Raman Spectra

Week 10: - i) Diatomic Molecules, ii) Franck Condon Principle, iii) Introduction to NMR Spectroscopy

Week 11: - i) NMR Spectroscopy- Relaxation Phenomena, ii) NMR Spectroscopy – CW and FT concept, iii) What is Chemical Shift?

Week 12: - i) NMR Spectroscopy- Structure and Chemical Shift, ii) NMR Spectroscopy- Splitting and Coupling Constants, iii) NMR Spectroscopy- Functional Group and Chemical Shift

Week 13: - i) NMR Spectroscopy- Interpretation of NMR Spectra, ii) ESR Spectroscopy, iii) Absorption Phenomena

Week 14: - i) Photophysical process, ii) Luminescence, iii) Quantum Yield Perspective, iv) Photochemistry – An Application

Week 15: - Proctored examination & Final Assessment

ABOUT INSTRUCTOR

Dr. Amar Ballabh

- Assistant Professor, Department of Chemistry, The Maharaja Sayajirao University of Baroda.
- Teaching experience of over 11 years in teaching Physical and Polymer Chemistry to UG and PG students.
- Research areas of interest are Crystal Engineering, Supramolecular Chemistry, Material Chemistry and possesses research experience of more than 16 years.
- Guided 2 research students for their PhD degree.

Prof. Prasanna S. Ghalsasi

- Professor, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara (since 2012.
- Postdoc in USA and Japan for nearly 5 years.
- Likes to teach undergraduate chemistry courses.
- Involved in Chemistry and Science Olympiad activity.
- Reviewed four World Edition books fromPearson Publisher in basic chemistry.
- Occupied with undergraduate research activity, recently under aegis of HBCSE, Mumbai (NIUS).
- Research, completed 5 research projects, on molecular materials, especially organic magnets and organic ferroelectrics
- Guided 4 PhD students and 20 MSc dissertations.

ORGANIC CHEMISTRY - I

DR. LALITA S. KUMAR
Associate Professor, School of Sciences, Indira Gandhi National Open University (IGNOU),
Maidan Garhi, New Delhi

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
COURSE DURATION : 8 weeks (9/17/2018 & 31/12/2018)
EXAM DATE : 11/ 01/2019 (TENTATIVE)
NO OF CREDITS : 2

PRE-REQUISITES : Student must have 10+2 passed with science stream. Students must have basic understanding of organic chemistry of 10+2 level.

OBJECTIVE OF COURSE

The course will cover following topics of 'Organic Chemistry-I':
1. Fundamentals of Organic Chemistry,
2.Stereochemistry, and
3. Aliphatic Hydrocarbons

LEARNING OUTCOME

After successfully completing this course, students will be able to understand and comprehend:

- Fundamentals of Organic Chemistry. Stereochemistry of organic compounds. Chemistry of Aliphatic Hydrocarbons such as Alkanes, Alkenes, Alkynes in terms of their preparation, physical properties and chemical reactions.
- This course will also be beneficial for those students who have completed their BSc and are preparing for certain competitive examinations.
- The advantage of the course may be taken by those students also who are pursuing Master's degree in Chemistry and intend to brush up their basics.

ABOUT INSTRUCTOR

- M.Sc., Ph.D. (Chemistry), M.A. (Distance education),
- Teaching experience of over 27 years
- Associated with the design and development of distance learning materials for the certificate, diploma and degree level programmes.
- Published several articles in national and international journals of repute.
- Research areas of interest- Reaction Mechanism, Stereochemistry, Biochemistry, Environmental Chemistry and Mobile learning.

DR. A. A. AJMERI
Assistant Professor (Stage-III), Department of Chemistry, Faculty of Science, The MaharajaSayajirao University of Baroda

DR. AMAR BALLABH
Assistant Professor, Department of Chemistry, Faculty of Science, The Maharaja Sayajirao University of Baroda

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 15 weeks (8/6/2018 to 27/11/2018)
EXAM DATE : 21-12-18 , tentative
NO OF CREDITS : 4

PRE-REQUISITES : Student must have 10+2 passed with science stream. Students must have basic understanding of Physical chemistry and Organic chemistry of 10+2 level.

OBJECTIVE OF COURSE

This course will cater to B.Sc. Chemistry and B.Sc. Physical Science (Physics, Chemistry and Mathematics) under the paper 'Chemistry-DSC 2C: 'Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry-II'. It will also cater to Generic Elective paper namely 'Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry-I' of B.Sc. Honours with Chemistry CBCS syllabus.

LEARNING OUTCOME

- ·students will be able to understand and comprehend: Solutions, Phase Equilibrium, Conductance, Electrochemistry, Carboxylic Acids and their derivatives, Carboxylic Acids derivatives(aliphatic), Amines and Diazonium Salts, Amino Acids, Peptides and Proteins.
- The advantage of the course may be taken by those students also who are pursuing Master's degree in Chemistry and intend to brush up their basics.

COURSE PLAN

Week 01: - i)Ideal/ non-ideal solution and derivation of Raoult's law, ii) Vapour pressure of ideal/ non-ideal solution, iii) Vapour pressure-composition and temperature-composition curves of ideal and non-ideal solutions, iv) Azeotropic and partial miscible liquid systems

Week 02: - i) Nernst's distribution law and its application, ii) Nernst's distribution law and its other remaining applications, iii) Introduction (system, equilibrium and phase rule), iv) Concepts on Phase rule, Phase, component and degrees of freedom

Week 03: - i) Derivation of Phase rule and its application on different systems, ii) Effect of variation of thermodynamic parameters on phase equilibrium of different systems, iii) Derivation of Clausius-Clapeyron equation and its application, iv) Phase diagram of one-component system (water and sulphur)

Week 04: - i) Two component system (simple eutectic system), ii) Two component system (congruent and incongruent melting), iii) Phase diagram of simple system (FeCl3-H2O and lead-silver), iv)Phase diagram of Sodium-Potassium system

Week 05: - i) Conductivity, equivalent and molar conductivity and effect of dilution, ii) Kohlrausch law and theory of weak electrolyte, iii) Transport number (or Transference number) and theory of strong electrolyte, iv) Applications of conductivity measurement

Week06: - i) Basic of electrochemistry, ii) Understanding electrode potential and measurement of cell potential, iii) Thermodynamics of a reversible cell and calculation of hermodynamic parameter, iv) pH and Buffer solution

Week 07: - i) Types of electrodes, pH determination and concentration cell, ii) Applications of electrochemistry, iii) Definition, Structure, IUPAC names and Preparations of Carboxylic acids. iv) Properties, pKa values and Relative strength of Carboxylic acids.

Week 08: - i) Chemical Properties of Carboxylic acids, Directing influence and Kolbe's Electrolysis. ii) Preparation, reactions and uses of Hydroxy acids, iii) Preparation, reactions and uses of Dicarboxylic acid, iv) Preparation, reactions and uses of Unsaturated Dicarboxylic acid

Week 09: - i) Hydrolysis of esters, Named reactions: HVZ, Perkin and Reformatsky reactions, ii) Structure, Naming, Classification and interconversion of Carboxylic acid derivatives, iii) Preparation and uses of Carboxylic acid derivatives, Rosenmund's and Schotten-Baumann reactions, iv) Preparations, transesterifications, ammonolysis and reductions of esters.

Week 10: - i) Classification, Nomenclature and Properties of Amines, ii) Basicity and Effect of substituents on properties of Amines, iii) Preparations of Amines: Gabriel-phthalimide, Hofmann degradation, Ammonolysis and reductions, iv) Reactions of Amines

Week 11: - i) Hofmann vs. Saytzeff elimination, Hinsberg Test and Phase-transfer Catalysis. ii) Diazotization, Sandmeyer and Coupling reactions, iii) Electrophilic substitution reaction: Difficulties and their solutions, Desired isomer Conversions, iv) Structures, Importance and Classification of Amino acids.

Week 12: - i) Zwitter ion, Isoelectric points and Stereochemistry of Amino acids ii) Synthesis and Chemical reactions of Amino acids, iii) Structure, IUPAC names and Hydrolysis of Peptides, iv) Synthesis of Peptides: Liquid and Solid Phase synthesis

Week 13: - i) Introduction, Classification and Denaturation of Proteins, ii) Nucleosides, Nucleotides and Nucleic, Acids: DNA, RNA iii) Comparison and Occurrence of classified Proteins, Coloured, Reactions of Proteins iv) Definition, Naming, Structure and General Uses(Carbohydrates)

Week 14: - i) Epimerisation, Increase and decrease of Chain and Osazone formation, ii) Configurations, Threo and Erythro Nomenclature. iii) Cyclic, Howarth andConformational structures,Mutarotation.

Week 15: - i) Monosaccharides, Glycosides and Rind size determination, ii) Introduction to Disaccharides, Polysaccharides and Sweetness of Sugars.

ABOUT INSTRUCTOR

Dr. A. A. Ajmeri

- Served as a Higher Secondary Teacher of Chemistry in an esteemed CBSE instituition 'BhartiyaVidya Bhavan's School, Vadodara.
- Lecturer in Chemistry at The M S University of Baroda in 1999 for B.Sc. and M.Sc .
- Awarded C. C. Shroff Research Scholarship in 1998.
- Area of research is Synthetic Organic Chemistry and working on building up seven membered β-lactam and sydnone ring on biological active compounds.

Dr. Amar Ballabh

- Assistant Professor, Department of Chemistry, The Maharaja Sayajirao University of Baroda.
- Teaching Expereince -11 years - Physical and Polymer Chemistry to UG and PG students.
- Research areas of interest are Crystal Engineering, Supramolecular Chemistry, Material Chemistry and possesses research experience of more than 16 years.

INORGANIC MATERIALS OF INDUSTRIAL IMPORTANCE

PROF. PRASANNA S GHALSASI
Professor, Faculty of Science, The Maharaja Sayajirao University of Baroda

DR. RAJENDRASINH JADEJA
Professor, Faculty of Science, The Maharaja Sayajirao University of Baroda

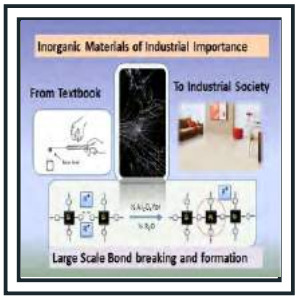
TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (6/8/2018 & 28/10/2018)
EXAM DATE : Exam date of the course, probably, will be 10 days after successfully completion of the course and course conent
NO OF CREDITS : 4

PRE-REQUISITES : Student must have 10+2 passed with science stream. Students must have basic understanding of Inorganic chemistry of 10+2 level.

OBJECTIVE OF COURSE

Course will cover following topics: 1. Recapitulation of s- and p-Block Elements, 2.Silicate Industries, 3. Fertilizers, 4. Surface Coatings, 5. Batteries, 6. Alloys, 7. Catalysis, 8. Chemical Explosives.



LEARNING OUTCOME

- Uniqueness of the course relies on addition of history component in few topics, to understand importance of civilization and need of industrialization along with present challenges in the industrial chemistry. Novel efforts are also made to incorporate visualization of industrial chemical process in some topics.
- After successfully completing this course, students will be able to understand and comprehend s- and p-Block Elements.
- This course will increase maturity to understand intricacies in industrial process such as silicate, Fertilizers,SurfaceCoatings,Batteries,Alloys,Catalysis,Chemical Explosives and glasses.
- This course will also be beneficial for those students who have completed their BSc and are looking for job or entrepreneurship.
- The advantage of the course may be taken by those students who are going to pursue Master's degree in Chemistry and intend to carry out research.
- Overall, this course will benefit student to understand industrial surrounding around us and living leader in the knowledge 'hungry' society.

COURSE PLAN

Week-1

Recapitulation of s- and p-Block Elements -1, Recapitulation of s- and p-Block Elements -2, Recapitulation of s- and p-Block Elements -3, Recapitulation of s- and p-Block Elements -4, Recapitulation of s- and p-Block Elements-5

Week-2

Recapitulation of s- and p-Block Elements-6, Recapitulation of s- and p-Block Elements-7, Recapitulation of s- and p-Block Elements-8, Recapitulation of s- and p-Block Elements-9

Week-3

Silicate Industries-1, Silicate Industries -2, Silicate Industries -3

Week 4

Glasses: History and Development, Glasses: Structural Chemistry, Glasses: Challenges

Week 5

Cement: Development and Manufacturing, Cement: Structural Understanding, Cement: Chemistry Behind Cement

Week-6

Fertilizers- History and Need, Fertilizers – Nitrogeneous, Fertilizers – Phosphatic and Challenges

Week -7

Ferilizers-1
Ferilizers-2

Ferilizers-3

Week-8

Surface Coatings -1
Surface Coatings -2
Surface Coatings -3
Surface Coatings -4

Week-9

Batteries -1
Batteries -2
Batteries -3

Week-10

Alloys-1
Alloys-2
Alloys-3
Alloys-4

Week-11

Catalysis-1
Catalysis-2
Catalysis-3

Week-12

Chemical Explosives
Proctored examination & Final Assessment

ABOUT INSTRUCTOR

Prof. Prasanna S. Ghalsasi

- Postdoc in USA and Japan for nearly 5 years.
- Likes to teach undergraduate chemistry courses.
- Involved in Chemistry and Science Olympiad activity.
- Reviewed four World Edition books from Pearson Publisher in basic chemistry.
- Occupied with undergraduate research activity, recently under aegis of HBCSE, Mumbai (NIUS).
- He is active in research, completed 5 research projects, on molecular materials, especially organic magnets and organic ferroelectrics with 4 PhD students and around 20 MSc dissertations.

Dr. Rajendrasinh Jadeja

- Over 12 years teaching experience.
- Published more than 50 research papers in National and International Journals of repute along with authoring one book.
- Guided 4 PhD. students

PROF. ZAFAR A. RESHI
Professor, Department of Botany,
University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (27/08/2018 to 17/11/2018)
EXAM DATE : 27/11/2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE

The objectives of this course are to acquaint students with:

- The local and geographical distribution and abundance of organisms (habitat niche, community,
- The inter-relationship between organism in population and communities (population ecology).
- Temporal changes in the occurrence, abundance and activities of organisms (seasonal, annual, successional).
- The structural adaptations and functional adjustment of organisms to their physical environment.
- The biological productivity of nature and its relations with mankind.
- ·The conservation and management of natural resources and pollution (applied ecology).

LEARNING OUTCOME

The course "Ecology and Environmental Pollution" is a core course in B.Sc. Botany under the Choice Based Credit System (CBSE). The course has been drawn up to provide the students theoretical understanding of the principles of ecology and also sensitive the students about the global problems of environmental pollution, particularly climate change, acid rain, stratospheric ozone depletion as well the local environmental issues of air, water and soil pollution.

COURSE PLAN

Ecological niche

Atmosphere—composition and stratification, Light—Quality vs quantity (Global radiation budget, PAR), Soil development (weathering and factors influencing soil development), Soil profile, Physical properties of soil (texture and soil structure), Chemical properties of soil (pH and soil nutrient status)

Ion exchange and uptake of nutrients by plants

Morphological and anatomical responses of plants to water, Physiological responses of plants to water stress, Morphological, anatomical and physiological adaptations of plants to light, Morphological, anatomical and physiological responses of plants to salinity, Population characteristics, Presentation of demographic data (life tables, survivorship curves etc.)

Population Regulation

Population Interactions

Community concept

Community characteristics (Analytic and Synthetic), Ecological Succession: Types and concept of climax community, Ecosystem Structure: biotic (food chains, food webs) and abiotic components; ecological pyramids

Primary productivity and factors influencing primary productivity

Energy flow in an autotroph and detritus based ecosystems, Biogeochemical carbon cycle: Forms of carbon; pools and fluxes, Biogeochemical nitrogen cycle: Forms of nitrogen; pools and fluxes; processes that bring about cycling of nitrogen through/across various reservoirs, Biogeochemical phosphorus cycle: Forms of phosphorus; pools and fluxes; processes that bring about cycling of phosphorus through/across various reservoirs, Biogeographic regions of India

Vegetation types of India

Global Warming

Concept of exotic species

Concept of sustainable development Nuclear Pollution

Acid Rain

Ozone depletion

Noise Pollution - I

Noise Pollution – II

Thermal Pollution

Climate Change

Problems in enforcement of environmental legislation

Photochemical Smog

Pollution

case studies – I: Air Pollution and Industrial Disaster

Pollution case studies – II: Water and Soil Pollution

Air Pollution

Water Pollution

Soil Pollution

Marine Pollution

Prevention of pollution

Definition: Genetic, Species and Ecosystem diversity

Value of biodiversity: Consumptive use, productive use, social, ethical and aesthetic and option values

Threats to biodiversity: Habitat loss, poaching of wildlife, man-life conflicts

Biodiversity at Global, national and local level

In-situ Conservation of biodiversity

Ex-situ conservation of biodiversity

Hotspots of biodiversity - I

Hotspots of biodiversity - II

India as a mega diversity nation

Endangered and endemic species of India

ABOUT INSTRUCTOR

- Masters degree in
  Botany, pursued M.Phil and Ph.D in the field on ecosystem ecology and resource management with special focus on alien plant invasions and weeds.
- More than 25 year of teaching experience at post-graduate level.
- Published 130 research papers in journal of international and national repute.
- Supervised more than 30 students for their M.Phil and Ph.D programmes.
- Work has been cited widely by other workers and at present has more than 800 citations with h index of 15 and i10-index of 25.

PHYCOLOGY AND MICROBIOLOGY

DR. SYED WILAYAT RIZVI

Associate Professor in Botany, Higher Education Department,
Government of Jammu and Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (06/08/2018 to 27/10/2018)
EXAM DATE : 27/11/2018
NO OF CREDITS : 4

PRE-REQUISITES : 10+2 with Science background

OBJECTIVE OF COURSE

The objectives of this course are to enable students:

- to seek base line information about microbial word including their metabolism, diversity and classification.
- to know about structural variations, reproduction and life cycles of viruses, viroids, prions, bacteria and algae.
- to learn about the diseases caused by viruses, prions, viroids and pathogenic bacteria.
- gain basic understanding about the significance of viruses in vaccine production, medicine, diagnosis of diseases and other aspects our day to day life.
- to understand the relationship of microbes with our environment at local and global level.

LEARNING OUTCOME

The course "Ecology and Environmental Pollution" is a core course in B.Sc. Botany under the Choice Based Credit System (CBSE). The course has been drawn up to provide the students theoretical understanding of the principles of ecology and also sensitive the students about the global problems of environmental pollution, particularly climate change, acid rain, stratospheric ozone depletion as well the local environmental issues of air, water and soil pollution.

COURSE PLAN

Diversity of Microbes

Microbial nutrition

Microbial growth Microbial metabolism

Economic importance of viruses

Economic importance of Bacteria

Viruses

Viruses: A General Account, Discovery and physiochemical and biological, characteristics of viruses, Classification of viruses (Baltimore)Viruses: general structure, Viroids, Prions, Replication in viruses, Viruses: Lytic and lysogenic cycles, DNA viruses (T-phage), Riboviruses (TMV)

Bacteria

Discovery and general characteristics of Bacteria, Classification of Bacteria, Archaebacteria, Eubacteria and their types, Mycoplasma: General account, Sphaeroplasts, Bacteria: cell structure, Bacteria: Nutritional types Reproduction in Bacteria, Bacterial recombination

Algae

Algae: general characters and classification, Algae: Ecology and distribution, Range of thallus organization in green algae, Cell wall in Algae, Cell structure and components in algae, Pigment system in algae, Reserve food and flagella in algae, Methods of reproduction in algae, Criteria for classification of algae, Significant contributions of phycologists (F.E.Fritsch, G.M. Smith, R.N. Singh, T.N. Desikachary, H.D. Kumar and M.O.P. Iyenger), Role of algae in environment, agriculture, biotechnology and industry / economic importance of Algae

Cyanobacteria / Cyanophyta &Xanthophyta

Ecology, occurrence and range of thallus organization in Cyanobacteria, Cell structure and Reproduction in Cyanobacteria, Nostoc - Morphology and Life cycle, Ecology, occurrence and range of thallus organization in Xanthophyta, Cell structure and Reproduction in Xanthophyta, Vaucheria: Morphology and Life cycle

Chlorophyta and Charophyta

General characteristics of Chlorophyta, Occurrence, thallus organization and cell structure in Chlorophyta, Reproduction in Chlorophyta, Chlymadomonas:Morphology and life cycle, Volvox: Morphology and life cycle, Oedogonium: Morphology and life cycle, Coleochaete: Morphology and life cycle, General characteristics of Charorophyta, Chara: Morphology and life cycle, Evolutionary significance of Prochloron

Phaeophyta and Rhodophyta

General characteristics of Rhodophyta, Occurrence, thallus organization and cell structure in Rhodophyta, Reproduction in Rhodophyta, Ectocarpus: Morphology and life cycle, Fucus: Morphology and life cycle, Polysiphonia: Morphology and life cycle

ABOUT INSTRUCTOR

- Masters in Botany , M.Phil and Ph.D. in Plant Tissue Culture from University of Kashmir
- Developed complete protocol for cloning of Ambri, Golden Delicious, Chambura and Maharaji varieties of Apple (Malus pumila Mill).
- Served in Higher Education Department for more than 23 years and has vast experience in teaching undergraduate and Post graduate students in Botany.
- Published many research papers and some Books in Botany for Undergraduate students.

MOLECULAR BIOLOGY

PROF. BASHIR AHMAD GANAI
Professor (Biochemistry), Centre of Research for Development,
University of Kashmir, Srinagar, J&K

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG
PRE-REQUISITES : 10+2 with knowledge of Science

COURSE DURATION : 12 weeks (30/07/2018 to 20/10/2018)
EXAM DATE : 31/10/2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

The objectives of this course are to give the target students/audience an understanding of:

- Nucleic acids covey Genetic information
- The Structures of DNA and RNA / Genetic Material
- Genome structure, chromatin and the nucleosome
- The Replication of DNA (Prokaryotes and Eukaryotes)
- The Mutability and Repair of DNA
- Mechanism of transcription & RNA modifications
- Translation (Prokaryotes and Eukaryotes)
- Transcription Regulation in Prokaryotes & Eukaryotes, Regulatory RNAs
- Isolation and estimation of genomic DNA/RNA and molecular weight determination and separation of proteins.

LEARNING OUTCOME

- The course "Molecular Biology" is a core course in B.Sc. Medical sciences ad M.Sc Biochemistry, Clinical Biochemistry, Biotechnology. M.ScZoology, M.Sc Bio resource, M.Sc Botany and M.ScMicrobiology under the Choice Based Credit System (CBSE).
- The course is specially designed to supplement and enhance the understanding of students about different dimensions of molecular biology.

COURSE PLAN

Week 1

1.DNA Structure Miescher to Watson and Crick-Historic Perspective, 2.DNA as carrier of Hereditary Information, 3.DNA and different types of DNA, 4.Types of Genetic Material5.Chemistry of DNA Synthesis6.Chromatin Structure: Euchromatin heterochromatin- constitutive and facultative heterochromatin, 7.Regulation of Chromatin Structure, 8.Organisation of DNA- Prokaryotes, Viruses, Eukaryotes9.DNA topology-Linking number and Topoisomerases 10.Eukaryotic Transposable Elements

Week 2

1.RNA Structure, Organelle DNA- Mitochondria and chloroplast DNA, 2.General Principles of DNA Replication, 3.Enzymes involved in DNA Replication, 4.Proteins involved in initiation, elongation and termination of polypeptides, 5.Replication of Linear Double Stranded DNA, 6.Various Models of DNA Replication, 7.DNA Damage Replication Errors and their repair

Week 3

1.Transcription in Eukaryotes, 2.Transcription in Prokaryotes, 3.Principles of Transcriptional Regulation, 4.Transcription regulation in Eukaryotes, 5.Spliceosome machinery and splicing pathways, 6.Gene silencing, Riboswitches, Regulatory RNA , RNA interference, mi RNA and siRNA & X-inactivation, 7.Signal transduction and control of transcriptional regulator, 8.Translation and various steps in protein synthesis, 9.Charging of tRNA, aminoacyl tRNA synthetases, Assembly line of polypeptide synthesis,10.Translation dependent regulation of mRNA and protein stability, 11.Fidelity of translation, inhibitors of protein synthesis and protein targeting

Week 4

1.Agarose Gel Electrophoresis, 2.DNA isolation from E coli (Theory), 3.DNA isolation from E coli (Practical), 4.Estimation of RNA by Orcinol Method, 5.Estimation of DNA by DPA method, 6.SDS-PAGE Practical

ABOUT INSTRUCTOR

- M.Sc (1988), M. Phil and Ph. D Biochemistry from University of Kashmir, Srinagar, J&K.
- Ex-Director, Centre of Research for Development (CORD) & Head, Department of Environmental Science, University of Kashmir, Srinagar since 2013 J&K.
- 23 years of teaching experience in the field of Protein biochemistry/ molecular biology/ Enzymology.

Social Science Courses

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TRENDS AND DYNAMICS OF WORLD POPULATION

DR.ANUPAMA
Professor, Department of Economics,
Punjabi University, Patiala.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (07/09/2018 & 22/10/2018)
EXAM DATE : 06-11-2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE

- To acquaint the students with the profile of world population.
- To discuss in detail about the population distribution among different parts of the world.
- To throw light on major issues like family planning, aging and health care.
- To know the condition of labour force and labour markets across the world.

LEARNING OUTCOME

The modules of this course aim at answering the following questions in a comprehensive manner.
What are the main features of world population?
How population is distributed in developed and developing countries?
What are the main trends and conflicts in world population?
What are the major components of African population?
What is the mechanism of labour market in Asia and Africa?

COURSE PLAN

Week I

Profile of World Population

World Population and Demographic Dynamics

Population Distribution in Developed World

Population Distribution in The Developing World

Week II

Population Trends in the Developed World

Population Trends in the Developing World

Demographic Transition and Conflicts

Age Structure in Developed and Developing Countries

Week III

Trends in Life Expectancy

Labour Force in United States: Trends

Sexual and Reproductive Health in Africa

Family Planning in Africa

Week IV

Population Aging in America

Population Trends and Challenges in China

Aging in China

International Experiences of Demographic Dividend

Week V

Demographic Dividend in Africa

Labour Markets in Africa

Job Quality and Labour Market in Africa

Week VI

Dimension of Labour Market Inequalities in Africa

Labour Markets and Coping Mechanisms in Africa

Demographic Profile of Asia

ABOUT INSTRUCTOR

- Working as professor in the Department of Economics, Punjabi University, Patiala.
- Delivered more than 30 educational videos in the subject of population studies for UGC and MHRD sponsored higher educational channels.
- Attended a great number of national and international conferences and seminars.

POPULATION, ENVIRONMENT AND DEVELOPMENT

DR.ANUPAMA
Professor, Department of Economics,
Punjabi University, Patiala.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (07/09/2018 & 22/10/2018)
EXAM DATE : 06-11-2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE

- To understand the relationship between population, environment and development.
- To discuss the existing population policies across the world.
- To address all the major environmental and climate related issues.
- To know the role of gender related issues in relation to population, environment and development.

LEARNING OUTCOME

After going through this course students shall be able to understand that how with globalization, and new and emerging technologies and modes of production and consumption, the relationships among population, environment and development have become issues of heightened concern for governments, the international community and the average citizen. Environmental stress is a matter not just of population change, but also of how and what people produce and consume now and in the future.

COURSE PLAN

Week I

Population and Issues of Aged population

Population and Issues Concerning Youth

Population Policies in Developed Countries

Population Policies in Developing Countries

Week II

Concepts of Population Dynamics and Climate Change Adaptation

Population and Climate Change and Understanding Impacts of Climate Change

Population and Land Degradation

Population and Water Scarcity

Week III

Population Growth and Bio-Diversity

Climate-related Disasters and Displacement

Population, Climate and Health

Population Dynamics and Policies in the Context of Global Climate Change

Week IV

Demography of Adaptation to Climate Change

Population Dynamics and Climate Change Adaptation Policy

Population, Gender and Climate Change

Women and Climate Change

Week V

Youth and Climate Change

Children and Climate Change

Children, Environment and Health

Population and Reproductive Health in National Adaptation Programmes of Action (NAPAs) for Climate Change

Week VI

Climate Change and Gender Equality and Adaptation Plans

Gender Mainstreaming and Water Resource Management

Gender Dimensions of Environmental Policies and Programs

Gender, Environment and Inclusive Growth

ABOUT INSTRUCTOR

- Course Coordinator of this course.
- One of the respected names in the field of population studies.
- Working as professor in the department of economics, Punjabi university, Patiala.
- Delivered more than 30 educational videos in the subject of population studies for UGC and MHRD sponsored higher educational channels.
- She has attended a great number of national and international conferences and seminars.

CONCEPTS AND THEORIES OF POPULATION

DR.GURINDER KAUR
Professor, Department of Geography,
Punjabi University, Patiala.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (07/09/2018 & 22/10/2018)
EXAM DATE : 06-11-2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE

- To acquaint the students with the diffrent Concepts and Theories of Population proposed by different experts.
- To enable the students to understand that population limitation can facilitate the development of a higher quality of life in the nation.
- To give accurate information to the students about the effect of changes in family size and in national population on the individual.
- To understand a broad definition of health, Human Rights, Religion, Mortality and food security.

LEARNING OUTCOME

After going throw this course students shall be able to know about the different Concept and Theories of Population. After the accomplishment of the course –

1. Students will be able to convey about the concepts of Population.
2. Learners will understand meaning and scope of demography.
3. Students will have an appraisal the different theories of population i.e. Malthusian, Optimum, Leibenstein etc.
4. They will come to know the role of Mortality, Migration, Fertility, Religion, Climate, Bio Diversity, Climate and other perspectives of population.
5. Learners will understand the Relationship between problems and resources of population.

COURSE PLAN

Week I

Meaning and Scope of Demography

Malthusian Theory of Population.

Optimum Theory of Population

Leibenstein's Theory of Population

Week II

Theory of Demographic Transition

Population Growth in Developed World

Population Growth in the Developing World

Population Change and Demographic Dynamics

Week III

Population Explosion and Population Implosion

Components of Population Change: Fertility

Components of Population Change: Mortality

Components of Population Change: Migration

Week IV

Causes and Consequences of Changes in Population Growth

Causes and Consequences of Changes in Fertility

Causes and Consequences of Changes in Mortality

The Concept of Population Control

Week V

Techniques of Population Control

Religion and Population Control

Morality and Population Control

Human Rights and Population

Week VI

Reproductive Rights and Population

Right to Abortion: Different Perspectives

Population and Food Security

Population, Gender and Climate Change

ABOUT INSTRUCTOR

- Course Coordinator of this course.
- One of the respected names in the field of population studies and geography.
- Working as professor in the department of geography, Punjabi university, Patiala.
- Delivered more than 20 educational videos in the subject of population studies for UGC and MHRD sponsored higher educational channels.
- Attended a great number of national and international conferences and seminars.

RESEARCH METHODS IN POPULATION STUDIES

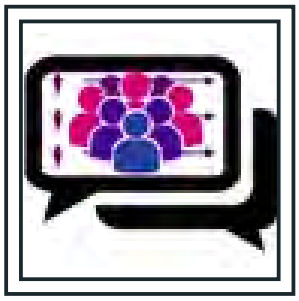
DR.GURINDER KAUR
Professor, Department of Geography,
Punjabi University, Patiala.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (07/09/2018 & 22/10/2018)
EXAM DATE : 16/11/2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE



- To discuss the basic statistics for demographic analysis
- To acquaint the students with all the eseential statistical tools and techniques and methods of data collection.
- To throw light on the conceptual models and practical aspects of different research designs.
- To understand the importance of all the steps in a research process and their relevance and implication in population studies

LEARNING OUTCOME

After going throw this course students shall be able to know about the different research methods in population studies. After the accomplishment of the course -

1. Students will be able to comprehend basic mathematics applied in population research.
2. Learners will understand different measures of statistics used in population studies.
3. Students will have a good knowledge about conceptual models of population research.
4. They will come to know about tools and techniques applied in population research.
5. Learners will understand how to produce effective results from population data by using various methods of research.

COURSE PLAN

Week I

Basic Mathematics for Demographic Analysis

Basic Statistics for Demographic Analysis

Calculation of Indicators of Population Growth and Distribution

Measures of Statistical Averages

Week II

Measures of Variance

Measures of Correlation

Measures of Regression

Concepts and Methods of Population Analysis

Week III

Methods of Quantitative Data Collection

Population Age-Structure and Growth

Population Projections

Understanding and Interpretation of Demographic Data

Week IV

Methods of Population Analysis

Methods and Techniques of Population Research

Conceptual Models for Effective Designing and Planning of Population Research

Conceptual Models for Effective Conduct of Population Research

Week V

Practical Aspects of Population Research Design

Effective Steps in Conducting Population Research

Integration of Concepts and Project Development

Research Skills: Research Design and Literature Review

Week VI

Research Skills: Plagiarism and Research Ethics

Sampling and Census Methods for Population Research

Questionnaire and Schedules for Population Research

Population Data Collection and Analysis

ABOUT INSTRUCTOR

- Course Coordinator of this course.
- One of the respected names in the field of population studies and geography.
- Working as professor in the department of geography, Punjabi university, Patiala.
- Delivered more than 20 educational videos in the subject of population studies for UGC and MHRD sponsored higher educational channels.
- Attended a great number of national and international conferences and seminars.

FUNDAMENTALS OF ANTHROPOLOGY

PROF. S. JIBONKUMAR SINGH
Professor, Department of Anthropology,
Manipur University

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School and also Minimum 10 + 2 any stream with sufficiently good academic record.
COURSE DURATION : 12 weeks (02/07/2018 to 22/09/2018)
EXAM DATE : 13/12/2018
NO OF CREDITS : 4
PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

- To understand the basic knowledge of anthropology
- its aims & scope of biological anthropology, socio-cultural anthropology, prehistoric culture and language

LEARNING OUTCOME

After the completion of the course, students will be able to understand the basic knowledge of anthropology, its aims & scope of biological anthropology, socio-cultural anthropology, prehistoric culture and language and also should also be able to develop research questions and design research proposal. The participants of the present course will also help in understanding the applications of anthropology in different aspects of human society.

COURSE PLAN

Week 01:

1.Meaning and Scope of Anthropology, 2. History of Anthropology, 3. Growth of Anthropology, 4. Modern Trends of Anthropology

Week 02:

1. Cultural Evolution: Broad Outline of Prehistoric Cultures, 2. General Studies on Material Culture of Prehistoric and Preliterate People, 3. Studies on habitat and Economy of Prehistoric/Preliterate Societies

Week 03:

1. Branches of Anthropology, 2. General Scope & Uses of Physical/Biological Anthropology, 3. General Scope and use of Social-Cultural Anthropology, 4. Fundamentals in Archaeological Anthropology: Chronology

Week 04:

1. Speech, Language and Dialect, 2. Sociolinguistics, 3. Semantics and Lexicon, 4. Morphemics and Syntax, 5. Phonetics and Phonemics

Week 05:

1. Relationship with Life Sciences, Earth Sciences, Medical Sciences, Environmental Sciences, 2. Relationship with History, Sociology, Economics, Social Psychology and Political Sciences, 3. Relationship with Social Sciences, 4. Relationship with Humanities, Literature

Week 06:

1. Research Methods: Tools and Techniques, 2. Fieldwork Tradition in Anthropology, Pilot Survey, 3. Participant observation, schedule and questionnaire and case study, 4. Interview and genealogical Method of data collection

Week 07:

1. Statistics –Universe and Sample: Random and non-random sampling

2. Raw and array data; Variable (quantitative and qualitative, discrete and continuous)

3. Frequency distribution (Mean, Median and Mode)

4. Measures of Dispersion (Range, standard deviation, standard error)

5. Graphic presentation (histogram, polygon and pie chart)

Week 08:

1. Introduction to Report writing, 2. Steps of report writing, 3. Structure of a report, 4. Footnote, reference, bibliography and appendix

Week 09:

1. Concept and scope of Applied Anthropology, 2. Concept and Scope of Action Anthropology, 3. Concept and Scope of Development Anthropology

Week 10:

1. Anthropometry in the field work, 2. General account of the field site

3. Census Survey, 4. Material culture of the Tangkhul (Based on the Anthropological field work)

Week 11:

Interactions on topics discussed on 1st to 5th week.

Week 12:

Interactions on topics discussed on 6th to 10th week.

ABOUT INSTRUCTOR

- Teaching experience of 30 years (8 eight years-undergraduate, 22 years-postgraduate).
- Research experience of 23 years research experience,
- presently guiding 6 (six) research scholars, produced 8 (eight) Ph.D. Degrees,
- Completed 4 (four) research projects and 2(two) continuing.
- Published numerous articles and books and attended many international and National conferences.

INTRODUCTION TO PHYSICAL ANTHROPOLOGY

PROF. S. JIBONKUMAR SINGH
Professor, Department of Anthropology, Manipur University

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 14 weeks (24/09/2018 to 27/12/2018)
EXAM DATE : 15/02/2019 (tentative)
NO OF CREDITS : 5

PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

- To understand the basic knowledge of physical anthropology,
- its aims, scope of physical anthropology and its relationship with allied disciplines

LEARNING OUTCOME

1. After studying this course, students will be able to understand the basic knowledge of physical anthropology, its aims, scope of physical anthropology and its relationship with allied disciplines.
2. Students will be able to answer the different theories of evolution and they should understand how human evolution occurred; what are the relationship between non-human primates and human.
3. Students will also be able to explain why human variation occurred and what could be the possible associated factors for it; division of human into different groups on the basis of variation; and classification of human into different categories biologically.
4. Moreover, after the completion of the course students will be able to take various somatometric measurements and somatoscopic observation on human subjects.

COURSE PLAN

Week 01:

1. Definition and Scope of Physical Anthropology; 2. Relationship of Physical Anthropology with other Branches of Anthropology; 3. Relationship of Physical Anthropology with other fields - Biology, Demography, Ecology and Forensic Sciences

Week 02:

1. Theories of Special Creation and Catastrophism, 2. Organic Evolution: Lamarckism, Darwinism, 3.Neo-Lamarckism and Neo-Darwinism

Week 03:

1. Evolution of Man, 2. Ramapithecus (Ramapithecus bevirostris), 3. Australopithecus Africanus, 4.Homo erectus (Pithecanthropus erectus)

Week 04:

1.Human Skeleton: Classification and Anatomical Features, 2.Skeletal Changes due to assumption of erect posture – Skull, Vertebral Column, 3.Skeletal Changes due to assumption of erect posture – Pelvic Girdle and Foot

Week 05:

1. Classification of Order Primates; 2. Salient Characteristics of the Order Primates; 3. Characters and Distribution of Anthropoid Apes

Week 06:

1. Human Growth and Development; 2. Different stages of life and Growth and Development; 3. Methods in growth studies; 4. Factors Affecting growth

Week 07:

1. Human genetics and its history and development; 2. Theories of inheritance: Man as an object of Genetical study, Laws of Heredity Mendel's principles; 3. Human Chromosome Compliment; 4. Cell Division: Mitotic and Meiosis; 5. Simple Single Factor inheritance in Man; 6. Multiple allelism and polygenic inheritance

Week 08:

1. Concept of Race and the UNESCO Statement of Race; 2. Racial Criteria (Stature, Skin Colour, Hair, Eye, Head, Nose and Face); 3. Major racial groups of the world and their characteristics; 4. Human variation: ABO, Rh and dermatoglyphics

Week 09:

1. Identification of Instruments: Spreading Caliper, Spreading Caliper (Blunt & Pointed) Anthropometer, 2. Identification of Instruments: Rod Compass, Tubular Craniophore, Cubic Craniophore & Diagraph

Week 10:

1. Anthropometry, 2. Cephalometry, 3. Anthropometric Indices: Cephalic Index, Total Facial Index and Body Mass Index, 4. Somatoscopic observation

Week 11:

1. Drawing & Description of Skull; 2. Drawing & Description of Girdle Bones: Clavicle, Scapula, Pelvic and Girdle; 3. Drawing & Description of Limb Bones: Humerus, Radius, Ulna, Femur, Tibia & Fibula

Week 12:

1. Osteometric measurements on Scapula, 2. Osteometric measurements on Humerus, 3.Osteometric measurements on Femur

Week 13:

1. Craniometry, 2. Direct Linear Measurements: Maximum Cranial Length, Maximum Cranial Breadth, Least frontal Breadth, 3. Direct Linear Measurements: Nasal Height, Nasal Breadth, Bizygomatic Distance, Bigonial Distance Length of Foramen Magnum, Cranial Index, Nasal Index, 4. Angular Measurements: Metopic angle and nasal profile angle.

Week 14:

1. Finger Pattern Types (Henry Classification), total Ridge Count, 2. Pattern Intensity index, Dankmeijer index and Furuhata's index, Mainline formula and Mainlikne index. 3.Serology: ABO and Rh(D) blood group system; 4. Human Physiology: Pulse rate and blood pressure

ABOUT INSTRUCTOR

- Teaching experience of 30 years (8 eight years-undergraduate, 22 years-postgraduate).
- Research experience of 23 years research experience,
- Presently guiding 6 (six) research scholars, produced 8 (eight) Ph.D. Degrees,
- Completed 4 (four) research projects and 2(two) continuing.
- Published numerous articles and books and attended many international and National conferences.

SOCIAL AND CULTURAL ANTHROPOLOGY

DR. TH. RABIKANTA SINGH
Associate Professor, P.G. Department of Anthropology, D. M. College of Science,
D. M. University, Imphal

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 12 weeks (02/07/2018 to 22/09/2018)
EXAM DATE : 14/12/2018 (tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

- It is concerned with culture which makes man unique among living creatures through learned behaviour per se, whether it belongs to the primitive men or city dwellers.
- to acquire a thorough knowledge of socio-cultural aspects of human and changes occurring in society and culture.
- to understand the ethnographic works with some examples.
- to know anthropology in Indian context

LEARNING OUTCOME

After learning the course the students will be able to understand-

- the concept and scope of social and cultural anthropology.
- the intra and inter relationship of social and cultural sub-discipline of Anthropology with the other sub-disciplines of the subject as well as with other allied sciences.

COURSE PLAN

Week 01:

1. Concept and Scope of Social Culture Anthropology, 2. Social & Cultural Anthropology: Relationship of Social & Cultural Anthropology with History, Economics & Psychology, 3. Relationship of Social and Cultural Anthropology with Political Science, Linguistics and Sociology

Week 02:

1. Theories of Social & Cultural Anthropology, 2. Evolutionism, 3. Neo-evolutionism, 4. Diffusionism

Week 03:

1. Concept of Society, 2. Social groups- Primary, Secondary and Tertiary, 3. Communities- Rural and Urban, 4. Society and Culture

Week 04:

1. Kinship: Types of Kinship, Affinal and Consanguinal, 2. Kin group – Lineage, Clan, Phatry and Moiety, 3. Kinship Terminology and its usages

Week 05:

1. Family: Definition, Types of family, 2. Functions of Family, 3. Marriage: Definition and forms of Marriage,4. Preferential and Prescriptive Marriage

5. Ways of acquiring mates, Hypergamy and Hypogamy

Week 06:

1. Polity- State and Stateless societies, forms of Government and Law, 2. Economy- Definition, Kula and Potlach

Week 07:

1. Religion: Definition and Characteristics, 2. Forms of primitive Religion, 3. Rites and ritual: Rites De Passage, 4. Specialist- Shaman, Priest, Divination

Week 08:

1. Social Change: Meaning, Factors of Social Change, 2. Theories of Social Change, 3. Assimilation and Acculturation , 4. Enculturation/Socialization

Week 09:

1. Ethnographic Account of Nuer, 2. The Purum social organization, 3. The Material Culture of the Onges, 4. Ethnographic Accounts of the Chin, 5. The Khasi Social Organisation

Week 10:

1. Indian Anthropology – growth and development, 2. Profile of Indian Tribes

3. Land Alienation, Shifting Cultivation, Constitutional Safeguards

Week 11:

1. Concepts used in civilization studies in India: Sanskritization, Parochialization, Universalization and Globalization, 2. Concepts used in Indian Anthropology: sacred complex, great and little tradition, caste tribe continuum, 3. Indian Caste System

Week 12:

Interactions with the students

ABOUT INSTRUCTOR

- Teaching experience of 22 years in UG and 11 years in PG classes.
- Guided three Ph. D. scholars under two universities and supervised two scholars under Tribal Research Institute, Govt. of Manipur.
- Completed various projects namely- Tribal Profile of Manipur under Directorate of Tribal and Backward Classes, Govt. of Manipur. 1998.
- Published a book entitled Pottery in Manipur in 1999 and also a Co-writer for text book in Anthropology for XII standard under Council of Higher Secondary, Manipur.
- An editorial member of Frontier Anthropology – an annual journal of Anthropological Society of Manipur.

SOCIOLOGY OF TRIBAL SOCIETY

DR. ROOPA RAVIKUMAR
Associate Professor, Department of Social Sciences,
Lady Doak College, Madurai

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 7 weeks (09/07/2018 to 24/08/2018)
EXAM DATE : 19/11/2018 (tentative)
NO OF CREDITS : 2

PRE-REQUISITES : Should have completed higher secondary.

OBJECTIVE OF COURSE

- To have a basic idea on the geographical distribution of tribal population in India.
- To understand and explore the tribal culture.
- To critically analyze the problems faced by the tribal population.
- To create interest in students to do research on tribal issues.

LEARNING OUTCOME

At the end of the course the student will be able to gain awareness of the various classification of tribal communities and Be familiar with the problems of tribes and enable them to research on various tribal issues.

COURSE PLAN

Week 01

1.Need for the study of tribal society

2.Nature and characteristics of tribal society

3.Tribes and castes in India

4.Formation of Tribal Status

Week 02

5.Ethnic and cultural diversity

6.Classification of tribal people- Nomads, Pastoral and Artisans

7.Classification of tribal people – shifting cultivators, peasants and agriculturists

8.Classification of tribal people- food gatherers and hunters

9.Tribes of India- Demographic Profile 1 and Profile II

Week 03

10. Characteristics features of tribal society- kinship, marriage and family

11. Tribes of India/status of women, marriage and education

12. Health and life expectancy of tribal people

Week 04

13. Tribal language

14. Religious beliefs, practices and cultural traditions

15. Poverty and illiteracy

Week 05

16. Indebtedness, land alienation, agrarian interests

17. Exploitations and other problems

18. Hinduisation and Sanskritisation

Week 06

19. The impact of colonial rule in tribal society

20. Colonial

21. Post-Independence scenario and tribal development

Week 07

22. Post independent period

23. Tribal communities of state/ religion

24. Tribal integration and identity

ABOUT INSTRUCTOR

- Apassionate and committed professor of Sociology with
- 25 years of teaching experience.
- Expert in dealing with vulnerable communities like the Tribals, transgender and the elderly people.
- Attended many international and National conferences and seminars.

FUNDAMENTALS OF RURAL SOCIOLOGY AND EDUCATIONAL PSYCHOLOGY

DR. HOMEN THANGJAM
Dept. of Political Science & Human Rights, Indira Gandhi National Tribal University
Regional Campus Manipur University

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 12 weeks (24/09/2018 to 21/12/2018)
EXAM DATE : 07/03/2019 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

- This is a multi-disciplinary subject with the sole objective of improving the agricultural practices as well as the well-being of the farmers in the rural areas.
- To understand complex social structures, culture and value system of the rural life, while at the same time the person engaged as an extension worker has to be well equipped with latest developments in the field of agriculture
- Finally transact the suitable knowledge/technology in the most effective manner to the rural stakeholders.

LEARNING OUTCOME

1. After studying this course, students will be able to understand the basic knowledge of agricultural extension, fundamentals of rural sociology and educational psychology, fundamentals of psychology and educational psychology and extension methodology for transfer of agricultural technology.
2. Students will be able to understand the reality of the Indian rural societies, social structures, culture and social values of the rural societies, and how these affect agricultural practices in India.
3. Students will be exposed to the importance of psychology and educational psychology in agricultural extension specially the role of intelligence, personality, motivation and principles of learning.
4. Students will be equipped with methodologies of extension for transfer of agricultural technology to the farmers. As communication plays an important role in the transfer of agricultural technology, special focus is given to understanding the concept of communication, its types and how to develop individual contact methods.
5. As Practical/field visit is the added in the course. Students will be given the opportunity to apply theoretical knowledge learnt in the classes to the real agricultural life of India.
6. After the completion of the course, students will be have the knowledge of agricultural extension and prepared to be an extension worker. The knowledge and skill so acquired during the course can be meaningfully utilised to improve not only the agricultural practices in India but also uplift the living standard of the people living in rural India.

COURSE PLAN

Week 01:

1. Sociology and Rural sociology, extension education, agricultural extension – meaning and definitions. 2. Importance of rural sociology in agricultural extension and their interrelationship. 3. Characteristics of Indian rural society – differences and relationships between rural and urban societies. 4. Social group(s) – classification – formation and organization of groups and role of social groups in agricultural extension 5. Social stratification – meaning – forms – class system and caste system.

Week 02:

1. Culture and different cultural concepts and their role in agricultural extension. 2. Social values, social control and attitudes – types and their role in agricultural extension 3. Leadership – meaning – classification of leaders – roles of a leader and different methods in selection of a leader. 4. Training of leaders – lay and professional leaders 5. Leadership and agents of agricultural extension

Week 03:

1. Psychology and Educational Psychology – meaning – scope and importance. 2. Intelligence – meaning – types – factors and importance in agricultural extension. 3. Personality – meaning – types – factors and importance in agricultural extension. 4. Perception, emotions and frustration – meaning – types – factors and importance in agricultural extension.

Week 04:

1. Motivation – meaning – types of motives – theories of motivation and importance of motivation in agricultural extension. 2. Teaching, learning, learning experience and learning situation – meaning and definition – elements of learning situation and its characteristics. 3. Principles of learning and their implications in teaching – steps in extension teaching

Week 05:

1. Communication – definition, models of communication process, 2. Elements of communication and their characteristics, 3. Types of communication - Verbal and non-verbal; functions, 4. Some concepts relating to communication

Week 06:

1. Extension teaching method – definition – functions and classification, 2.Individual contact methods: Farm and home visit, 3 Group contact methods: Method demonstration

4. Group discussion – meaning – purposes – procedure

Week 07:

1. Mass contact methods: Campaign – meaning – objectives – procedure advantages and limitations, 2. Radio – meaning – purposes – advantages and limitations, 3. Information Sources: Internet-Meaning-Purposes-Benefits and Limitations

Week 08:

1. Call centres – Farmers Call Centre in Manipur and Kisan Call Centres, 2. Adoption - Diffusion – Innovation, 3. Innovation decision process – meaning– stages – concepts of dissonance and rejection, 4. Factors influencing adoption process – social, personal and situational, 5. Farmers' Training Centre (FTC) – objectives and trainings organized

Week 09:

1. Visit to a village to list out the taboos, folkways, rituals and social values in the Village. 2. Administering psychological tests by students to assess the personality types of human beings. 3. Conducting role play technique by the students to exhibit different leadership styles.

Week 10:

1. Exercise to create a learning situation under village conditions for a specific teaching activity. 2. Exercise on training need assessment of farmers of a village. 3. Visit to a village for conducting a training programme. 4. Exercise on identification of potential agricultural technologies for enterprises.

Week 11:

Interactions on topics discussed on 1st to 5th week

Week 12:

Interactions on topics discussed on 6th to 10th week.

ABOUT INSTRUCTOR

- Completed his Ph.D. from Jawaharlal Nehru University, New Delhi
- JRF/ NET qualified
- 10 years of teaching experience
- Project Manager of the project entitled Strategic Analysis from 2006-2009.
- Published many articles and edited many journals.

PRINCIPLES OF SOCIOLOGY

DR. B. NALINI
Professor Emeritus UGC, ICSSR Senior Fellow, Dept. of Sociology
Madurai Kamaraj University

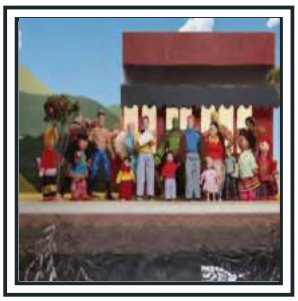
TYPE OF COURSE : Certificate
INTENDED AUDIENCE : UG

COURSE DURATION : 17 weeks (09/07/2018 to 31/10/2018)
EXAM DATE : 05/12/2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : ·Should have completed higher secondary. Should possess a basic thirst to know the functioning of society, have interest in gaining knowledge of social life.

OBJECTIVE OF COURSE

- To enable the students to understand the society and social relationships.
- To help the learners to acquire knowledge of human personality and social expectations.
- To enable the learners to equip themselves for Civil service exams.



LEARNING OUTCOME

- ·On completion of the course the learner will get a clear picture of the social system in which they live and could develop a better social relationship.
- The students will realize the importance of each and every social unit, custom and institutions and will try to adhere to the social expectations.

COURSE PLAN

Week 01 Unit -1 Introduction to sociology

1.Definitions, subject matter and important concepts, 2.Sociology as a Science and its relation to other social sciences-I, 3. Sociology as a Science and its relation to other Social Sciences-II

Week 02 Unit -2 - Approaches

4.Sociological methods and approaches-Part I, 5.Sociological methods and approaches-Part II, 6.The role of sociologists in Society

Week 03 Unit-3 Culture & Civilization

7.Definition of culture and civilianization, 8. Concepts relating to culture, 9. Concepts relating to culture and civilization

Week 04 Unit-4 Social Groups & Process

10. Social Groups-I, 11. Social Groups-II, 12. Social Process-I, 13. Social Process-II

Week 05 Unit5- Social Institutions-Part-1

14.Family as social institution, 15.Marriage as social institution, 16. Kinship as social institution

Week 06 Unit6- Social Institutions =Part 2

17.Religion as social institution, 18.Political system as social institution, 19.Economic and educationa system as social institution

Week 07 Unit7-Sociology of family

20.Sociology of Family, 21.Definition & types of family-nuclear family

22.Definition and types of family-joint Matrilineal and Matrilineal, 23.Family structure and composition

Week 08 Unit8-Sociology of Kinship-Basics

24.Sociology of Kinship, 25.Kinship structure and function, 26. Nature and significance of Kinship

Week 09 Unit9- Rules of Marriage

27.Rules of Marriage- endogamy, exogamy and others, 28. Preferential marriages, 29. Taboos in Marriages

Week 10 Unit 10 Types of Marriage

30. Types of marriage (monogamy, polygamy), 31.Types of marriage (levirate, sororate), 32.Types of marriage (Hypo gamy, hyper gamy)

Week 11 Unit 11-Socialization - Definitions and stages

33. Socialization – Definition and types, 34. Stages of socialization, 35. Development of Self

Week 12 Unit 12 Socialization Agencies & Development

36.Theories of socialization, 37. Agencies of socialization-I, 38. Agencies of Socialization – II

Week 13 Unit 13 Social stratification- Definition & Theories

39.Social Stratification- Definition & Characteristics, 40.Theories of Social Stratification-I, 41.Theories of Social Stratification-II, 42.Caste & class as a form of social stratification

Week 14 Unit-14 Social control

43.Social control, 44.Agencies of social control, 45.Social control-current scenario-I, 46.Social control – current scenario-II

Week 15 Unit 15 Social change - Basics

47.Social change- Introduction, 48.Forms of social change, 49.Factors stimulating social change

Week 16 Unit 16 Social Change

50. Theories of social change, 51. Westernization & Globalization

Week 17

52.Social change in India

ABOUT INSTRUCTOR

- Teaching Experience of 30 years
- Specialised in Sociology of Health, Sociology of Modernisation, Family & Kinship.
- Published 5 books and numerous articles in National and International journals.
- Visited many countries to attend conferences and workshops.
- Organised many conferences and workshops.

HUMAN RIGHTS AND HUMANITARIAN LAW

DR. N. PRAMOD SINGH
Associate Professor, L.M.S Law College, Imphal Manipur

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 12 weeks (24/09/2018 to 13/12/2018)
EXAM DATE : 8/03/2019 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

To understand the importance of human rights and humanitarian rules, especially for safeguarding the basic rights and freedoms of individuals in the conflict situation, The national humanitarian rules and agencies along with their role and functions have been cited comprehensively in this course

LEARNING OUTCOME

- Familiarize with the relationship of Human Rights with the U.N.
- Understand the background and significance of Universal Declaration of Human Rights.
- Familiarize with the various International Covenants.
- Explore the specialized Human Rights Instruments of U.N.
- Understand the basic Principle of International Humanitarian Law
- Understand the Role of UN in solving the Problems of Refugees.

COURSE PLAN

Week 01:

1. U.N. Human Rights under the UN Charter, 2. U.N. General Assembly

3. Economic and Social Council (ECOSOC), 4. U.N. Human Rights Commission, 5. U.N. Human Rights Council, 6. U.N. Trusteeship Council, 7. U.N. Special Rapporteurs, 8. Universal Periodic Review

Week 02:

1. Background for adoption of UDHR, 2.Significance of UDHR

Week 03:

1. Background for adoption of ICCPR, 2. Contents of ICCPR, 3. Implementation mechanism and procedure under ICCPR, 4. Significance of reporting procedure under ICCPR

Week 04:

1. Background for adopting the International Covenant on Economic, Social and Cultural Rights (ICESCR), 2. Contents of ICESCR, 3. Implementation mechanisms and procedure under ICESCR, 4. Significance of reporting procedure under ICESCR

Week 05:

1. Convention on prevention and punishment of crimes and genocide,1951, 2. International conventions on the Elimination of all forms of Racial Discrimination, 1969, 3. Convention on the Elimination of all forms of Discrimination Against Women, 1979, 4. Convention on the Rights of the Child, 1989.

Week 06:

1. Historical background of evolution of International Humanitarian Law (a) Temporary Tribunal, ICTY, ICTR, Rome Treaty, ICC (b) Customary International Humanitarian Law, 2. Adoption of old Geneva Conventions on International Humanitarian Law (1864), 3. Adoption of Hague Convention on International Humanitarian Law (1899 &1907), 4. Adoption of UN Convention on International Humanitarian Law (1949), 5. Adoption of Geneva protocols on International Humanitarian Law (1977)

Week 07:

1. Protection of Sick and wounded Soldier during war and armed conflict. 2. Protection of unarmed civilian and their objects, 3. Prohibition of use of weapons and methods of warfare. 4. Protection of prisoners of war and civilians under custody. 5. Role of Humanitarian agencies under International Humanitarian Law (ICRC)

Week 08:

1. Background for enactment of Geneva Convention Act, 1960, 2. Basic principles of Act of 1960, 3. Evaluation of the activities of the National Red Cross Society and other national humanitarian agencies.

Week 09:

1. Meaning and definition of displaced persons, 2.Issues of displaced persons and their protection under International Law.

Week 10:

1. Refugee problems and UN, 2. Role of the UNHCR for protection of refugee

Week 11:

Interactions on topics discussed on 1st to 5th week

Week 12:

Interactions on topics discussed on 6th to 10th **week.**

ABOUT INSTRUCTOR

- Teaching experience of 20 years. His specialized in Jurisprudence, Constitutional Law, Adm. Law, Human Rights and International Humanitarian Law.
- Actively involved in disseminating Human Rights Education in Various part of India.
- Published 3 books (Global Justice & Rule of Law, Human Rights In Manipur, Constitutional Governance and Legal Institution) and has contributed many book chapters and research Articles
- Supervised 3 PhD Research Scholars under his guidance.

HUMAN RIGHTS IN INDIA

DR. N. PRAMOD SINGH
Associate Professor, L.M.S Law College, Imphal Manipur

TYPE OF COURSE : Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School
COURSE DURATION : 12 weeks (02/07/2018 to 22/09/2018)
EXAM DATE : 12/12/2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course

OBJECTIVE OF COURSE

- This is an introduction to the concept of Human Rights in general with reference to human rights in India especially in North-eastern India.
- To understand the relevant provisions of human rights those are enshrined in the constitution. As such, the preamble to the constitution promises to secure to all the people of India- right to life, liberty, belief, faith, worship, equality of status and opportunity among others.
- The course deals with the root causes of violations of human rights of individuals, especially with reference to North east India.

LEARNING OUTCOME

After studying this course, the students/learners will be able to:

- Familiarize with the concept of Human Rights in India.
- Understand the Constitutional Provisions of Human Rights.
- Familiarize with the statutory provisions of Human Rights and role of other statutory commissions.
- Explore the causes of Human Rights Violation in North East India.
- Understand the Human rights of women and children.
- Understand the Role of Human Rights NGOs in North East India

COURSE PLAN

Week 01:

1. Human Rights movement during Indian freedom struggle. 2. Civil and Political Rights Movements Social, economic and educational Rights Movements

Week 02:

1. Rights to equality (Article 14-18), 2. Right to freedom (Article 19-22), 3. Right against exploitation (Article 23-24), 4. Right to freedom of religion (Article 25-28). 5. Cultural and educational right (Article 29-30). 6. Right to Constitutional Remedies (Article 32-35)

Week 03:

1. Nature and scope of Directive Principles of State Policy. 2. Justiciability of Economic and Social Cultural rights. 3. Relations between fundamental rights and Directive Principles of State Policy. 4. National and International obligation of India under Directive Principles of State policy

Week 04:

1. Background for Protection of Human Rights Act, 1993. 2. Human Rights Court under Protection of Human Rights Act, 1993. 3. Powers and Functions of National Human Rights Commission. 4. Powers Functions of State Human Rights Commission

Week 05:

1. National Commission on Minorities. 2. National Commission on Schedule Caste and Schedule Tribes. 3. National Commission on Other Backward Class.

4. National Commission for protection of Child Rights

Week 06:

1. Socio-Economic development and Human Rights. 2. Insurgency problems and Human Rights violation in North East. 3. Human Right and AFSPA, 1958

4. Institutional (National & International) responses to AFSPA.

Week 07:

1. Arbitrary arrest and detention of citizen. 2. Custodial crimes. 3. Enforced disappearance. 4. Extra Judicial Killing

Week 08:

1. Causes and Consequences to atrocities against women and children. 2. Women and children trafficking in North East India. 3. Torture, Rape and killing women and children 4. Problems of child labour

Week 09:

1. Protection of Rights of women and Children living with HIV/AIDS under the Indian Laws. 2. Protection of Rights of women and children living with HIV/AIDS under the International Laws. 3. Government responses to promote and protection of Rights of Women and Children living with HIV/AIDS. 4. Voluntary organisation and NGOs responses to promotion and protection of Rights of women and Children living with HIV/ AIDS.

Week 10:

1. Role of NGOs and protection of civil and political rights of citizen. 2. Human Rights Education and Role of NGOs. 3. Human Rights NGOs and statutory bodies. 4. Human Rights NGOs and Court

Week 11:

Interactions on topics discussed on 1st to 5th week

Week 12:

Interactions on topics discussed on 6th to 10th week.

ABOUT INSTRUCTOR

- Teaching experience of 20 years. His specialized in Jurisprudence, Constitutional Law, Adm. Law, Human Rights and International Humanitarian Law.
- Actively involved in disseminating Human Rights Education in Various part of India.
- Published 3 books (Global Justice & Rule of Law, Human Rights In Manipur, Constitutional Governance and Legal Institution) and has contributed many book chapters and research Articles
- Supervised 3 PhD Research Scholars under his guidance.

MAKING OF MODERN EUROPE: REVOLUTIONS, ECONOMY AND EMPIRE (1780-1939)

DR. KINGSHUK CHATTERJEE
Associate Professor, Department of History,
University of Calcutta

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 6 weeks (6th Aug to 14th Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 3

PRE-REQUISITES : XIIth standard pass; ease with English language

OBJECTIVE OF COURSE

1. A clear understanding of how mechanization and Industrial Revolution challenged European politics, society and economy
2. A basic grounding in the diverse response of European states to the challenges of Mechanized production system
3. A solid grasp of the origins, development and larger significance of the Russian Revolution of 1917
4. A basic understanding of the right wing ideologies in Europe in the early twentieth century, including Fascism and Nazism.

LEARNING OUTCOME

The course is designed to highlight the running thread of economic transformation in 19th century Europe, and weave it into the larger story of European state and international diplomacy. After completion of the course, students will able to understand European imperialism of the 19th century and Communism and Fascism of the inter-war era as products of the material circumstances, rather than any ideological predisposition.

COURSE PLAN

1. Industrial revolution and emergence of Industrial Societies in Europe
2. Industrial Revolution: Great Britain's leadership
3. Industrial Revolution: Great Britain
4. Industrial Revolution: France
5. Industrial Revolution: Germany
6. Industrial Revolution: Germany II
7. Industrial Revolution: Russia
8. Industrial Revolution: Russia II
9. Bismarckian diplomacy and the system of alliance
10. Changes under Wilhelm II
11. The Eastern Question: the problem and background
12. Emergence of Balkan Nationalism: 1851-1878 and 1878-1914
13. Theories of imperialism and The Age of Empire
14. Scramble for colonies and Clash of Empires
15. The Alliance System: Triple Alliance and Triple Entente
16. Outline of Russian History: 19th Century
17. Russian Revolution: Growth of Revolutionary Movement
18. Russian Revolution: Making of the Russian Revolution of 1917
19. The October Revolution and The Civil War of 1818-20
20. World Economic Depression
21. Rise of Fascism
22. Fascism in Italy
23. The Rise of Nazism in Germany

ABOUT INSTRUCTOR

- An adjunct at the Institute of Foreign Policy Studies, Calcutta University.
- Deputy Director, Centre for Pakistan and West Asian Studies, Calcutta University
- Director, Centre for Studies in China and her Neighbourhood, Calcutta University.
- Previously served as a Founding Professor in the Department of History, School of Humanities and Social Sciences at Shiv Nadar University and Fellow at the Maulana Abul Kalam Azad Institute of Asian Studies.
- A Fulbright Scholar-in-Residence at the United States Naval Academy in Annapolis, Maryland.

MAKING OF MODERN EUROPE: REVOLUTIONS, NATIONALISM AND WARS

SUBHAS RANJAN CHAKRABORTY
Former Professor, Department of History, Presidency College, Kolkata

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 7 weeks (6th Aug to 21st Sep, 2018)
EXAM DATE : Tentatively Dec, 2018
NO OF CREDITS : 3

PRE-REQUISITES : XIIth standard pass; ease with English language

OBJECTIVE OF COURSE

- A basic understanding of the significance European revolutions in the 18th and 19th century
- A basic understanding of the process of the emergence of nations and nationalism in modern Europe
- A basic understanding of the dynamics of global imperialism and wars in the nineteenth and early twentieth century

LEARNING OUTCOME

A student faithfully completing the course will gain a formative understanding of the political and economic processes which shaped modern European and Global politics and international relations during the last two centuries.

COURSE PLAN

1. Crisis of the "Ancient Regime" in France
2. Coming of the French Revolution
3. The Constitution of 1791
4. Rise and Fall of the Jacobin Republic
5. Revolution and Gender, Revolutionary Culture
6. The Directory and Coup d'etat Of 18th Brumaire
7. Napoleon as ruler: Internal Reorganization
8. Napoleon and Europe: 'Revolution on Horseback'
9. Napoleon:The Road to Decline
10. Europe after Napoleon: Forces of continuity and change
11. Conservatism at Work: Metternich System 1815-1848
12. Restoration and Revolution in France: 1815 – 1848
13. 1848: The Year of Revolutions
14. Revolution of 1848: Germany
15. Liberalism and democracy in Britain
16. Socialism in Europe
17. France 1848-1871: Second Republic and Second Empire
18. France (1848-1871): The Second Empire
19. The Unification of Italy
20. Making of a Unified Italy
21. Establishment of the Second Reich in Germany
22. Germany: Road to Unification
23. World War I - The Origins
24. The End of World War I and the Peace of Versailles
25. Post War European Order and its Problems
26. Hitler, Nazism and The second World War
27. The Slide to War: 1930s
28. Origins of the Second World War

ABOUT INSTRUCTOR

- Retired from Presidency College, Kolkata.
- Author of a bestseller primer on European history,
- Taught European history, including the history of the French Revolution and Napoleon, for several decades.
- Published on aspects of European history, on the history of Darjeeling and on social and cultural histories of sports and migration.
- Recent publications include papers on Voyage of Komagata Maru, the Derozians, and the Tudor State.
- A former President of the Mahanirban Calcutta Research Group, a research collective and a Vice-president of the Asiatic Society, Kolkata, Chakraborty is currently a guest teacher at the University of Calcutta.

CLASSICAL POLITICAL PHILOSOPHY

PROFESSOR NOOR AHMAD BABA
Dean Social Science - Central University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 7 weeks (09/07/2018 to 25/08/2018)
EXAM DATE : 08/09/2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 with knowledge of Social Science

OBJECTIVE OF COURSE

- The genesis of Classical Political Philosophy.
- To familiarizes students with the manner in which the political questions were first posed since the times of Socrates.
- To understand the contribution of Plato to the Western Political Philosophy
- To know about the life and works of Aristotle.
- To appreciate the text and context of Medieval Political Philosophy.
- Contribution of Machiavelli as an interlude inaugurating modern politics
- Contribution of Hobbes, Locke and Rousseau.
- Karl Marx and his contribution to western Political philosophy

LEARNING OUTCOME

The course "Classical Political Philosophy" is a core course in B.A.Hon's under the Choice Based Credit System (CBSE). After completion of the course students will be able to understand classical political philosophy through Greek antiquity. Students will also be familiarized with the manner in which the political questions were first posed. Machiavelli comes as an interlude inaugurating modern politics followed by Hobbes

COURSE PLAN

Week 01:-

Political Philosophy of Plato-1

Political Philosophy of Plato – II

Political Philosophy of Plato – III

Political Philosophy of Aristotle

Interaction with the Resource Persons (5th day

Week 02:-

Political Philosophy of Saint Augustine

Political Philosophy of Saint Thomas Aquinas

Political Philosophy of Marsiglio of Padua

Political Philosophy of Montesquieu

Interaction with the Resource Persons (5th day

Week 03:-

Political Philosophy of Machiavelli

Political Philosophy of Thomas Hobbes – I

Political Philosophy of Thomas Hobbes - II

Interaction with the Resource Persons (5th day

Week 04:-

Political Philosophy of John Locke – 01

Political Philosophy of John Locke – 02

Political Philosophy of Jean Jacques Rousseau – 01

Political Philosophy of Jean Jacques Rousseau - 02

Interaction with the Resource Persons (5th day

Week 05:-

Political Philosophy of Jeremy Bentham

Political Philosophy of John Stuart Mill

Political Philosophy of Immanuel Kant

Political Philosophy of George Hegal

Political Philosophy of Thomas Hill Green

Interaction with the Resource Persons (5th day

Week 06:-

Karl Marx – A Profile

Karl Marx – Life and Works

Marxist Theory of Historical Materialism

Marxian Concept of Class

Conflict Theory with Special Reference to Karl Marx

Interaction with the Resource Persons (5th day

ABOUT INSTRUCTOR

- Masters from the Centre for Political Studies at the School of Social Sciences of Jawaharlal Nehru University (JNU)
- M. Phil and Ph.D. from the School of International Studies of Jawaharlal Nehru University (JNU).
- Completed an Advance Level International Diploma on Peace and Conflict Research from Uppsala University, Sweden.

PROF. S. M. AFZALQADRI
Former Dean & Head, Department of Law, University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 13 weeks (02/07/2018 to 22/09/2018)
EXAM DATE : 29/09/2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : 10+2

OBJECTIVE OF COURSE

- Application of Indian Penal Code as a substantive Criminal law
- Extent, application and fundamental principle of law of crimes.
- To understand the offences against person, property, reputation, religion and state
- Crimes against women are on increase, therefore a special emphasis is given to explain these offences
- To understand subject of criminology including the Schools of criminology
- To study rights of accused, prison system and rights of prisoners.

LEARNING OUTCOME

The course "Criminal Law & Criminology" is a course in the subject of Law (B.A, L.L.B; LLB, LLM). This course will help students to supplement and enhance their understanding about different dimensions of Criminal law and Criminology. The course will enrich them about the important area of law.

COURSE PLAN

Week 01

1. Definitions under Indian Penal Code
2. Extent and operation of the Indian Penal Code
3. Elements of crime
4. Stages in commission of a crime

Week 02

Constructive joint liability
Mistake, Judicial and Executive acts
Accident
Necessity and Infancy

Week 03

Insanity and Intoxication
Consent and Good faith
Right of Private Defence
Abetment

Week 04

Criminal Conspiracy
Philosophy and Theories of Punishment
Capital Punishment
Murder (Section 300-302)

Week 05

Culpable Homicide (Sec. 299
Hurt and Grievous Hurt
Wrongful Restraint & Wrongful confinement
Kidnapping and Abduction

Week 06

Offences against Women
Law relating to Rape
Offences relating to Marriage
Offences against Property

Week 07

Criminal misappropriation of Property
Cheating & its legal connotations
Mischief
Criminal defamation

Week 08

Forgery under IPC
Counterfeiting of coins
Offences against State
Offences against Religion

Week 09

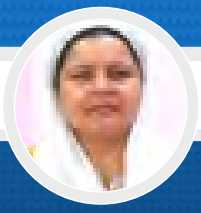
Definition of Criminology
Schools of Criminology
Rights of Accused
Prison system and Prisoners rights

Week 10

Juvenile delinquency and its control
Drug Addiction: Its magnitude and control
White color crime and corruption

ABOUT INSTRUCTOR

- Did his L.L.M in the year 1974 and Ph.D in 1986 from Aligarh Muslim University.
- Appointed as Lecturer in Kashmir University in 1976 and retired in 2007 as Professor, Head and Dean, Faculty of Law, University of Kashmir.
- Served as Joint Registrar Kashmir University, Dean Students Welfare, Chief Warden and Chief Proctor of University of Kashmir.
- Was awarded fellowship of Indian Society of Criminology.
- Written three books on Police, Copy Right Law, Criminology.
- Has attended 26 conferences both at national and international level.



DR AMINA PARVEEN
Sr. Assistant Professor, Post Graduate Department of Education,
University of Kashmir

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 7 weeks (02/07/2018 to 18/08/2018)
EXAM DATE : 25/08/2018 (Tentative)
NO OF CREDITS : 2

PRE-REQUISITES : 10+2 with knowledge of Education

OBJECTIVE OF COURSE

- Basics of Educational Psychology
- Conceptual frame work of learning
- Understanding about the process of learning
- Know how about Intelligence and its different factors
- Description about the varied tests of intelligence
- Understanding personality and different approaches to its composition
- To have a look over the stage of adolescence
- To go through the various issues and problems of adolescents

LEARNING OUTCOME

The course "A Course on Educational Psychology" forms a part of Core and Some Discipline Centric in B.A Education Hon's and B.A Education under the Choice Based Credit System (CBSE). After completion of the course, this will supplement and enhance the understanding of students about different aspectsof Educational Psychology.

COURSE PLAN

Week 01

01. Definition of psychology and its relationship with education, 02. Meaning and scope of Educational Psychology, 03.Nature,Concept and Factors of Learning, 04. Thorndike's Trial and Error theory of learning, Interaction with the Resource Persons

Week 02

05.Pavlov's Classical Conditioning Theory, 06. Skinner's Operant Conditioning Theory, 07. Insightful Learning–Kohler, et.al. 08.Transfer of Learning, Interaction with the Resource Persons

Week 03

09. Concept of Intelligence and IQ, 10. Spearman's Two Factor Theory of Intelligence, 11. E.L.Thorndike's Multi-Factor Theory of Intelligence, 12. L.L.Thurstone's Group - Factor Theory of Intelligence, Interaction with the Resource Persons (5th day)

Week 04

13.Simon-Binet Scale of Intelligence, 14. Catell's Culture-fair Test of Intelligence, 15. Bhatia Battery Test of Intelligence, 16. Creativity-Concept and Nourishment, Interaction with the Resource Persons

Week 05

17. Personality and its Development,

18. Type Theory of Personality- William Sheldon and Jung,

19. Trait Theory of Personality- Allport,

20. Self Theory of Personality- Carl Rogers, Interaction with the Resource Persons

Week 06

21.Psychoanalytical Theory of Personality- Sigmund Freud,

22.Adolescence and their Psycho-Physical characteristics

23. Problems of Adolescents

24. Role of Education in solving problems of Adolescents

Interaction with the Resource Persons

Week 07

25. Concept , Characteristics of Mental Health and Hygiene

26. Adjustment and Defence Mechanism

ABOUT INSTRUCTOR

- Senior Assistant Professor, Department of Education, University of Kashmir.
- Did her master's degree in Education from the University of Kashmir and persued her M.Phil and Ph.D from the same university (Kashmir University).
- Has worked as lecturer in the department of higher education J&K state prior to joining the University of Kashmir as a faculty in Education.
- Currently teaches at the Department of Education, University of Kashmir, and is contributing as resource person in the Directorate of Distance Education, University of Kashmir.

COUNSELING IN SOCIAL WORK

DR. V. KANAKADURGAMBA
Faculty Member, Roda Mistry College of Social Work and Research Centre

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 11 weeks (1st Oct to 31 Dec 2018)
EXAM DATE : 13th Sep 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate , +2

OBJECTIVE OF COURSE

- To bring out the Scope of Counseling.
- Techniques and Skills In Counseling
- Counseling Process
- Characteristics of an Effective Counselor
- Ethics in Counseling
- Meaning of Treatment
- Basic Treatment approaches in counseling
- Advanced Treatment approaches in counseling
- Counseling with children, Adolescents and marital partners

LEARNING OUTCOME

Learner will be able to identify individuals, families and community problems with counseling in Social Work Practice, diagnoses and treats in solving them. They Learn the knowledge of counseling helps in their practice.

COURSE PLAN

Week I: Counseling

Week II: Process of Counseling

Week III: Techniques and Skills in Counseling

Week IV: Ethics in Counseling

Week V: Treatment Approaches in Counseling 1

Week VI: Treatment Approaches in Counseling 1

Week VII: Treatment Approaches in Counseling 2

Week VIII: Counseling for Different Clients

Week IX: Counseling for Different Clients

Week X: Counseling for Different Clients

Week XI: Family and Group Counseling

Week XII: Counseling in Social Work Practice

ABOUT INSTRUCTOR

- A Social work Educator with more than 4 decades of experience in teaching, research and training.
- Has presented number of papers in National and International Seminars.
- Guiding research students in Social work.

DISASTER MANAGEMENT

NAVEEN KUMAR NANJUNDAN
Assistant Professor &Centre for Folk Culture Studies, School of Social Sciences,
University of Hyderabad

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 13 weeks (1st Oct & 31st Dec 2018)
EXAM DATE : 30th December 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate/Any Equivalent Examination

OBJECTIVE OF COURSE

- To provide students an exposure to disasters, their significance and types.
- To ensure that students begin to understand the relationship between vulnerability, disasters, disaster prevention and risk reduction.
- To gain a preliminary understanding of approaches of Disaster Risk Reduction
- To enhance awareness of institutional processes in the country.
- To develop rudimentary ability to respond to their surroundings with potential disaster response in areas where they live, with due sensitivity.

LEARNING OUTCOME

- Identify and describe broadly the social and economic impacts that occurs during disasters.
- Identify Global trends and types of Disasters.
- Analyse the role of Climate change , Development and Disastersin the Indian Context.
- Understand the significance of Disaster Risk reduction.
- Know the stake holders and policies involved in Disaster Management.
- Evaluate the causes, prevention and preparedness during disasters at local and global level.

COURSE PLAN

Week 01:- Disaster Management

Disaster and Disaster Management :Meaning, Concepts Related with Disaster and Disaster Management, Disasters in India, Issues Concerned with Disaster Management, Phases of Disaster Management

Week 02:- Types of Disasters

Natural Disasters, Case Study, Man-made Disasters, Case Study, Simple and Complex Disasters, Difference between Accidents and Disasters, Slow and rapid Onset Disasters, Module MCQ's Assignment

Week 03:- Disasters Management in India

Evolution of Disaster Management in India, National institute of Disaster Management, Disaster Management Act, 2005, The National Policy on Disaster Management 2009, National Plan on Disaster Management 2016, Module MCQ's, Module Questions Assignment

Week 04:- Refugee Problems

Refugee Problems – An Overview, Political, Social, Economic impacts of Disasters, Gender and Social issues during disasters, Principles of psychosocial issues and recovery during emergency situations, Relationship between Disasters, Development and Vulnerabilities, · Module MCQ's, Assignment

Week 05:- Refugee Problems

Equity issues in disasters, Human Resettlement and Rehabilitation issues during and after disasters, Inter-sectoral coordination during disasters, Module MCQ's, Module Questions, Assignment

Week 06:- Stake Holders in Disaster Relief Management

Role of Central Government, Role of State Government, Role of District Administration, Role of Armed Forces, Role of Para Military Forces, Mid-Term Objective Type(MCQ's) Assessment

Week 07:- Stake Holders in Disaster Relief Management

Role of Fire Services, Role of International Organisations, Role of Non-Governmental Organisations, Role of National Cadet Corps, Role of Scouts and Guides,Role of Interface between Stake Holders, Module MCQ's, Assignment

Week 08:- Disaster Risk Reduction, Disaster Risk Reduction Strategies, Risk Reduction Preparedness Plans, Action Plans and Procedures, Module MCQ's

Module Questions, Assignment

Week 09:- Disaster Risk Reduction

Early warning Systems, Models in disaster preparedness, Components of Disaster Relief-(Water, food, sanitation, shelter, Health and Waste Management), Module MCQ's, Assignment

Week 10:- Disaster Risk Reduction

Community based Disaster Risk Reduction, Factors affecting Vulnerabilities

Disaster Risk Reduction Master Planning for the Future and Capacity Building, Module MCQ's, Assignment

Week 11:- Disaster Risk Reduction

Rehabilitation measures and long term reconstruction, Psychosocial care provision during the different phases of disaster., Module MCQ's, Assignment

Week 12:- Disasters and Development

Impact of Development projects, Changes in Land-use, Climate Change Adaptation, Module MCQ's, Module Questions,Assignment

Week 13:- Disasters and Development

Relevance of indigenous knowledge, appropriate technology and local resources,Global trends in disasters, Module MCQ's ,Proctored End-Term Exam

ABOUT INSTRUCTOR

- An Assistant Professor at Centre for Folk Culture Studies, School of Social Sciences, University of Hyderabad.
- Served as a Lecturer of Social Work at the Roda Mistry College of Social Work & Research Centre, Hyderabad, during 2005-2008.
- Serving since 2010 as a faculty member in University of Hyderabad.
- Teaching and research interests are Folklore and Community Development, Field Work and Community Studies, Ritual Studies, Disaster Management &ICT in Education.

PROF. K. VISHWESHWAR RAO
Department of Social Work, Andhra University, Visakhapatnam
Andhra Pradesh

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (1st Oct to 28th Dec 2018)
EXAM DATE : 30th Dec 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate , +2

OBJECTIVE OF COURSE

- To bring out the Concept and Growth of Gerontology and Geriatrics.
- To discuss Trends in Population Ageing.
- To give a knowledge of Factors Contributing to Growing Problems of The Elderly in India
- To bring out the Problems of the Elderly in India
- Older Persons and the Family
- Old Age Homes - Types and Services Provided
- United Nations Organization and the Elderly
- Policies & Programs of elderly Legislations for the elderly

LEARNING OUTCOME

This course on Gerontological Social Case Work is useful in dealing with Factors Contributing to growing Problems of the Elderly in India and Older Persons & the Family. Also about Gerontological Social Work Practice in the Community.

COURSE PLAN

WEEK - 01 Geronotology and Geriatrics: Concept and Growth

WEEK - 02 Trends in Population Ageing

WEEK - 03 Factors Contributing to growing Problems of the Elderly in India

WEEK - 04 Problems of the Elderly in India

WEEK - 05 Older Persons and the Family

WEEK - 06 Older Age Homes: Types and Services Provided

WEEK - 07 United Nations Organization and the Elderly

WEEK - 08 Policies and Programmes of elderly

WEEK - 09 Legislations for the elderly

WEEK - 10 Legislations for the elderly

WEEK - 11 Gerontological Social Work Practice in the Community

WEEK - 12 Ageing in India

ABOUT INSTRUCTOR

- M. Phil. in Social Work for work on A Study on the Problems of the Displaced Persons of Visakhapatnam Steel Project under Prof.. B. Vijayalakshmi(Andhra University)Awarded on 17-03-1988
- Ph. D. in Social Work for work on Rural Elderly in Andhra Pradesh: A study of their socio-demographic profile under Prof. B. Devi Prasad(Andhra University)Awarded on 07-07-1996 .

DR. JHANSI RANI
Head & Associate professor, Department of Public Administrator, Arts and Science College for Women, Andhra Mahila Sabha, Osmania University Campus

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (1st Aug to 6th Nov 2018)
EXAM DATE : 12th November 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate / Any Equivalent Examination

OBJECTIVE OF COURSE

- This course make you understand the Historical Background and Evolutionary Perspectives of Indian Administration and Different Contexts of Indian Administration.
- And also explains the State Administration: Structure and Process and Mechanisms.
- Finally let you learn Technology and Integrity in Indian Public Administration and Control Mechanism over Administration

LEARNING OUTCOME

By the end of the course the learner would be able to gain quantitative knowledge on various theoretical aspects of Public Administration, with necessary conceptual frame work.

COURSE PLAN

WEEK - 01 Historical Background and Evolutionary Perspectives of Indian Administration

WEEK - 02 Different Contexts of Indian Administration

WEEK - 03 Constitutional Context of Indian Administration

WEEK - 04 Union Executive and Administration Structure and Process

WEEK - 05 Secretariat and Directorates WEEK - 06 Public Enterprises in India Emerging Issues

WEEK - 07 State Administration : Structure and Process

WEEK - 08 State Administrative Mechanisms

WEEK - 09 District Administration : Structure and Process

WEEK - 10 Emerging Issues in Modern Administration

WEEK - 11 Technology and Integrity in Indian Public Administration

WEEK - 12 Control Mechanism over Administration

ABOUT INSTRUCTOR

- 18 years of experience in Under Graduate teaching in public Administration.
- As a BOS Chairperson designed curriculum and introduced new courses like Good Governance, Law and Justice for Women, Disaster Management, Civil Services in India and General Studies at college level.
- Published Articles and Chapters in reputed Journals and books.
- Presently holding the position of Member Secretary to Academic Council. Member of Board of Studies, Osmania University, PG. and other autonomous Colleges.
- Worked as a subject coordinator for CEC –EMRC for Public Administration lessons during 2016-17 and Subject expert and coordinator for CEC –EMRC MOOCS -2018.

INTRODUCTION TO PUBLIC ADMINISTRATION

DR. JHANSI RANI
Head & Associate professor, Department of Public Administrator, Arts and Science College for Women, Andhra Mahila Sabha, Osmania University Campus

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 10 weeks (2nd July to 8th Sep, 2018)
EXAM DATE : 17th September 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate / Any Equivalent Examination

OBJECTIVE OF COURSE

- This course provides the basic meaning and Nature of Public Administration.
- This course will tries to understand the Significance of Public Administration in the changing context of Liberalisation, Privatisation and Globalisation (LPG); Oriental and Classical Approaches; Classical Thought: Bureaucracy; and Ecological and Social Justice Approaches.

LEARNING OUTCOME

By the end of the course the learner would be able to gain quantitative knowledge on various theoretical aspects of Public Administration, with necessary conceptual frame work.

COURSE PLAN

Week I: Introduction to Public Administration

Week II: Evolution and Status of Public Administration

Week III: Classical Theories

Week VI: Bureaucracy and Human Relations Movement and Behaviouralism

Week V: Bureaucracy and Human Relations Movement and Behaviouralism

Week VI: Ecological Development and Social Justice Approaches

Week VII: Organizational Humanism & Market Theories

Week VIII: Principles of Public Administration

Week XI: Concepts of Public Administration

Week X: Emerging Trends

ABOUT INSTRUCTOR

- 18 years of experience in Under Graduate teaching in public Administration.
- As a BOS Chairperson designed curriculum and introduced new courses like Good Governance, Law and Justice for Women, Disaster Management, Civil Services in India and General Studies at college level.
- Published Articles and Chapters in reputed Journals and books.
- Presently holding the position of Member Secretary to Academic Council, Member of Board of Studies, Osmania University, PG. and other autonomous Colleges.
- Worked as a subject coordinator for CEC –EMRC for Public Administration lessons during 2016-17 and Subject expert and coordinator for CEC –EMRC MOOCS -2018.

SOCIAL CASE WORK

DR. V. KANAKADURGAMBA
Faculty Member, Roda Mistry College of Social Work and Research Centre

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 11 weeks (2nd July to 28th Sep 2018)
EXAM DATE : 13th Sep 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate , +2

OBJECTIVE OF COURSE

- Understand the needs, problems and behavior of the individuals.
- Learn the skills and techniques of Social Case Work.
- Learn the Principles and Process of Social Case work.
- Develop ability to use different therapeutic models of Social Case work to solve. Individual problems.

LEARNING OUTCOME

Learner will be able to identify individual problems, diagnoses and treats in solving them. They Learn to establish professional relationship to achieve the goal.

COURSE PLAN

Week I: Definition and Scope of Social Case Work

Week II: Definition and Scope of Social Case Work

Week III: Social Case Work Process

Week IV: Social Roles-Problems & Adaptation

Week V: Social Case Work with Families

Week VI: Assessment tools in Social Case Work

Week VII: Approaches & Models in Social Case Work

Week VIII: Case Worker- Client Relationship

Week IX: Case Worker- Client Relationship

Week X: Social Case Work in Different Settings

Week XI: Recording in Social Case Work

ABOUT INSTRUCTOR

- Social work Educator with more than 4 decades of experience in teaching, research and training.
- Presented number of papers in National and International Seminars.
- Till date continues to contribute to the field of Social work Education. Guiding research students in Social work.

SOCIAL WELFARE ADMINISTRATION

DR. D.K.LAL DAS
Research Consultant , Osmania University

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (1st Oct to 28th Dec 2018)
EXAM DATE : 30th Dec 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate , +2

OBJECTIVE OF COURSE

- To understand the need for scientific approach to Social Welfare Administration.
- To understand the meaning, nature, scope and importance of social welfare administration.
- To develop ability to administer social policies and programmes.

LEARNING OUTCOME

This course on Social welfare administration is useful in dealing with the social service and social welfare organisation.

COURSE PLAN

WEEK - 01 Concept of Social Welfare Administration

WEEK - 02 Types and Models of Social Welfare Organisations

WEEK - 03 Changing Trends and Problems of Voluntary Organisations

WEEK - 04 Organisational Setup of Social Welfare Organisations

WEEK - 05 Role of Social Welfare Administrator

WEEK - 06 Establishment and Registration of Social Service / Social Welfare Organisation

WEEK - 07 Principles of Social Welfare Administration

WEEK - 08 Social Welfare Administration as a Method of Social Work

WEEK - 09 Funding of Social Welfare Organisation

WEEK – 10 Social Welfare Programmes and Services

WEEK – 11 Social Welfare Programmes and Services

WEEK – 12 Evaluation of Social Welfare Programmes and Services

ABOUT INSTRUCTOR

- Social Work Researcher and Educator with more than four decades of experience in Teaching, Research, Training and Consultancy.
- Former Principal and Director of a College of Social Work in Hyderabad.
- Has directed several research projects, authored several books, and presented papers at national and international seminars.
- Till date continues to contribute to the field of Social Work Research by conducting research methodology workshops and guiding research scholars from across the globe.

SOCIAL WORK RESEARCH

DR. D.K.LAL DAS
Research Consultant , Osmania University

TYPE OF COURSE : UG
INTENDED AUDIENCE : UG

COURSE DURATION : 12 weeks (2nd July 2018 to 28th Sep 2018)
EXAM DATE : 13th Sep 2018 (Tentative)
NO OF CREDITS : 4

PRE-REQUISITES : Intermediate , +2

OBJECTIVE OF COURSE

- To understand the need for scientific approach to human inquiry
- To understand the meaning, nature, scope and importance of social work research.
- To develop ability to conceptualise, formulate and conduct research study would include a broad range of research skills such as Selection and Formulation of research problem, selection of research strategy, developing tools of data collection, use of sampling methods and techniques, etc.).
- To develop research report writing skills.

LEARNING OUTCOME

Learner would be able to identify and formulate his / her research topic, formulate hypothesis, select a sampling design, select a research instrument, collect, process and analyse data and write research report.

COURSE PLAN

Week I : Social Science Research

Week II : Methods of Social Science Research

Week III : Social Work Research

Week IV : Research Designs

Week V : Basic Elements of Social Science Research

Week VI : Formulation of Research Problem

Week VII : Sampling Designs

Week VIII : Methods and Tools of Data Collection

Week IX : Processing and Analysis of Data

Week X : Social Statistics

Week XI : Writing of Research Report

ABOUT INSTRUCTOR

- Social Work Researcher and Educator with more than four decades of experience in Teaching, Research, Training and Consultancy.
- Former Principal and Director of a College of Social Work in Hyderabad.
- Directed several research projects, authored several books, and presented papers at national and international seminars.
- Till date continues to contribute to the field of Social Work Research by conducting research methodology workshops and guiding research scholars from across the globe.

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STUDENT PSYCHOLOGY

DR.S.RENUKADEVI
Professor & Head, Dept. of Engineering Education National Institute Of Technical Teachers Training & Research (NITTTR)

TYPE OF COURSE : Teacher Education Certificate Course
COURSE DURATION : 9 weeks (August 27 to October 28, 2018)
INTENDED AUDIENCE : PG Engineering Students/Teachers working in Polytechnic/Engineering Colleges/Universities with minimum Qualification PG – All Science/Engineering/Technology Disciplines (M.Sc/M.E/M.Tech/M.S (By research)
EXAM DATE : November 2018
NO OF CREDITS : 3

PRE-REQUISITES : Teacher of Engineering/Science Subjects

OBJECTIVE OF COURSE

- Establish the need for understanding learners in teaching learning process
- Understand the modern day learner's personality characteristics
- Appreciate the importance of personality tests and inventories
- Comprehend strategies for motivating students
- Apply techniques for improving the personality of present day learners thereby improving classroom teaching
- Use the basic counseling skills for student issues
- Comprehend NLP strategies for solving student issues

LEARNING OUTCOME

The course is expected to make a shift in the teaching learning process with enhanced competencies in teachers for handling present day learners.

COURSE PLAN

Week 1: Teaching Learning Process

Week 2: Student characteristics

Week 3: Psychological Testing

Week 4: Student Motivation

Week 5: Physical and Cognitive development

Week 6: Emotional Intelligence and Relationship Management

Week 7: NeuroLinguistic Programming

Week 8: Counselling Skills

Week 9: Summary and Assessment

ABOUT INSTRUCTOR

Dr. S. Renukadeviis currently Professor and Head of Department of Engineering Education, NITTTR, Chennai. She holds a Doctorate in Computer Applications (Engg Education), M.phil in Computer Science and Masters in Computer Application. She has 28 years of experience in teaching and research, of which 23 years in teacher training and research at NITTTRc. Her expertise includes Pedagogy, Educational Psychology, Soft Skills, Computer applications in education & training and Gender Development/Studies. She has coordinated more than 250 short term programmes and acted as resource person in several national and international programmes. She has been coordinating the M.tech (HRD) programme of the institute. She has authored more than 40 research papers and contributed chapters in books. She has produced 4 Ph.D dissertations and currently guiding 3 scholars in Engineering Education. She has attended several National and International conferences and presented papers. She has visited Germany, UK, Ireland and Malta. Her interest in Student Psychology has resulted in new methodologies in teacher training. She is a trained NLP practitioner. She has conducted an international school psychology conference of ISPA (US). She is affiliated to psychology organisations such as IAAP(Regional President) and InSPA(State President, TN).

STUDENT ASSESSMENT AND EVALUATION

DR. G.JANARDHANAN
Associate Professor & Head
i/c Centre for Envi. Management, NITTTR

DR. V.SHANMUGANEETHI
Asst. Professor, Dept. of Computer Science and Engineering

DR. KSA DINESH KUMAR
Asst. Professor, Dept. of Civil Engineering

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : Teachers from Technical institutions
COURSE DURATION : 8 weeks (August 27 to October 22, 2018)
EXAM DATE : November 2018
NO OF CREDITS : 3
PRE-REQUISITES : Basic knowledge of Teaching Learning Practice

OBJECTIVE OF COURSE

To scientifically design the assessment tool for assessing the quantitative and qualitative performance of a student.

LEARNING OUTCOME

To apply various assessment methodologies in the teaching learning practice.

COURSE PLAN

Week 1: Introduction to Assessment – Evaluation – Need for the Assessment – Different forms of Evaluation – Diagnostic Assessment – Formative Assessment – Summative Evaluation – Graduate Attributes and Assessment

Week 2: Complexity of the questions – Mapping Two-dimensional approach of preparing the Instructional objectives with complexity of questions – Factual Questions – Conceptual Questions – Procedural knowledge Questions – Meta- Cognitive Questions

Week 3: Types of Evaluation – Norm reference – Criterion reference – Types of questions – Supply type – Selection type – Numerical problem solving.

Week 4: Introduction to Table of Specifications (TOS) – Modules vs Levels in the TOS – Scheme of Evaluation in TOS – Factors to be considered for preparing TOS.

Week 5: Characteristics of evaluation tool – Validation of the tool - Reliability – Validity vs Reliability – Logical and statistical validity – Usability – Discrimination factors in the Evaluation tool

Week 6: Standardized Tests versus Informal Classroom Tests - Standardized Achievement Test Batteries - Achievement Tests in Specific Areas - Customized Achievement Tests - Individual Achievement Tests - Achievement and Aptitude Tests - Scholastic Aptitude and Learning Ability - Group Tests of Learning Ability

Week 7: Introduction to Rubrics – Need for the rubrics – Holistic rubric – Analytic rubric – preparation of Criteria for Rubrics – Consolidation of rubric values

Week 8: Methods of Interpreting Test Scores - Grade Norms - Percentile Rank - Standard Scores - Profiles - Skill Analysis - Cautions in Interpreting Test Scores

ABOUT INSTRUCTOR

Dr.V.Shanmuganeethi, Assistant Professor, Department of Computer Science and Engineering. He has been working in the domain of web technologies, Cloud computing, programming Paradigm, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 150 training programmes on CSE discipline and Engineering Education. Dr.G.Janardhanan, Associate Professor & Head i.c , Centre for Environmental Management . He has been working in the domain of Civil Engineering, Environmental science, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles.He has developed various projects for Engineering Education includes e-content development and Virtual Laboratory. Dr. K S A Dinesh Kumar, Assistant Professor, Department of Civil Engineering. He has been working in the domain of Structural Engineering, Geographical Information System, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 100 training programmes on Sustainable Development, Green building and Engineering Education.

LEARNING MANAGEMENT SYSTEM THROUGH MOODLE

DR. G.JANARDHANAN
Associate Professor & Head
i/c Centre for Envi. Management, NITTTR

DR. V.SHANMUGANEETHI
Asst. Professor, Dept. of Computer Science and Engineering

DR. KSA DINESH KUMAR
Asst. Professor, Dept. of Civil Engineering

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : Teachers from Technical institutions
COURSE DURATION : 4 weeks (19th Nov to 18th Dec, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

PRE-REQUISITES : Basic skills in using Web

OBJECTIVE OF COURSE

To use MOODLE Learning Management System to improve active and collaborative learning environment.
To organize and store course content in a secure web-based environment where the students can access

LEARNING OUTCOME

To practice MOODLE LMS for class room teaching, sharing learning material and student assessment.

COURSE PLAN

Week 1:

Introduction to Learning Management System (LMS) – Learning Theories - Instructional Technology with Pedagogy – Applications of Educational Technology – Content Management System (CMS) and LMS – Features of LMS – Assignment - Introduction to MOODLE LMS – Facts and figures of MOODLE LMS – MOODLE Installation and configuration – Assignment

Week 2:

Course Creation and Management – Course Category – Course Format – Course study Plan – Course Activity – Assignment - Chat – Choice – External tool – Forum – Glossary – Lesson – Quiz – SCROM Package – Survey – Wiki - Course Resources – e-Book – File Management – Folder Management – Video Content – Audio Content - Page – URL Management

Week 3:

Course Administration – Enroll users in Courses – Filters - Report Generation - Grade book setup for course - Site Administration in MOODLE LMS – Notification – Users – Grades – Badges –Plugins - Security – Appearance – Front page Settings

Week 4:

User Management – User Accounts – User Actions – User Profile – Upload user Details – User Permissions – User Policies – Define Roles - Question bank — Import and Export functions – Third party SCORM pack questionnaire

ABOUT INSTRUCTOR

Dr.V.Shanmuganeethi, Assistant Professor, Department of Computer Science and Engineering. He has been working in the domain of web technologies, Cloud computing, programming Paradigm, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 150 training programmes on CSE discipline and Engineering Education. **Dr.G.Janardhanan,** Associate Professor & Head i.c. Centre for Environmental Management . He has been working in the domain of Civil Engineering, Environmental science, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles.He has developed various projects for Engineering Education includes e-content development and Virtual Laboratory. **Dr. K S A Dinesh Kumar**, Assistant Professor, Department of Civil Engineering. He has been working in the domain of Structural Engineering, Geographical Information System, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 100 training programmes on Sustainable Development, Green building and Engineering Education.

E-CONTENT DEVELOPMENT

DR. P. MALLIGA
Associate Professor & Head, Centre for Educational Media and Technology, National Institute of Technical Teachers Training & Research (NITTTR)

SHRI. FELIX AROKIYA RAJ, A.P.
Assistant Professor, Centre for Educational Media and Technology, National Institute Of Technical Teachers Training & Research (NITTTR)

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : Teachers, Research Scholars, Instructional Designer, E-Learning Specialist, Teacher Certification Programme
COURSE DURATION : 8 weeks (August 27 to October 22, 2018)
EXAM DATE : November 2018
NO OF CREDITS : 3
PRE-REQUISITES : Knowledge of basic digital literacy like internet browsing, email communication

OBJECTIVE OF COURSE

With the advent of Internet and world wide web (www), the access to information has become very easy and the entire world is moving towards digitization. Twenty first century students learn in a global classroom and not necessarily within four walls. They are more inclined to find information by accessing the Internet through mobile phones and computers, or chatting with friends on a social networking site. The advancements in technology and the plethora of powerful and innovative digital devices and tools have a great potential to improve educational outcomes. Educators must understand that the use of digital content and devices will improve teaching and learning and thus enhance educational opportunities and benefit the Millennial. This course on E-content development is meant to understand the meaning and standards of E-content, learning objects, designing and development of digital resources for teaching and learning. Thus this course aims in providing the knowledge and skill for teachers to cater to present day learners and their learning styles.

LEARNING OUTCOME

Develop Multimedia content or E-content using web tools by applying the principles of Instructional Design.

COURSE PLAN

Week 1: E-learning

Understand E-Learning with respect to its need, trends, benefits and challenges

Modules: E-Learning – Scope and Types, E-Learning Trends, Millennial Learners, E-Learning Technologies, E-Learning Benefits and Challenges, Need for E-Content Development

Week 2: Instructional Design Models

Identify the multimedia principles and elements for E-Learning

Modules: E-Content Nature and Scope, E-Content Elements, Multimedia Principles, Instructional Design Models, Life Cycle of E-Content, Learning Objects & Standards

Week 3: E-learning Standards and Tools

Explain the components of Authoring Tools and E-Learning standards

Modules: Content Authoring Tools & Usage, E-Learning Authoring Tools and Technologies, SCORM & Tin Can API, Free/Cloud Authoring Tools

Week 4: E-Publishing

Describe the salient features of E-Content Development Tools

Modules: Documentation & Bookmarking Tools, E-Publishing, Concept of creating E-Books, Presentation Tools, Online Collaborative Tools

Week 5: Graphics and Animation

Develop Graphics /Images for brochure cover page

Modules: Graphics and Image File Formats, GIMP & its features, Animation Types and its usage, Animation Tool Features

Week 6: Audio and Podcasting

Apply the audio editing techniques for creating podcasts

Modules: Basic Principles of Sound, Audio Recording Tools, Audio Editing Techniques, Use of Podcasting in Education

Week 7: Screencast Videos

Develop the E-Content using Social Media Networks Modules: Creating Screen-cast Video, Video Uploading & Sharing, Education Channel Analytics, Photo Slideshow Creation

Week 8: Creating Video lessons and Quizzes

Understand the techniques to create customized lessons

Modules: Customized lessons using TED-ED, Online Quizzes, Survey Forms

ABOUT INSTRUCTOR

Dr. P. Malliga is working as Senior System Analyst and Head in charge of Centre for Educational Media and Technology, National Institute of Technical Teachers Training and Research, Taramani, Chennai. She has got 28 years of experience in Teaching and Research and Development. Her areas of interest in training include ICT enabled learning and Teaching, Instructional Design, E-learning and Open Education. She has published 20 research papers in refereed National / International journals and Conferences in the area of Computer Science and Engineering, ICT based Education and Training, Educational Technology. She has contributed to leading Material (Course Material) on Instructional Design for E-learning for MCA Distance Mode program for Anna University. She has conducted around 350 courses for Polytechnic consultancy projects for producing multimedia instructional materials on Computer Networks; producing 10 CBTs on 10 different subjects of Computer Science; producing studio based video lectures on Computer Science subjects for satellite based education through Gyandarshan. She has authored a self Instructional and Engineering College teachers in the areas of Computer Science and Educational Technology. She has trained around 400 Overseas Teachers in the areas of Information Technology, Educational Video Production and Educational Media Production for E-learning. A. P. Felix Arokiya Raj is an assistant professor in the Center for Educational Media & Technology (CEMT) of National Institute of Technical Teachers Training and Research (NITTTR) Chennai. He specializes in the areas of E-Learning Technologies and Instructional Resource Development. He obtained his Master's in Electronic Media Informatics from Anna University, Chennai. His PhD research study is on effective MOOC design. He has been involved in E-Content development and Instructional Design for NMEICT project.

TRANSFORMING INSTRUCTION THROUGH BLENDED CLASSROOM

DR. G.JANARDHANAN
Associate Professor & Head i/c Centre for Envi.Management, NITTTR

DR. V.SHANMUGANEETHI
Asst. Professor, Dept. of Computer Science and Engineering

DR. KSA DINESH KUMAR
Asst. Professor, Dept. of Civil Engineering

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : Faculty member of all technical institutions & Aspiring Teachers
COURSE DURATION : 8 weeks (Sept 02 to Oct 29, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 3
PRE-REQUISITES : Faculty members should have knowledge / experience in classroom instruction.

OBJECTIVE OF COURSE

In the end of this course the participants will be able to:

- Design an effective lesson utilizing instructional technology resources and integrate into a blended learning environment.
- Develop a plan to implement blended learning into your classroom.
- Explore online FOSS resources and digital tools as an integral component of blendedlearning.
- Integrate blending into laboratory instruction.
- Understand how objectives of blended learning will impact decisions about institutional planning.
- Evaluate the idea of a flipped classroom Gain understanding of what it really means to flip your classroom.
- Explore different formative and summative assessment strategies for a blended classroom
- Design and develop assessment timeline.

LEARNING OUTCOME

The participants will be design and develop their blended classroom for developing better knowledge society. The faculty members will have the necessary skills and resources to provide a blended and flipped classroom environment for their students. It promotes better student engagement and student achievement.

COURSE PLAN

Week 1: Introduction and Blended Learning Models: An overview, definition, and introduction to Teaching with technology – Benefits and Challenges of Blended Learning

Week 2: Designing Blended Classroom: Instructional Design Models – Process of Blending Learning - Different models of blended learning – Design for Blended Learning - Explore how to help students transition smoothly from traditional education to blended learning.

Week 3: Tools & Resources for creating Blended Classroom:

Explore the choices of software, hardware, and facilities – Practice exercise to create blending environment – Content creation – Assessment tools.

Week 4: Reengineering Role of FacultyMembers & Redesigning the educational institution:Discover the role of the teacher is digital learning – Student activity and collaboration - Transition from traditional classroom to Virtual classroom – Infrastructure requirements.

Week 5: Blending of Laboratory courses: Virtual Laboratory:

Role of Laboratory – Conceptual knowledge and procedural knowledge – Blending through Virtual laboratory – Assessment

Week 6: Blending with SWAYAM Courses / NMEICT:

Learn the steps of the design process to begin development of your own blended learning implementation using SWAYAM / NPTEL Courses.

Week 7: Venturing into Flipped classroom. Introductionto flipped classrooms – The golden rules of flipping–Student engagement in Flipping.

Week 8: Framing Assessment for Blended Learning:How does it work –Framing Formative and Summative assessment – Development of Assessment plan – Preparation of Rubrics.

ABOUT INSTRUCTOR

Dr. G. Janardhanan, Associate Professor & Head i/c , Centre for Environmental Management . He has been working in the domain of Civil and Environmental Engineering, Sustainable development, Instructional technologies and Teaching – Learning Practices. He has coordinated more than 100 training programmes both Nationally and Internationally in the area of Sustainable Development, Green building concepts, Water Quality Analysis, Geoenvironmental Engineering, Blended and Flipped Classroom, Technology Enabled Teaching Learning, Student Evaluation and Instructional Design and Delivery. He has transformed through training more than 260 international participants and 2500 plus national participants. He has developed virtual laboratory for environmental engineering laboratory and handled several national and international projects in the area of engineering, technology and Engineering Education. **Dr. V. Shanmuganeethi,** Assistant Professor, Department of Computer Science and Engineering. He has been working in the domain of web technologies, Cloud computing, programming Paradigm, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 150 training programmes on CSE discipline and Engineering Education. **Dr. K. S. A. Dinesh Kumar,** Assistant Professor, Department of Civil Engineering. He has been working in the domain of Structural Engineering, Geographical Information System, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 100 training programmes on Sustainable Development, Green building and Engineering Education. He has developed various projects for Engineering Education includes e-content development and Virtual Laboratory.

REDEFINING LABORATORY INSTRUCTION USING VIRTUAL LABORATORY

DR. G.JANARDHANAN
Associate Professor & Head i/c Centre for Envi.Management, NITTTR

DR. V.SHANMUGANEETHI
Asst. Professor, Dept. of Computer Science and Engineering

DR. KSA DINESH KUMAR
Asst. Professor, Dept. of Civil Engineering

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : Faculty member of all technical institutions & Aspiring Teachers
COURSE DURATION : 4 weeks (Oct 29 to Nov 26, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2
PRE-REQUISITES : Faculty members should have knowledge / experience in classroom instruction.

OBJECTIVE OF COURSE

In the end of this course the participants will be able to:

- Design an effective laboratory utilizing technology enabled VLAB technology resources and integrate into a mainstream environment.
- Enhance the large group of studentinstruction in laboratory and deepening their knowledge.
- Explore online FOSS resources and digital tools as an integral component of laboratory instruction.
- Develop flipped approach to integrate theory and practice of laboratory instruction.
- Explore different formative and summative assessment strategies for a laboratory assessment.

LEARNING OUTCOME

The participants will be design and develop their laboratory instruction using virtual laboratory increating better knowledge society. The faculty members will have the necessary skills and resources to provide a virtual laboratory environment for their students. It promotes better student engagement and student achievement.

COURSE PLAN

Week 1: Introduction: An overview, definition, and introduction to laboratories in technical education – Different types of Laboratory instruction - Benefits and Challenges in laboratory instruction – Present status and the path ahead.

Week 2: Enhancing laboratory instruction using virtual laboratories:Simulation versus real experimentation – Computer in the laboratory - Explore how to help students transition smoothly from traditional Laboratory to Virtual Laboratory – Procedural learning to Conceptual learning – Online tools and resources for virtual laboratory - Learn the steps of the design process to begin development of your own implementation using Vlab - NMEICT.

Week 3: PerformanceAssessment in Laboratory:

How does it work –Framing Formative and Summative assessment for laboratory instruction – Development of Assessment plan – Preparation of Rubrics.Explore the choices of software, hardware, and facilities – Practice exercise to create blending environment – Content creation – Assessment tools.

Week 4: Future look of laboratory instruction and academic practice:Discover the role of the teacher is Technology enabled laboratory instruction – Changing Physical Appearance – Student activity and Closercollaboration.

ABOUT INSTRUCTOR

Dr. G. Janardhanan, Associate Professor & Head i/c , Centre for Environmental Management . He has been working in the domain of Civil and Environmental Engineering, Sustainable development, Instructional technologies and Teaching – Learning Practices. He has coordinated more than 100 training programmes both Nationally and Internationally in the area of Sustainable Development, Green building concepts, Water Quality Analysis, Geoenvironmental Engineering, Blended and Flipped Classroom, Technology Enabled Teaching Learning, Student Evaluation and Instructional Design and Delivery. He has transformed through training more than 260 international participants and 2500 plus national participants. He has developed virtual laboratory for environmental engineering laboratory and handled several national and international projects in the area of engineering, technology and Engineering Education. **Dr. V.Shanmuganeethi,** Assistant Professor, Department of Computer Science and Engineering. He has been working in the domain of web technologies, Cloud computing, programming Paradigm, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 150 training programmes on CSE discipline and Engineering Education. **Dr. K. S. A. Dinesh Kumar,** Assistant Professor, Department of Civil Engineering. He has been working in the domain of Structural Engineering, Geographical Information System, Sustainable development, Smart City, Instructional technologies and Teaching – Learning Practices and Principles. He has coordinated more than 100 training programmes on Sustainable Development, Green building and Engineering Education. He has developed various projects for Engineering Education includes e-content development and Virtual Laboratory.

PROF. DR. E.S.M.SURESH
Professor & Head, Department of Civil Engineering, National Institute of Technical Teachers Training & Research.
(NITTTR)

TYPE OF COURSE : Teacher Education Certificate Course
COURSE DURATION : 8 weeks (Aug 13 to Oct 08, 2018)
INTENDED AUDIENCE : PG Engineering Students/Teachers working in Polytechnic/Engineering Colleges/Universities with minimum Qualification PG – All Science/Engineering/Technology Disciplines (M.Sc/M.E/M.Tech/M.S (By research)
EXAM DATE : December 2018
NO OF CREDITS : 3

PRE-REQUISITES : Preferably Undergone Training in Pedagogy

OBJECTIVE OF COURSE

Engineering practice and its related technologies have become global in scope and scale. To be effective, today's engineering graduate must not only be grounded in scientific and mathematical fundamentals, engineering principles and design, but must also have a global outlook and the broader skills to work in society in both home country and internationally.The quality issues of technical education system are required to be identified and strategies for application of principles of TQM, Re-engineering and Benchmarking be considered. This course is meant to senior teachers who are working in Polytechnic and Engineering colleges who are involved in quality assurance and accreditation process.

LEARNING OUTCOME

Improving quality Education in Engineering education. Develop different strategies to enhance the quality of education. Applying outcome Based learning and assessment systems.

COURSE PLAN

Week 1: Quality Assurance in Engineering Education-Overview (Introduction), Module1: Strategic Planning- Functions of Education Management

Week 2: Module1: Institutional Vision Mission and Mandate, Steps involved in strategic planning process, Work Plan Action Plan, Leadership qualities, Autonomy, Internal Revenue Generation and Utilization, Academic Performance Indicators

Week 3: Module 2: Institutional Development- Institutional development Models, Centre of Excellence

Week 4: Module 2: Industry Institution community partnership models, Industrial Consultancy, Research and Development

Week 5: Module 3: Total Quality Management in Engineering Education- Leadership, Concepts of Quality Management, QMS/QC Tools, Assessment of Quality, Application of TQM in Engineering Education

Week 6: Module 4: Educational Project Management-Project Management Principles, PERT/CPM, Applications of Network Techniques, Time analysis, Cost Planning and Control, Cost Tradeoff- Resource Planning and Monitoring, Project management software packages

Week 7: Module 5: Outcome Based Education & Accreditation- Overview of OBE &Accreditation, Course Outcome, Programme Educational Objectives, Mapping of Course outcome - Programme outcome

Week 8: Module 5: Assessment of Attainment of PEO.PO & CO, Accreditation Criteria &Parameters, SAR Preparations.

ABOUT INSTRUCTOR

Prof. Dr. E.S.M .Suresh is working as Professor and Head of Civil Engineering at National Institute of Technical Teachers Training and Research , Chennai, India (MHRD, Govt. of India). He has got 28 years of experience in Teaching and Research. He is conducting Faculty Training Programs for Polytechnic and Engineering College Teachers. He has completed more than 400 training for Polytechnic/Engineering College faculty. He has conducted more than 10 International Training Programs. He is guiding Ph.D Scholars in the area of Engineering Education and Civil Engineering. (6 got Awarded and 5 more are working under his guideship). He is the Expert Member of National Board of Accreditation and evaluated the Civil Engineering Programs at Diploma, Degree and Post Graduate level. He has been recognized as an expert by UNESCO Bangkok on MOOCs in Higher Education. He has visited countries viz. USA, The Netherlands, Germany, France, Belgium, Singapore, Malaysia and China.

STRATEGIC PLANNING FOR TECHNICAL INSTITUTIONS

PROF. S. DHANAPAL
Professor & Head, (Retd), Centre for Curriculum Development, National Institute Of Technical Teachers Training & Research.
(NITTTR)

TYPE OF COURSE : Teachers Training Certificate Course
INTENDED AUDIENCE : Faculty members of Technical Institutions
COURSE DURATION : 8 weeks (24th Sep to 16th Nov, 2018)
EXAM DATE : 24th November, 2018
NO OF CREDITS : 3
PRE-REQUISITES : Reasonable knowledge of the student services, industry partnership, Institutional organization, accreditation requirements and achievements of one's own institution

OBJECTIVE OF COURSE

Strategic Planning helps a technical institution to proactively shape its future and determine the path and milestones that determine actual performance. In the bottom-up approach the teachers and staff of the institution take the responsibility of developing and managing the strategic plan. This course has the objective of providing the teachers with the knowledge and skills needed for developing a strategic plan, particularly the need for a plan, developing vision and mission statements, SWOT analysis, identifying thrust areas and objectives, developing work plan and action plan and carrying out the strategic plan (strategic management).

LEARNING OUTCOME

- Initiate the strategic planning process for the institution
- Clarify the mandate of the organisation
- Develop Vision and Mission statements.
- Conduct SWOT analysis for the institute
- Identify Thrust Areas which are the strategic directions of the institute
- Develop Work Plan and Action Plans for implementing the Thrust Areas
- Implement the strategic plan for the institution
- Monitor the implementation and evaluate the results achieved
- Revise the strategic plan

COURSE PLAN

Week 1: Module 1: Strategic Planning, need, Module 2: Reasons for strategic planning, Module 3: Alternatives for strategic planning, Assignment: Identify the need for Strategic Planning for your institution

Week 2: Module 1: Decision on strategic planning, Module 2: Strategic planning group, Module 3: Training members of the group, Assignment: Exercise on steps in developing strategic planning

Week 3: Module 1: Defining mandate, Module 2: Clarifying mandate for an organisation, Assignment: Develop the Mandate for an institution

Week 4: Module 1: Components and attributes of Vision and Mission statements for an institution, Module 2: Developing vision and mission statements, Assignment: Develop Vision and Mission statements for your organisation consistent with Mandate

Week 5: Module 1: Components Purpose of SWOT analysis, information sources, tool development, Module 2: Data collection and analysis

Assignment: 1. Develop tools for SWOT analysis, 2. Carry out SWOT analysis for your organisation Mandate

Week 6: Module 1: Identification of thrust areas and prioritising them, Module 2: Identify objectives for thrust areas, Module 3: Write objective statements, Assignment: 1. Identify Thrust areas and Writing objectives

Week 7: Module 1: Prepare work plan and develop action plan, Assignment: 1. Preparing Work Plan and Action Plan for your organisation

Week 8: Module 1: Identification of Strategic management process, ToR for Strategic Management Group, Module 2: Seven key factors for sustaining the process, Module 3: structures, linkages and procedures for the process, Assignment: 1. Develop ToR for Management Group and develop structures and linkages for the Process

ABOUT INSTRUCTOR

Extensive experience in developing Strategic Plans for technical education institutions. Carried out Strategic Planning for 15 polytechnics in the North Eastern States under World Bank Assisted Project (Tech Ed III). Part of the expert team for developing Strategic Plan for a leading Engineering College in Tamilnadu. Has trained several teachers in the Strategic Planning process for technical institutions.

DR. SUNIL DUTT
Professor & Head, Department of Education & Educational Management, National Institute of Technical Teachers Training & Research, Chandigarh

TYPE OF COURSE : Teachers Training Certificate Course
INTENDED AUDIENCE : Teachers working in Educational Institutions and other professionals to enable them develop Self-learning materials in their subjects
COURSE DURATION : 8 weeks (15th Oct to 07th Dec, 2018)
EXAM DATE : 15th December, 2018
NO OF CREDITS : 2
PRE-REQUISITES : Teachers working in Technical Institutions with UGC/AICTE prescribed qualifications

OBJECTIVE OF COURSE

In order that learners learn in their own time and at their own pace with little or no supervision, self- learning materials are designed to facilitate the learning process. Self-directed learning can be challenging, even for the brightest and most motivated students. The course introduces the learner to the need: New challenges and trends; concept of Learning Material and its purposes; essential characteristics of SLMs; general principles of Learning Material Development; process of developing Self Learning Material; structure of Self Learning Materials; producing prototype; validation

LEARNING OUTCOME

After the course is over, participants will be able to develop self-learning material (both print and computer Assisted) on any topic of their choice in their areas of specialization.

COURSE PLAN

Week 01: Self Learning Material – Need, New Challenges & Trends, concept, Characteristics & Types

Week 02: Systematic Approach to Instructional Design – Steps, Task Analysis and Learning Outcomes

Week 03: Principles and Process of Development of Self Learning Material

Week 04: e-content Generation and Integration of Graphics in Self Learning Material

Week 05: Computer Assisted Instruction-Design & Development

Week 06: Self Learning Material – Content Organization & Presentation

Week 07: Quality Assurance and Intellectual Property Rights

Week 08: Validation – Its need and methodology; Responsibility and Obligations

Total duration of the course is 20 hours. Each week contains videos (2 to 6; each of about 10 minutes duration), e-content, Discussion forums/quizzes/Assignment and time for studying web link resources

ABOUT INSTRUCTOR

Dr. Sunil Dutt is presently Professor & Head, Department of Education and Educational Management at National Institute of Technical Teachers Training & Research, Chandigarh. He holds M.Sc. (Hons) Chemistry; M.Ed. and Ph.D. (Education). He has about 2 and half years industrial and 33 years of teaching and research experience. His areas of specialization include Educational Technology, Research Methodology, Guidance & Counselling, Measurement & Evaluation and Educational Management. He has guided 34 Ph.D. dissertations and contributed 59 research publications in International & National Journals and published six text books. He has coordinated about 275 short term courses and taught subjects like 'Research Methodology', 'HRD & Training Methods', 'Education Project Planning & Management', 'Psychology of Adult Learning' and 'Principles of Management'. He has developed 03 video films, 18 CAI packages/self-learning material; Coordinated 12 Research & Development studies; coordinated testing services/activities under IRG etc.

DR. RAJESH KUMAR DIXIT
Professor, Department of Civil and Environmental Engineering,,
NITTTR Bhopal

TYPE OF COURSE : Teacher Education certificate course
INTENDED AUDIENCE : Teachers of engineering colleges.
COURSE DURATION : 8 weeks (30th July to 21st Sept, 2018)
EXAM DATE : There is no final examination in this MOOC
NO OF CREDITS : 3

OBJECTIVE OF COURSE

To prepare the participants (means teachers or potential teachers of engineering colleges) to:
a. Design (redesign) the undergraduate engineering programme in line with outcome based accreditation based on NBA criteria.
b. Implement and evaluate undergraduate engineering programme in line with outcome based accreditation based on NBA criteria.
c. Identify and collect appropriate data for various criteria.
d. Prepare the self assessment report (SAR) for undergraduate engineering programmes.
e. Face the NBA evaluation team.
f. Prepare response/ documents for post visit activities.

LEARNING OUTCOME

This course on accreditation will prepare the participants to take up accreditation related activities for undergraduate engineering programmes including preparing Self-Assessment Report.

COURSE PLAN

Week 1:

Module 1: Introduction to accreditation

Module 2: Outcome based Education

Week 2:

Module 3: Vision, Mission and PEOs

Module 4: POs and PSOs

Week 3:

Module 5: Course Outcomes and Mapping with POs and PSOs

Module 6: Curriculum structure, Curriculum gap and Content beyond syllabus

Week 4:

Module 7: Teaching learning processes

Module 8: Attainment of POs, PSOs and Cos

Week 5:

Module 9: Criteria related to students : Students' Performance

Module 10 : Criteria related to faculty : Faculty Information and Contributions

Week 6:

Module 11: Facilities and Technical Support

Module 12: Continuous Improvement

Module 13: First Year Academics

Week 7 :

Module 14: Student Support Systems

Module 15: Governance, Institutional Support and Finances

Week 8:

Module 16: Applying for Accreditation and Visit

Module 17: Problem Solving: Difficulties Encountered

ABOUT INSTRUCTOR

Prof.R.K.Dixit is currently working as Professor in the Department of Civil and Environmental Engineering at National Institute of Technical Teachers' Training and Research, Bhopal. He is having 33 years of experience in training, education, research, industry, consultancy and extension activities. He has published more than 50 research papers. He has conducted more than 50 visits for accreditation of under-graduate and post graduate engineering programmes as well as diploma (engineering) programmes as a chairman and an expert-member. He has been consultant, the World Bank, The Govt. of Madagascar, National Project Implementation Unit and various state governments for technical education.

FUNDAMENTALS OF CURRICULUM IN ENGINEERING EDUCATION

PROF. JOSHUA EARNEST
Professor, Department of Civil and Environmental Engineering,
NITTTR Bhopal

TYPE OF COURSE : Teacher Education Certificate Course

COURSE DURATION : 4 weeks (Aug 13 to Sept 10, 2018.)

INTENDED AUDIENCE : The course is mainly intended for those technical teachers who are interested in understanding or developing engineering education curricula. Teachers could be of any discipline..

EXAM DATE : September 2018

NO OF CREDITS : 2

PRE-REQUISITES : Any engineering, pharmacy or architectural graduate.

OBJECTIVE OF COURSE

Comprehend different types of curriculum approaches to plan to design of relevant outcome-based engineering curricula of technical education programmes to fulfill the need of the industry/society by comprehending.

LEARNING OUTCOME

a. Select the relevant approach(s) for the developing curriculum for the given occupation.
b. Evolve the activities of the different stages for developing the given curriculum.
c. Design relevant need identification tools for different technical occupations.
d. Evolve relevant curriculum designs for an outcome-based curriculum (OBC).

COURSE PLAN

Week-1

Learning Outcome: Select the relevant approach(s) for the developing curriculum for the given occupation

Week-2

Learning Outcome: Evolve the activities of the different stages for developing the given curriculum

Week-3

Learning Outcome: Design relevant need identification tools for different technical occupations

Week-4

Learning Outcome: Evolve relevant curriculum designs for an outcome-based curriculum (OBC)

ABOUT INSTRUCTOR

Prof. Joshua Earnest is currently working as Professor in National Institute of Technical Teachers Training and Research (NITTTR), Bhopal. He is having an industrial experience of about 6 years and 31 years of experience in education, teaching, training, research, consultancy and research. He has published 2 technology books one targeted for the industry and other for the university system. 1 book related to curriculum development along with Prof. B. L. Gupta, and 2 modules related to engineering education along with other co-faculty of NITTTR Bhopal. He has published several international papers related to engineering education over the past several years. Prof. Joshua Earnest is B. Sc (Engg). in Electrical Engineering, an M.Tech. in Heavy Electrical Equipment, M. Tech Ed., and a Ph. D. in Technical Education.

PROF. B. L. GUPTA
Professor, Department of Management and Dean Academics and Research
National Institute of Technical Teachers' Training and Research,
Bhopal

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Since it is teacher training programme so teachers of Polytechnics
COURSE DURATION : 8 weeks (August 13 to October 08, 2018)
EXAM DATE : November 2018
NO OF CREDITS : 3
PRE-REQUISITES : Pre-requisites of the course. Any teacher or potential teacher of polytechnics may enrol for the programme

OBJECTIVE OF COURSE

To prepare the participants (means teachers or potential teachers of polytechnics) to:
a. Make preparation to satisfy requirements of NBA criteria
b. Prepare the self assessment report for Diploma engineering programmes.
c. Facilitate on site evaluation by NBA evaluation team

COURSE PLAN

Week 01:-

Module 1 Overview of NBA

Week 02 :

Module 2 Vision, mission and Programme educational objectives

Week 03 :

Module 3Programme curriculum and teaching learning process

Week 04 :

Module 3 Programme curriculum and teaching learning process

Week 05 :

Module 4Course outcomes and outcomes

Week 06 :

Module 5students' Performance

Module 6 Faculty information and Contribution

Module 7 Facility and technical support

Week 07 :

Module 8 Continuous improvement

Module 9 Student Support System

Module 10 Governance, institutional support and financial resources

Week 08 :

Module 11Documentation for accreditation

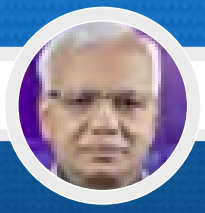
Module 12Preparation for obtaining NBA

Module 13Preparation for NBA Evaluation team visit

Module 14Facilitating on site visit of NBA evaluation team

ABOUT INSTRUCTOR

Prof. B. L. Gupta is currently working as Professor in Department of Management, National Institute of Technical Teachers' Training and Research, Bhopal. He is also holding the post of Dean Academics and Research. He is having 35 years of experience in education, teaching, training, consultancy, extension and research. He has published 22 reference books and more than 60 research papers. Prof. Gupta has conducted more than 70 training programmes on accreditation. Prof. B. L. Gupta is B. E. Civil, LL. B., M. Tech Ed., Ph. D. in Technical Education, MBA in Human resource management, PG Diploma in marketing, and PG Diploma in Operation Management.



DR. D. SINGH KARAULIA
Professor of Computer Science, National Institute of Technical Teacher's Training and Research, Bhopal

TYPE OF COURSE : Teacher Education Certificate Course
INTENDED AUDIENCE : PG / Faculty teaching PG engineering programme
COURSE DURATION : 4 weeks (15th Oct to 14th Nov, 2018)
EXAM DATE : 17th November, 2018
NO OF CREDITS : 2
PRE-REQUISITES : Faculty Training on "Accreditation of UG Programmes" Conducted by NITTTRs – preferable but not necessary

OBJECTIVE OF COURSE

After completion of this course participants will be able to fill up the Self Appraisal Report (SAR) of PG engineering programme for NBA accreditation

LEARNING OUTCOME

- Articulate curriculum development aspects, PEOs, POs, and COs
- Design Course Articulation Matrix, and assess attainment of POs
- Compile student's data and faculty contribution records
- Document laboratories & research facilities
- Record evidence based continuous improvement

COURSE PLAN

Week 1:

Significance of Accreditation, OBA, Accreditation process, pre-qualifier, premise & criteria of accreditation, basic institutional information, articulating vision, mission and PEOs, programme curriculum, teaching & learning processes.

Week 2:

Articulating Program Outcomes (POs), Course Outcomes (COs), and designing a Course Articulation Matrix, attainment of Programme Outcomes.

Week 3:

Compiling admitted students & successfully graduated student's data, success rate, professional activities, and faculty contributions.

Week 4:

Laboratories & research facilities; continuous improvement.

ABOUT INSTRUCTOR

A Professor at NITTTR, Bhopal experienced in training, education, research, consultancy & extension activities, and served as programme evaluator as member of NBA Expert Committees.

LEARNING MANAEMENT SYSTEM

DR. RANJAN DASGUPTA
Professor, Department of Computer Science and Engineering, NITTTR, Kolkata

RAJEEV CHATTERJEE
Assistant Professor, Department of Computer Science and Engineering, NITTTR, Kolkata

TYPE OF COURSE : Teacher Certificate Course
INTENDED AUDIENCE : Faculty members of Technical Institution
COURSE DURATION : 12 weeks (27th August to 16th Nov, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4
PRE-REQUISITES : Faculty members should have exposure in various web-based application and interest in distance mode of Teaching-learning system.

OBJECTIVE OF COURSE

Learning Management System (LMS) is a course that will empower the teachers of the higher education to develop their courses in the e-learning platform. This will also aware them of the various features available in the LMS. After going through the course learners' will be able to:

- Explain the concept e-learning
- Demonstrate the fundamentals of Learning Management System
- Explain various learning methods, learning approaches, learning styles
- Demonstrate content development using standards such as SCORM and LTSA
- Explain internet technology, social media
- Use of ADDIE model for e-content development based on MOODLE platform
- Explain Security and plagiarism related to LMS

LEARNING OUTCOME

The SWAYAM/MOOC course on Learning Management System (LMS) is a first-hand experience for the teachers of the higher education institutes especially those related the technical domain. The course will demonstrate the various terminologies related to the domain of e-learning or Technology Enabled Learning (TEL). Apart from this the learner will be able to develop a learning content related to a course of particular domain using the state of art technology and standards available on SWAYAM/MOOC platform.

COURSE PLAN

Week 01:- E-learning Fundamentals

Week 02:- LMS fundamentals, Major features of LMS

Week 03:- Learning methods, Learning Domains, Learning Approach, Types of learning, Adult learning approach

Week 04:- SCORM and LTSA

Week 05:- Internet Technology

Week 06:- Technology and use, Social Media

Week 07:- Learning 2.0, LMS more than content delivery

Week 08:- LMS Design issues, MOODLE, ADDIE model

Week 09:- Security and LMS

Week 10:- Plagiarism and LMS

Week 11-12:- Preparing faculty for LMS/ SWAYAM use.

ABOUT INSTRUCTOR

Dr. Ranjan Dasgupta, Professor, Department of Computer Science and Engineering is working at NITTTR, Kolkata for more than 25 years and is actively engaged in various teaching learning process. He has coordinated more than 200 training programs on Database Management System(DBMS), Webpage Design, Software Engineering and allied areas. His research interest includes Cloud computing, e-learning, Software engineering.

Rajeev Chatterjee, Assistant Professor, Department of Computer Science and Engineering is working at NITTTR, Kolkata for near about 18 years and is actively engaged in the domain of Technology Enabled Learning (TEL), Confidence Based Learning (CBL), IT infrastructure development, Computer Network etc. He has coordinated more than 150 training programs on IP based networking, e-learning, e-content development and IT infrastructure development.

LABORATORY AND WORKSHOP MANAGEMENT

DR. DIPANKAR BOSE
Professor, Department of Mechanical Engineering, National Institute of Technical Teachers' Training and Research, Kolkata

DR. SAMIRAN MANDAL
Professor, Department of Mechanical Engineering, National Institute of Technical Teachers' Training and Research, Kolkata

DR. SUBRATA MONDAL
Assistant Professor, Department of Mechanical Engineering, National Institute of Technical Teachers' Training and Research, Kolkata

TYPE OF COURSE : Teacher Certificate Course
INTENDED AUDIENCE : Faculty members of Technical Institution
COURSE DURATION : 8 weeks (23 Aug to 21 Sep, 2018)
EXAM DATE : November 2018
NO OF CREDITS : 2
PRE-REQUISITES : Any teacher or potential teacher of technical institution may enrol for the programme

OBJECTIVE OF COURSE

After successful completion of the course the participants will be able to

- To explore methodology of laboratory/workshop learning
- To explore various aspects of training for instructors, and management issues
- To explore safety management for laboratory/workshop

LEARNING OUTCOME

Module 1
1. Explain aims of laboratory and workshop classes, 2. Describe the purpose and nature of activities in laboratory and workshop.

Module 2
1. Explain the steps in planning a laboratory class, 2. Develop expected outcomes of laboratory class, 3. Prepare instruction sheet for laboratory class, 4. Develop lesson plan for a laboratory class, 5. Explain the steps for conducting a laboratory class, 6. Plan the demonstration of a laboratory class, 7. Guide the students to conduct/perform experiment/job in laboratory/ workshop

Module 3
1. Explain the nature of performance based assessment, 2. Describe the main steps of performance based assessment, 3. Explain the basis of performance based assessment, 4. Explain the common methods of observing, recording and scoring, 5. Develop rubrics for performance based assessment in laboratory

Module 4
1. Explain non-motivational issues of the students in attending practice classes, 2. Know the steps for encouragement of motivation in laboratory works to the students, 3. Explain role of instructors in managing practice classes, 4. Describe the various aspects of management of manpower (technical staff) and students, 5. Plan management of machines/equipment and consumables

Module 5
1. Discuss various common hazards in laboratory/workshop

Module 6
1. Describe overall safety management issues to be followed in conducting laboratory and workshop activities. 2. Describe the details of protective equipment required for safety management in laboratory and workshop. 3. Explain various safe operating procedures to be followed for safety aspects of laboratory/workshop users.

Module 7
1. Explain objectives of training , 2. Know learning methods of training , 3. Plan training strategies of instructors, 4. Explain categorization of instructors for selection of training providers, 5. Know various types of training providers.

Module 8
1. Describe the details of wastes produced in conducting laboratory and workshop classes. 2. Explain different methodologies in managing waste in laboratory and workshops.

COURSE PLAN

Week 1- Introduction (aims of laboratory and workshop classes), the purpose and nature of activities in laboratory and workshop.

Week 2- Nature of learning process in laboratory and workshop, methodology of laboratory and workshop learning.

Week 3 -Basis of evaluation in laboratory and workshop, and various parameters for the performance assessment of laboratory and workshop classes.

Week 4 - Management issues such as management of classroom, manpower, resources.

Week 5 - Common hazards in laboratory and workshops.

Week 6 - Safety management in laboratory and workshops, personal protective equipment etc.

Week 7 - Training aspects of Laboratory instructors.

Week 8 -Waste management in laboratories and workshops, common violations in waste management in laboratory/workshop

ABOUT INSTRUCTOR

Dr. Dipankar Bose, Professor, Department of Mechanical Engineering, at National Institute of Technical Teachers' Training and Research, Kolkata has been working in the domain of Manufacturing Technology, Fluid Mechanics and Pedagogical Aspects of Laboratory Teaching. He has coordinated more than 100 training programs on Mechanical Engineering discipline and Engineering Education.

Dr. Samiran Mandal, Professor, Department of Mechanical Engineering, at National Institute of Technical Teachers 'Training and Research, Kolkata has been working in the domain of Manufacturing Technology, Product Design, Robotics and Research Methodology. He has coordinated more than 150 training programs on Manufacturing Technology and Teaching Learning Systems.

Dr. Subrata Mondal, Assistant Professor, Department of Mechanical Engineering at National Institute of Technical Teachers 'Training and Research, Kolkata has been working in the domain of Advanced Applications of Material Science & Engineering, Biomaterials, Water Treatment and Safety Aspects of Laboratory. He has coordinated training programs on Material Science, Nanotechnology, Water Treatment, Safety Management of Laboratory etc.

LEARNING AND INSTRUCTION

DR. KIRAN SAKSENA
Professor and Ex-Head, Department of Education & Research,
N.I.T.T.T.R. Bhopal.

TYPE OF COURSE : Teacher Training Certificate Course
INTENDED AUDIENCE : UG/PG/Diploma/Certificate/School Practising / Potential technical teachers
COURSE DURATION : 4 weeks (15th Oct 2018 to 12th Nov 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

OBJECTIVE OF COURSE

The course is intended to enable the practicing and probable teachers to:

- Appreciate the process of learning from different perspectives and apply the principles of learning to enhance the effectiveness of learning and instruction.
- Support to achieve the intended learning outcomes at different taxonomic levels in cognitive, affective and psycho-motor domains.
- Design the instructional process to achieve intended learning outcomes

LEARNING OUTCOME

The course will enable the teachers to:

1. Explain the process of learning from different perspectives.
2. Suggest the activities for classroom/ Lab instruction sessions in view of principles of learning derived from different perspectives.
3. Manage variables affecting the process of learning to enhance its effectiveness
4. Use inventories / tools to identify the individual differences among learners.
5. Suggest strategies to address individual differences among learners
6. Formulate learning outcomes at different taxonomic levels in Cognitive, Affective and Psychomotor domains.
7. Design learning and instruction events as per Gagne's nine events
8. Prepare an instructional plan based on events

COURSE PLAN

Week 01:

Unit One: Human Learning: An Overview: Process and Principles of Human Learning as derived from different perspectives: Behaviourism, Congitivism, Constructivism, Social Learning., Experiential Learning, Action Learning and Collaborative Learning

Week 02:

Variables Affecting Human Learning, Inventories/tools to assess identified variables and Learning styles of students

Week 03:

Domains of Learning- Domains of learning, Four pillars of learning and Taxonomic level in Cognitive, Affective and Psychomotor Domain.

Week 04:

Instruction: Process of learning and Instruction, Instructional events by Robert M Gange

ABOUT INSTRUCTOR

Dr. Kiran Saksena is a Professor and senior faculty member and has more than 33 years of experience of designing and conducting training programmes for technical teachers, developing learning resources, conducting research for systemic development, handling national and international consultancy projects. She has guided research studies at postgraduate and doctorate level, presented / published more than 35 research papers in many national and International Seminars. She is internationally trained in countries like U.K., Philippines and U.S.A. (1999) in specialized areas and skills. She is a practising counsellor and an excellent soft skills trainer. Prof. Kiran Saksena is Ph.D. (Education), M.Ed., M.A. (Applied Psychology) (University Gold Medalist) and P.G. Diploma in Human Resources Management (IGNOU).

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Diploma & Certificate Courses

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LIBRARY AUTOMATION AND DIGITISATION

PROF. UMA KANJILAL

Professor and Head Faculty of Library and Information Science and presently Director of Inter University Consortium of Technology Enabled Flexible Education (IUC- TEFED) in the Indira Gandhi National Open University (IGNOU), New Delhi

TYPE OF COURSE : Certificate

INTENDED AUDIENCE : Certificate

COURSE DURATION : 6 months (July 1, 2018 to Dec 31, 2018)

EXAM DATE : December 2018

NO OF CREDITS : 4

PRE-REQUISITES : Passed 10 + 2 with Library & Information Science qualification atleast at Certificate level.

OBJECTIVE OF COURSE

This course introduces the concepts of library automation and digitisation. It aims to train the learners on open source library automation software Koha and digital library software DSpace.

LEARNING OUTCOME

After going through this course the learner will get a thorough understanding of an automated library system, automation processes and the use of open source Integrated Library System software like Koha. They will also know about different types of resources available in Libraries and their preservation aspects. They will get familiarised with the digitisation process and learn to use Open Source DSpace software for developing digital libraries and repositories.

COURSE PLAN

Block 1: Library Automation Packages

- Unit 1: Introduction
- Unit 2: Acquisition and Cataloguing
- Unit 3: Serials Control
- Unit 4: Library Services

Block 2: Media Resources

- Unit 6: Media Resources for Libraries and their Preservation
- Unit 7: Equipment and their Maintenance

Block 3: Digitisation of Media Resources

- Unit 8: Digitisation Concept and Need
- Unit 9: Methods and Equipment

ABOUT INSTRUCTOR

Prof. Uma Kanjilal has more than 28 years of experience in the Open and Distance Learning System. She is one of the National Coordinators of SWAYAM (India MOOCs) and SWAYAM PRABHA. She is a PI of the National Virtual Library of India Project of Ministry of Culture. Her specializations include e-learning, multimedia courseware development, ICT applications in Libraries and Digital Libraries. She was a Fulbright Scholar in University of Illinois, Urbana Champaign in 1999-2000 where she worked on Multimedia courseware development.

DATABASE AND CONTENT ORGANISATION

DR. V. V. SUBRAHMANYAM
Associate Professor and Director in the School of Computer and Information Sciences (SOCIS), IGNOU, New Delhi.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate
COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

PRE-REQUISITES : Passed 10 + 2 with Library & Information Science qualification at least at Certificate level.

OBJECTIVE OF COURSE

By the end of the course, students will be able to: 1. Understand the Database concepts, elements of DBMS and Database Models 2. Review and articulate database functions and data modelling in LIS environment 3. Describe various File Organisation Techniques and Search Strategies 4. Understand the Relational Model and able to create conceptual design diagrams using Entity Relationship Modelling 5. Identify the concerns of Indexing 6. Use Structured Query Language to retrieve and manage information 7. Work with MySQL – RDBMS, executing all of its SQL commands 8. Identify basic concerns regarding Database Recovery, Transaction Management, Concurrency control and Deadlocks. 9. Access and use WINISIS 10. Understand the emerging trends namely Open Access Database Services, Text Retrieval Engines, Multilingual Text Retrieval, Data Mashup and Linked Open Data for Libraries.

COURSE PLAN

1. DBMS –Introductory Concepts
2. Elements of DBMS
3. Types of Databases and Data Models
4. Relational Databases and Overview of DB Design
5. Various Key Constraints in RDBMS
6. Anomalies and Normalization
7. File Organization
8. Search Strategy
9. Content Organisation and Formats
10. Indexing and Indexing Tools
11. Types of SQL Commands and Introduction to MySQL
12. MySQL Commands
13. Database Recovery
14. Transaction Management, Concurrency Control and Deadlock
15. Textual DBMS Major features
16. CDS/ISIS for Windows An Introduction
17. Use of Content Designators in WINISIS
17. Use of Content Designators in WINISIS
18. Common Communication Format (CCF) in WINISIS
19. Steps in Developing Databases in WINISIS
20. Steps in WINISIS: FDT and Worksheet
21. Steps in WINISIS: Pickup Lists in Worksheet
22. Steps in WINISIS: Basic Formatting Language
23. Steps in WINISIS: Advanced Formatting Language
24. Steps in WINISIS: Field Selection Table (FST)
25. Data Entry and Data Export/Import in WINISIS
26. Searching and Browsing in WINISIS
27. Utilities in WINISIS
28. CDS/ISIS Software Family
29. Textual Databases Evolution and Evaluation
30. Introduction to Open Access Database Services
31. Text Retrieval Engines
32. Multilingual Text Retrieval
33. Data Mashup
34. Linked Open Data for Libraries

ABOUT INSTRUCTOR

Dr. V. V. Subrahmanyam received his *PhD(Computer Science)* from Jamia Milia Islamia (Central University), New Delhi, *M.Tech* (Computer Science and Technology) from Andhra University, Visakhapatnam and *B.Tech* (Computer Science and Engineering) from Nagarjuna University, Guntur. He is faculty in School of Computer and Information Sciences (SOCIS), IGNOU since 1998 and he has over 19+ years of research and teaching *experience.*

DOCUMENT PROCESSING AND ORGANISATION

PROF. JAIDEEP SHARMA
Professor Library and Information Science, IGNOU, New Delhi

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate
PRE-REQUISITES : Passed 10 + 2

COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

After going through the Course, the learners will be able to: Appreciate the need and purpose of cataloguing and classification in a library; Understand the process of cataloguing and classification; Know the different types and schemes of classification; Assign class numbers to documents using DDC; Know the different types of catalogues; Prepare catalogue entries using AACR2R; File entries in a catalogue knowing the different rules for filing; and Shelve books and carry out shelf rectification in a library

LEARNING OUTCOME

After attending this course, the learner will be able to understand the significance of classification and cataloguing in a library. He will be able to classify and catalogue documents using DDC and AACR- 2R. He will also be able to file entries and shelve books using standard schemes.

COURSE PLAN

Block 1: Classification Unit 1: Basics of Classification Unit 2: Classifying Documents using DDC Block 2: Cataloguing Unit 3: Basics of Cataloguing Unit4: Cataloguing Documents using AACR-2 Block 3: Filing and Shelving Unit 5: Filing Rules Unit 6: Shelving Course- 3 Information Sources and Library Services(BLII-013) Block 1: Information Sources and their use Unit1: Categories of Information sources Unit 2: Types of Information Sources Block 2: Library Services Unit 3: Circulation Services Unit 4: Reference Service Unit5: Awareness Services Unit 6: User Orientation

ABOUT INSTRUCTOR

Prof. Jaideep Sharma is a professor in the Faculty of Library and Information Science (LIS). He has a prior experience of working in the face-to-face mode of teaching for 14 years before joining IGNOU in the year 2003. Prof. Sharma has a doctoral degree in the area of Professional Competencies and Education for LIS in India. His area of specialization is Information Processing and Retrieval. Currently, he is also working as University librarian of IGNOU.

INFORMATION SOURCES AND LIBRARY SERVICES

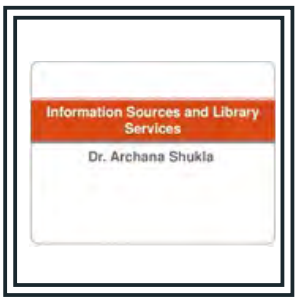
DR. ARCHANA SHUKLA
Assistant Professor, Library and Information Science, IGNOU

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate
PRE-REQUISITES : Passed 10 + 2

COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

The course deals with information sources and library services. It gives detailed information about categories of information sources and how to evaluate them.



LEARNING OUTCOME

After going through this course, you will be able to:
•Explain various types of information sources.
•Categorise them based on different criteria.
•Identify the different types of reference and information sources.
•Understand the basis characteristics and uses of these sources.
•Know about both print and electronic information sources.
•Describe the different types of services provided by Library and Information Centres.

COURSE PLAN

BLOCK 1 : LIBRARIES: BASICS AND CONTEXTS
Unit 1 : Role of Libraries in Society
Unit 2 : Types of Libraries and their Functions
Unit 3 : Functional Units and Operational Aspects
Unit 4 : Library Staff: Role and Responsibilities
BLOCK 2 : LIBRARY ROUTINES
Unit 5 : Document Selection and Acquisition
Unit 6 : Physical Processing
Unit 7 : Library Records
Unit 8 : Library Maintenance

ABOUT INSTRUCTOR

Dr. Archana Shukla, Reader Faculty of Library and Information Science, School of Social Sciences, IGNOU, new Delhi.

SUSTAINABLE MANAGEMENT OF BIODIVERSITY

DR. SHACHI SHAH
Associate Professor in the School of Inter-disciplinary and Transdisciplinary Studies at IGNOU, New Delhi.

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate

COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

This course provides an understanding of the concept and principle of biodiversity science. The course provides detailed information on the value and importance of biodiversity, causes as well as current crisis, and consequences of biodiversity loss. The course provides a conceptual understanding of various means of conservation, restoration and sustainable utilization of biodiversity which can provide viable solutions to a range of societal challenges and provides an effective tool to bridge the knowledge gap for sustainable management of biodiversity. The course also explores the linkages between biodiversity conservation, ecosystem services, climate change and sustainable livelihood. The course will also provide insights into current challenges as well as opportunities in the context of various international cooperation and national level programmes and legislative framework for biodiversity conservation. The course also will explore the Inter-linkages of biodiversity and sustainable development goals and the role of biodiversity in supporting the achievement of the Sustainable Development Goals.

LEARNING OUTCOME

- To understand the origin of Biodiversity, its values and importance
- To understand the extent of biodiversity threats causes as well as current crisis, and consequences of biodiversity loss
- To assess the linkages between global biodiversity loss and ecosystem services, food security and livelihood in the changing climate
- To provide a conceptual understanding of various means of conservation, restoration and sustainable utilization of biodiversity
- To provide international cooperation and legislative framework for biodiversity conservation
- To explore Inter-linkages of biodiversity and sustainable development goals and the role of biodiversity in supporting the achievement of the Sustainable Development Goals

COURSE PLAN

PRELUDE TO BIODIVERSITY Origin of species, Basic concept of Biodiversity, Value of biodiversity, Ecosystem Services, Biodiversity in India, Forest Biodiversity, Wetland Biodiversity, Extinction of species. GENETIC RESOURCES Plant genetic resources, Centres of origin, Agrobiodiversity, Crop Domestication, Animal genetic resources, Fish genetic Resources, Germplasm characterization and evaluation, Food security. DRIVERS OF BIODIVERSITY LOSS Direct Drivers of biodiversity loss, Biodiversity hotspots, Climate change and Invasive species as a threat to biodiversity, Threats to biodiversity hotspots in India, Consequences of biodiversity loss. BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT Conservation Biology, Germplasm Conservation, In situ and Ex situ conservation, Protected Areas, Eecosystem Approach for Sustainable management, Role of traditional Knowledge in Biodiversity Conservation, Community based ecosystem conservation, Gender and Biodiversity Conservation. SUSTAINABLE INITIATIVES International and National instruments to conserve biological diversity, Convention of Biological Diversity, Millennium Developmental Goals, National Biodiversity Act 2002, Governance of biodiversity in India, BIODIVERSITY AND SUSTINABLE DEVELOPMENT GOALS Inter-linkages of biodiversity and sustainable development goals and the role of biodiversity in supporting the achievement of the Sustainable Development Goals

ABOUT INSTRUCTOR

Dr. Shachi Shah is Associate Professor in the School of Inter-disciplinary and Transdisciplinary Studies at IGNOU, New Delhi. She attained her Master's in Environmental Science and Ph.D. in Environmental Science from G.B. Pant University of Agriculture and Technology, Pantnagar. She was a Post-Doctoral Research Fellow at G.B. Pant National Institute of Himalayan Environment & Sustainable Development, Almora, India from 2003 to 2004. In 2004, she joined College of Forestry and Hill Agriculture, G.B. Pant University of Agriculture and Technology, Pantnagar as Assistant Professor (Environmental Science). As a faculty member of G.B. Pant University during 2004-11, she taught many courses at graduate level and worked on diversity and biotechnological application of plant growth promoting rhizobacteria of Himalayan Region. She also serves on the Editorial boards of Journal of Environment and Ecology and Indian Journal of Hill Agriculture and reviewer for a number of other National and International journals.

FOOD LAWS AND STANDARDS

PROF. M. K. SALOOJA
Professor & Director, School of Agriculture, Indira Gandhi National Open University IGNOU, New Delhi

TYPE OF COURSE : Diploma
INTENDED AUDIENCE : Diploma
COURSE DURATION : 12 weeks (July 9, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4
PRE-REQUISITES : Graduation/ Post Graduation in Science with Chemistry/ Bio-chemistry or Microbiology as one of the subjects.

OBJECTIVE OF COURSE

The objective of Course "Food Laws and Standards" is to explain participating fellows with the basic aspects of national and international food laws and standards. The course has four major components – (a) Indian Food Regulatory Regime; (b) Global Scenario; (c) Export and Import Laws and (d) Regulations and Other Laws and Standards.

LEARNING OUTCOME

•Knowledge on basic aspects of national and international food laws and standards.

COURSE PLAN

Block-1: Indian Food Regulatory Regime
Unit-1 Prevention of Foods Adulteration Act Rules
Unit-2 Foods Safety and Quality Requirements
Unit-3 Foods Safety and Standard Act, 2006
Unit-4 Essential Commodities Act, 1955

Block-2: Global Scenario
Unit-5 Codex Alimentarious Commission (CAC)
Unit-6 WTO Implications
Unit-7 Other International Standards Setting Bodies (e.g. ISO, OIE, IPPC)

Block-3: Export & Import Laws and Regulations
Unit-8 FTDR Act, 1992 and Foreign Trade Policy
Unit-9 Export (Quality Control and Inspection) Act, 1963
Unit-10 Export Regulations and Promotion Bodies
Unit-11 Plant and Animal Quarantine
Unit 12 Customs Act and Import Control Regulations

Block-4: Export & Import Laws and Regulations
Unit-13 Other Laws Related to Food Products
Unit-14 Voluntary National Standards: BIS and AGMARK
Unit-15 National Agencies for Implementation of International Food Laws and Standards Unit-16 Food Labelling

ABOUT INSTRUCTOR

Academic experience of more than 33 years in the disciplines of Dairy Technology, Food Safety and Quality Management and Vocational Education. A Dairy Technologist by profession from the National Dairy Research Institute and set to the teaching profession as Assistant Professor in the Dairy Science College, Udaipur. Diversified into educational planning and vocational education by serving as Senior Research Officer in the Planning Commission and Reader in the NCERT, respectively. IGNOU's experience in the open and distance learning is adding new vista to the academic profession. At present, Programme Coordinator for the following IGNOU programmes: 1. Diploma in Dairy Technology; 2. Diploma in Value Added Products from Fruits &; Vegetables; 3. Post Graduate Diploma in Food Safety & Quality Management; and 4. Ph.D. in Dairy Science & Technology. Awarded with Commonwealth Scholarship for Post doctorate at CSIRO, Australia and Jawaharlal Nehru Award of ICAR. Always willing to learn.

TECHNOLOGY OF FERMENTED, CHEESE, ICE-CREAM AND BY-PRODUCTS

PROF. M. K. SALOOJA
Professor & Director, School of Agriculture, Indira Gandhi National Open University IGNOU, New Delhi

TYPE OF COURSE : Diploma
INTENDED AUDIENCE : Diploma
COURSE DURATION : 12 weeks (July 9, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

PRE-REQUISITES : Graduation/ Post Graduation in Science with Chemistry/ Bio-chemistry or Microbiology as one of the subjects.

OBJECTIVE OF COURSE

The objective of the Course is to explain participating fellows with the basic composition, standard specification, method of manufacturing, packaging and defects during manufacturing and storage of these products. The course has four major components – (a) Fermented Products; (b) Cheese; (c) Frozen Dairy Products and (d) Dairy By-products. It shall impart knowledge and technical proficiency in manufacture of these products. It shall also facilitate Good Manufacturing Practices in the dairy sector.

LEARNING OUTCOME

Knowledge on basic aspects of basic composition, standard specification, method of manufacturing, packaging and defects during manufacturing and storage of fermented, cheese, ice-cream and by-products.

COURSE PLAN

Technology of Fermented, Cheese, Ice-cream and By- products
Fermented Dairy Products Manufacture of Shrikhand and yogurt
Making of Yogurt
Fermented, Commercial Product of Dahi, Lassi and Chhachh
Commercial Production of Shrikhand, Mishti dahi and Yougurt
Fermented Dairy Product Manufacturing of Indigenous Product
Fermented Dairy Products Packaging and Sorage
An Introduction to Milk By- Products
Casein By- Products
Condensed Whey and Whey Powder
Application of Membrane Processing in Dairy Industry
Ice- Cream and Frozen Desserts: An Introduction
Calculation of Ice Cream Mix and Commercial Manufacturing
Cheese Starter Cultures
Microbiology of cheese

ABOUT INSTRUCTOR

Academic experience of more than 33 years in the disciplines of Dairy Technology, Food Safety and Quality Management and Vocational Education. A Dairy Technologist by profession from the National Dairy Research Institute and set to the teaching profession as Assistant Professor in the Dairy Science College, Udaipur. Diversified into educational planning and vocational education by serving as Senior Research Officer in the Planning Commission and Reader in the NCERT, respectively. IGNOU's experience in the open and distance learning is adding new vista to the academic profession. At present, Programme Coordinator for the following IGNOU programmes: 1. Diploma in Dairy Technology; 2. Diploma in Value Added Products from Fruits &; Vegetables; 3. Post Graduate Diploma in Food Safety & Quality Management; and 4. Ph.D. in Dairy Science & Technology. Awarded with Commonwealth Scholarship for Post doctorate at CSIRO, Australia and Jawaharlal Nehru Award of ICAR. Always willing to learn.

INDIAN AGRICULTURAL DEVELOPMENT

DR. PRAVEEN JAIN
Assistant Professor in the School of Agriculture, Indira Gandhi National Open University (IGNOU), New Delhi

TYPE OF COURSE : Diploma
INTENDED AUDIENCE : Diploma
COURSE DURATION : 20 weeks (July 9, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4
PRE-REQUISITES : Graduation/ Post Graduation in Science with Chemistry/ Bio-chemistry or Microbiology as one of the subjects.

OBJECTIVE OF COURSE

The course describes the various phases of the Indian agriculture development starting from the pre-historic agriculture to the modern agriculture. The course identifies the traditions, belief and agricultural practices followed by Indian farmers. The course explains the scope of Indian agriculture and its contribution in the Indian economy. The status, utilization pattern, problems and development of agricultural resources viz. land, labour, water, biodiversity, livestock and fisheries are covered. Institutional development in agriculture such as cooperatives, farmers' organization, institutional finance, research, education and extension warehousing and storage, public distribution system, etc. are explained along with their importance. Various concepts such as capital formation, agricultural pricing, taxation and subsidies are briefly described along with their importance in agricultural production management. The course talks about the role of food grains procurement, storage, marketing, research and technology transfer in development of Indian agriculture.

LEARNING OUTCOME

The learners will recognise the emerging issues and trends in agriculture such as diversification, agriculture industry interface, trade, quality, gender and sustainability, globalization and use of information and communication technology.
during manufacturing and storage of fermented, cheese, ice-cream and by-products.

COURSE PLAN

Week 1: Evolution And Scope Of Agriculture
WEEK 2: INDIAN FARMERS TRADITIONS, BELIEF AND PRACTICES
Week 3: Role of Agriculture in Indian Economy
Week 4: Development of Indian Agriculture
Week 5: Land Resources and Cropping Pattern
Week 6: Biodiversity- Conservation and Utilization
Week 7: Growth and Characteristics Of Agricultural Labour
Week 8: Livestock and Fisheries Resources In India
Week 9: Agricultural Credit, Insurance and Warehousing
Week 10: Public Distribution System and Food Security
Week 11: Cooperatives, Farmers Organizations and NGOs
Week 12: Research, Education and Extension
Week 13: Capital Formation, Pricing, Taxation and Subsidies
Week 14: Procurement, Storage And Distribution of Foodgrains
Week 15: Research and Development and Transfer of Technology
Week 16: Agriculture Linkage with other Sub-Systems
Week 17: Diversification in Agriculture
Week 18: Agriculture Industry Interface
Week 19: Issues Related to Trade, Gender and Sustainability
Week 20: ICT and Agriculture

ABOUT INSTRUCTOR

Dr. Praveen K. Jain, Ph.D. in Agricultural Economics is working as Assistant Professor in the School of Agriculture, Indira Gandhi National Open University (IGNOU), New Delhi since 2006. His areas of interest include e-learning technologies, e-extension, and agriculture education through ODL besides the core areas agricultural policy, agricultural marketing and agribusiness management. He is coordinating distance education programmes in the areas of agricultural policy, plantation management, agribusiness management and agriculture extension. He has more than 35 research papers and 3 books to his credit.

INTRODUCTION TO POULTRY FARMING

DR. P VIJAYAKUMAR
Assistant Professor, School of agriculture, Indira Gandhi National Open University(IGNOU), New Delhi

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate

COURSE DURATION : 10 weeks (July 9, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 2

OBJECTIVE OF COURSE

The course is designed to acquaint with the status and perspective of Indian Poultry Industry and advantages of rearing poultry.

LEARNING OUTCOME

After going through the course the learners will be able to:.

- understand various types of poultry farms and farming systems practised in India
- know about the different academic and development institutions involved in the training and extension activities in the poultry sector
- enumerate different government schemes and poultry cooperatives throw light on the common breeds of poultry, different body systems and functions, different breeding systems involved in poultry farming and culling and judging of poultry

COURSE PLAN

- Indian Poultry Industry - Brief View
- Indian Poultry Industry - Growing Trends
- Common Technical Terms in Poultry Production
- Poultry Body System and Functions
- Poultry Farming in India
- Poultry Development Programmes in India
- Various Types of Poultry Farms
- Rural Backyard Poultry Farming
- Small Scale Broiler Farming for Meat
- Commercial Intensive Broiler Farming for Meat Production
- Small Scale Layer Farming for Eggs
- Commercial Layer Farming for Eggs
- Duck Farming for Eggs and Meat
- Quail Farming for Eggs and Meat
- Turkey Farming for Eggs and Meat
- Poultry Breeder Farms and Integrated Mixed Farming
- Breeds, Varieties and Strains of Poultry
- Systems of Poultry Breeding
- Culling of Birds for Profitable Poultry Farming
- Judging of Poultry for Better Performance

ABOUT INSTRUCTOR

Dr. P. Vijayakumar, Ph.D. in Livestock Production Management (LPM) is working as Assistant Professor in the School of Agriculture, Indira Gandhi National Open University (IGNOU), New Delhi since 2006. His areas of interest include Animal Husbandry, Dairy/Poultry farming, distance education and food safety through ODL . He is coordinating distance education programmes in the areas of Sericulture, Dairy Farming, Poultry Farming and Fish Products Technology. He has published 12 research papers and 3 book chapters in reputed national and international journals and publications.

DESIGN AND FACILITATION OF E-LEARNING COURSES

DR. G. MYTHILI
Deputy Director, STRIDE, Indira Gandhi National Open University(IGNOU),
New Delhi

TYPE OF COURSE : Diploma
INTENDED AUDIENCE : Diploma

COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

Keeping in view the need of the learners, teachers and practitioners of e-learning, this course is planned, designed and developed to acquaint them with the design aspects of Instructional Design.

LEARNING OUTCOME

This course describes the foundations, processes, models and theories and instructional design in practice that have evolved from the basic systemic approaches for e-learning environment.

COURSE PLAN

Introduction to Open and Distance Learning
Understanding Learning and Instructions
School of Thoughts Behaviourism (Part-1)
School of Thoughts Behaviourism (Part-2)
School of Thoughts: Cognitivism
Jean Piaget's theory of cognitive
Constructivism and Online Learning
Connectivism and Digital Learning
Cognitive Load Theory
Cognitive Flexibility Theory
Instructional Design and Online Learning
ADDIE Model
Dick and Carey Model
The Assure Model of Instructional Design
Four-Component Instructional Design (4C-ID) Model
Assure Model of Instructional Design
Understanding Learning and Instruction
Collaborative Learning
Scenario based Learning
Top Down and Bottom Up -Theories and Perspective
Problem Based Learning
Bloom's Taxonomy and Digital Learning
Robert Gange's Learning Outcome
Vygotsky_ Language of Thoughts
Jerome S. Bruner on Teaching Learning
Learning Objectives
Concept Mapping and Digital Learning
Concept Mapping - Free Mind
Technology Analysis for E-Learning

ABOUT INSTRUCTOR

Dr. G. Mythili, BE (Computer Science and Engineering), Master of Science in IT, Master of Arts in Distance Education and Ph.D in Distance Education is Deputy Director in Staff Training and Research Institute of Distance Education, IGNOU. She has contributed towards the development of human and training resources through academic workshops and by developing training materials in IGNOU. She has conducted a number of research individually, and as part of a team during the last 5-6 years and has published articles in referred journals. She is an efficient resource person for training of various kinds with special reference to computer related training on basic computing, multimedia development and online, web-based training (Web 2.0). She is coordinating two online programmes of IGNOU: Academic Counsellors Training–Online and Post Graduate Diploma in E-Learning.

BASICS OF RUSSIAN: COMMUNICATION SKILLS-PART 1 THEORY

SHIVAJI BHASKAR
Assistant Professor in Russian at the School of Foreign Languages IGNOU

TYPE OF COURSE : Diploma
INTENDED AUDIENCE : Diploma
COURSE DURATION : 12 weeks (July 1, 2018 to Dec 31, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

PRE-REQUISITES : No formal Education is required, though 10th level of English proficiency is desirable.

OBJECTIVE OF COURSE

The main objective of the course is to give an opportunity to all those who want to learn Russian.

LEARNING OUTCOME

•To develop the ability to use Russian effectively for the purpose of practical communication in spoken and written discourse.
•To respond, in written or oral form, quickly, adequately and accurately in different communicative situations (such as- to give & receive personal information, to give basic instructions, to involve in dialogues related to day-to-day life, to relate events, facts and to narrate situations, to express opinions, to describe persons or things, to justify opinions, etc.)
•To demonstrate knowledge of sufficient vocabulary to use with grammar patterns
•To enable students to gain access through language to the contemporary scene and the background of Russian speaking countries, their people and their cultures.
•To establish the skills, language and attitude required to promote and facilitate further study of Russian.

COURSE PLAN

Origin of the Russian Language
Introduction to the Russian Alphabet
Letters of the Russian Alphabet
Vowels & Consonants
Vowels sounds
Consonant Sounds
Introduction to the Russian Phonetics: Voiced & Voiceless Consonants.
Devoicing of Consonants; Singular & Plural Nouns
Combination of Vowel sounds & Consonant Sounds-
Use of Stress sign and Intonation in Russian
Use of Affirmative and Negative sentences in Russian
Pronouns in Russian
Verb Conjugations
Verb Conjugations
Personal Pronouns
Possessive pronouns
Demonstrative pronouns
•Use of Animate and Inanimate in Russian
•Gender in Russian
Russian Verbs and Their Conjugations
Use of Who and What in Russian
Days of the Week
Months of the Year
Cardinal numbers in Russian
Verbs conjugations in Russian
Dialogs & Texts in Russian
Case System in Russian
Prepositional Case
Use of Noun and Adjective endings in Russian
Use of Questions “Where?” and “Where?” to in Russian
Use of Pronouns in Prepositional Case
Use of Questions “About What” and “About Whom?”
Use of Verbs of Motion in Russian
Use of Verbs of Motion in Russian with Prefixes
Common Phrases, Greetings in Russian and Russian Cuisine.

ABOUT INSTRUCTOR

Mr. Shivaji Bhaskar is Assistant Professor in Russian at the School of Foreign Languages, IGNOU. His area of special interest is Teaching of Russian as a Foreign Language (РКИ), Culture & Civilization of Russia, Translation & Interpretation and Area Studies with special emphasis to Russian and Eurasian Studies.

AWARENESS PROGRAMME ON SOLAR WATER PUMPING SYSTEM

DR. MUKESH KUMAR
Assistant Professor in the School of Agriculture, Indira Gandhi National Open University (IGNOU), New Delhi

TYPE OF COURSE : Awareness
INTENDED AUDIENCE : Neo-literates preferably 8th pass
PRE-REQUISITES : Class 8 pass

COURSE DURATION : 4 weeks (Sep 5, 2018 to Nov 4, 2018)
EXAM DATE : December 2018
NO OF CREDITS : 4

OBJECTIVE OF COURSE

- Sensitize and educate learners about importance of solar energy and its application in agriculture;
- Identify the components solar PV water pumping system;

LEARNING OUTCOME

Impart the skills for operation, operation, maintenance and safety in relation to solar PV water pumping system.

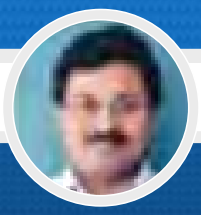
COURSE PLAN

Module-I: Solar Energy and its Application
Module-II: Solar Water Pump and its Components
Module-III: Operation, Maintenance and Safety

ABOUT INSTRUCTOR

Dr. Mukesh Kumar is working as Assistant Professor (Stage-3) in School of Agriculture, Indira Gandhi National Open University, New Delhi. He has completed B.Tech. in Agricultural Engineering and Masters in Soil and Water Engineering from Punjab Agricultural University Ludhiana. He received his Ph.D. in Agricultural Engineering with the specialization in Soil and Water Conservation Engineering from Indian Agricultural Research Institute. Dr. Mukesh Kumar has started his Professional career in 2001 at IARI as Research Associate. He has teaching and research experience in the field of drip irrigation, water management and watershed management.

ENVIRONMENT SUSTAINABILITY



DR. M. RAJESH
Regional Director, IGNOU Regional centre, Vatakara, Kerala

TYPE OF COURSE : Certificate
INTENDED AUDIENCE : Certificate
PRE-REQUISITES : Class 8 pass

COURSE DURATION : 6 weeks (Oct 1, 2018 to Nov 15, 2018)
EXAM DATE : December 2018
NO OF CREDITS : -

OBJECTIVE OF COURSE

This course is an unique attempt to present environmental issues from the perspective of social and allied sciences.

LEARNING OUTCOME

The course has the advantage of leveraging experts from diverse fields such as law, trade, education, sociology, technology, international relations and the like.

COURSE PLAN

- Envrionment and Society - Introduction
- Seminal cases in Environmental Protection
- Environment and the Indian Constitution
- Legal Edifice of Environmental Protection
- Environment Impact Assessment Norms and their Application In India
- The water Act
- The Air Act 1981
- The Gadgil Report on the Western Ghats
- e Wild life Protection Act 1972
- Forest Conversion Act 1980
- The Kasturirangan Report
- Trade and Environment

ABOUT INSTRUCTOR

Dr. M.Rajesh, Regional Director, IGNOU Regional centre, Vatakara, Kerala

National Council of Educational Research and Training

School Educational Courses

MHRD

सत्यमेव जयते

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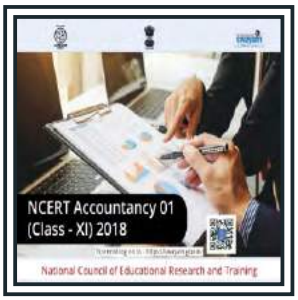
PROF. SHIPRA VAIDYA
Faculty in Department of Education in Social Science,
NCERT, New Delhi

FIRST CYCLE : July 9, 2017 To Dec 31, 2017
https://swayam.gov.in/course/3845-ncert-accountancy-01-class-11

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/5044-ncert-accountancy-01-class-xi-2018

ABOUT THE COURSE



An important part of any business organisation is the money that comes in and the money that goes out. Every bit of monetary inflow and outflow needs to be tracked and accounted for.

This course will help the aspiring accountants, like you, to strengthen the conceptual base in accounting through variety of e-resources like video lectures, enrichment materials for supplementing textbooks, self assessment inventory and checklist, external weblinks and many more activities for smooth progression and joyful learning. This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

OBJECTIVE

This course is intended to develop understanding:

1. Systematically recording the accounting transactions, accountants ably determine the longevity, profitability of a business, perform financial forecasts and assess the overall performance of a business enterprise.

2. How can the credibility and usefulness of accounting and financial information be ensured? Or Why accounting and finance are the key elements for a business entity?

3. To understand how accounting operates through Generally Accepted Accounting Principles, accounting standards and structured rules and

COURSE SCHEDULE

Introduction To Accounting

Economic events, Summarising, Analysing, Reporting, Financial position, Accounting a source of information, Branches of Accounting, Users of accounting information, Reliability, Relevance, Understandability, Comparability, Assets, Liabilities, Capital, Expense, Income, Expenditure, Revenue, Debtors, Creditors, Goods, Cost, Gain, Stock, Purchase, Sales, Loss, Profit, Voucher, discount, Transaction, Drawings.

Theory Base of Accounting

Accounting concepts, Accounting principles, Consistency, Going concern, Accrual, Cost, Conservatism (Prudence), Matching, Money measurement, Accounting Period, Business entity, Dual Aspect, Revenue recognitions, Full Disclosure, Materiality, Objectivity, Double entry system, Single entry system, Accrual basis of accounting, Cash basis of accounting, Accounting standards, IFRS

Recording of Business Transactions

Source Documents, Accounting Vouchers, Accounting equation, Impact of Business transactions, Debit, Credit, Rules of Debit and Credit, Analysis of Business transactions, Debit, Credit, Rules of Debit and Credit, Analysis of Business transactions, Cash Book, Types of cash book, Single column Cash book, Double Column Cash book, Three column Cash book, Petty cash book, Contra entry, Imprest system of petty cash book, Special purpose books, Subsidiary books, Purchases book, Sales Book, Purchases Return books, Sales returns book, Journal proper, Ledger, Principal book of Accounting, Balancing of Ledger accounts, Bank Reconciliation Statement, BRS, Reasons of differences between Bank column of Cash book and Pass book

Trial Balance and Rectification of Errors

Trial Balance, Compensating Error, Commission, Error of Principle, Error Omission, Trial Balance, Compensating Error, Error of Commission, Error of Principle, Error Omission, Suspense Account,

Depreciation, Provisions & Reserves

Source Documents, Depreciation Vouchers, Reserve and Provision, Revenue and Capital Reserve,

ABOUT INSTRUCTOR

Dr. Shipra Vaidya is Professor of Commerce in Department of Education in Social Sciences, NCERT, New Delhi. Her area of specialisation includes Accounting, Budgeting and Finance; Business Entrepreneurship and Computerised Accounting System. She is a member coordinator for NCERT's Commerce Curriculum and Textbooks at the higher secondary stage.

PROF. SUNITA FARKYA
Faculty in Department of Education in Science and Mathematics, NCERT, New Delhi

DR. YASH PAUL SHARMA
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : Oct 30, 2017 To Apr 30, 2018
https://swayam.gov.in/courses/4321-ncert-biology-01-class-11

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/4930-ncert-biology-01-class-xi-2018

ABOUT THE COURSE

Biology is the science of life forms and living processes. The living world comprises a wide diversity of organisms. The observation of the diverse forms of life on earth was made initially through the naked eyes and later by using instruments such as magnifying lenses and microscopes. The organisms were described on the basis of observed structural features, both external and internal. The detailed description of life forms on the basis of appearance external and internal features brought out their concept of diversity. It is the cell theory that emphasised the unity underlying this diversity of forms, i.e., the cellular organisation of all life forms. Cell theory also created a sense of mystery around living phenomena, i.e., physiological and behavioural processes. This mystery was the requirement of integrity of cellular organisation for living phenomena to be demonstrated or observed. This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

COURSE SCHEDULE

The Living World

Biodiversity, Binomial Nomenclature, Taxonomy, Systematics, Species, Genus, Family, Kingdom, Phylum, Class, Order Family, Genus, Species, Herbarium, Monographs

Biological Classification

Biological classification, Two Kingdom System Of Classification, Five Kingdom system of Classification, Monera, Protista, Fungi, Animalia, Plantae,

Plant Kingdom

Thallophyta, Chlorophyta, Rhodophyta, Phaeophyta, Isogamous, Anisogamous, Eutrophication, Pyrenoids, Phycocolloid, Bryophytes, Rhizoid, Gemma, Protonema, Antheridium, Pteridophyta, Sphenophyta, Gymnosperms, Angiosperms, Cone, Flower, Pollen Grain, Embryo, Monocot, Dicot, Fruit, Cotyledons

Animal Kingdom

Biodiversity, classification, Phylum Porifera, Phylum Cnideria, Features of animals as the basis of classification: Grade of organisation, Body plan, Symmetry.

Morphology of Flowering Plants

Meristematic tissue, permanent tissue, xylem, phloem, Tissue Systems, Dermal System, Ground Tissue System, Vascular

Anatomy of Flowering Plants

Tissue System, Anatomy of stem, Anatomy of roots, Anatomy of leaf, Secondary Vascular Growth, Heart wood and Sap wood, Periderm,

Structural organisation in AnimalsCell: Unit of life

Cell Theories, Prokaryotic cell, Eukaryotic cell, Cell Components, Cell Processes, Cell Mechanics, Active transport, passive transport, endomembrane system, endoplasmic reticulum, Golgi apparatus, nucleus, chromatin, cytoskeleton, cilia, flagella

Biomolecule

Primary Metabolites and Secondary Metabolites, Biomacromolecules, Polysaccharides, Proteins, Nature of bond linking monomers in a polymer, Structure of proteins, Classification of proteins based on structural complexity, Nucleic Acids

Cell Cycle and Cell division

Mitosis, Meiosis, cell division

ABOUT INSTRUCTOR

Sunita Farkya

Dr. Sunita Farakya is Professor in Department of Education in Science and Mathematics, NCERT, Her area of specialization includes Plant Biotechnology, Biological Control of weeds, Production of Secondary metabolites. She has completed projects named 'Studies on the production of secondary metabolites from plant cell culture' funded by CSIR; 'Study of Post Graduate Teachers' (PGTs) understanding of Plant tissue culture and genetic engineering (Biotechnology) and their application to human welfare'; 'Studies on the production of anti cancer drug in cell and hairy root cultures of Thuja spp.' funded by UGC. She has further worked on Plant tissue culture techniques, Photochemistry, Molecular Biology Techniques, Microbial Techniques, Chromatographic techniques, Electrophoresis techniques, enzyme extraction and activity assay, toxicity studies and many more.

Dr. Yash Paul Sharma

Dr. Yash Paul Sharma has worked as Assistant Professor in the Central Institute of Educational Technology, NCERT, New Delhi. With PhD degree in Zoology and one year PostDoc from CSIR, Dr. Sharma has interests in Taxonomy, evolutionary Biology and integrating ICT to teach biological concepts. Dr. Sharma has discovered several new species of ants with co-workers with publications in many international journals of repute.

DR. C.V. SHIMRAY
Associate Professor in the Department of Education in Science and Mathematics, NCERT, New Delhi

DR. YASH PAUL SHARMA
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : July 01, 2017 To Dec 31, 2017
https://swayam.gov.in/course/3866-ncert-biology-03-class-12

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/5042-ncert-biology-03-class-xii-2018

ABOUT THE COURSE

The course is designed for class 12th on NCERT textbook pattern. The course will deals with Reproduction in Organisms, Sexual Reproduction in Flowering plants, Human Reproduction and Reproductive Health from Unit 6. It also deals with Principles of Inheritence and Variation,Molecular Inheritance and Evolution from Unit 7. These chapters are divided into modules as per syllabus and each module will be having eContent file, Video tutorial, Self Assessment questions and Weblinks. Apart from it Transcription of the video will also be provided.
This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

COURSE SCHEDULE

Reproduction in Organisms

Reproduction, Life Span, Asexual Reproduction, Sexual Reproduction, clone, Sexual reproduction, Juvenile phase, Vegetative phase, Oestrous cycle, Menstrual Cycle, Gametogenesis, zygote, embryogenesis,

Sexual Reproduction in Flowering Plants

Flower, stamen, microsporangium, pollen grain, microsporogenesis, outbreeding devices, pollen-pistil interaction, artificial hybridisation, emasculation, ovule, double fertilisation, triple fusion, apomixis, polyembryony

Human Reproduction

Sexual dimorphism, testes, accessory ducts, external genitalia, male germ cells, spermatogenesis, spermiation, seminiferous tubules, Laydig's cells, interstitial cells, Ootid, polar body, Graafian follicles, fallopian tube, mammary glands, corpus luteum, Fertilisation, Zygote, Polar body, cleavage, blastomeres, trophoblast, inner cell mass, placenta, implantation, pregnancy, parturition, lactation, colostrum

Reproductive Health

Reproductive health, RCH. AIDS, Sexual diseases, contraceptive methods, reproductive health, test tube baby, infertility, reproductive diseases. Sexually transmitted diseases (STD), medical termination of pregnancy (MTP)

Principles of Inheritance and Variation

Gene, Allele, Dominant, Recessive, Homozygous, Heterozygous, Genotype, Phenotype, Punnett's Square, F_1 and F_2 generations or progenies, Gene, Allele, Dominant, Recessive, Homozygous, Heterozygous, Genotype, Phenotype, Punnett's Square, F_1 and F_2 generations or progenies, Pleiotropy, polygenic inheritance, Linkage, Recombination, crossing over, sex determination, Dihybrid cross, Independent assortment, Linkage, recombination, sex chromosomes, autosomes, heterogametic sex, pedigree analysis, aneuploidy and polyploidy.

Molecular basis of Inheritance

Nucleoside, nucleotide, phosphodiester linkage, histone octamer, nucleosome, euchromatin, heterochromatin, transforming principle, bacteriophage, RNA world, semi-conservative, point mutation, adapter RNA ,charging of t-RNA, translation, untranslated regions, operon, repressor, inducer, DNA, Human Genome Project, DNA fingerprinting

Evolution

Big Bang Theory, Nebular Hypothesis, Biopoiesis, Abiogenesis, Biogenesis, Panspermia, Coacervates , Chemical Evolution , Paleontology, Zoogeography, Phytogeography, Vestigial organs, Paleontology, Taxonomy, Biochemistry, Physiology, Biological evolution, Lamarckism, *Dryopithecus*, *Ramapithecus*, *Australopithecus*, *Homo habilis*, *Homo erectus*, *Homo sapiens, Neanderthal, Cro-Magnon*

ABOUT INSTRUCTOR

Dr. C. V. Shimrav
Dr C.V. Shimray is a faculty in Biology in the Department of Education in Science and Mathematics, NCERT, New Delhi. Her area of specialization includes Zoology (Entomology) and Environmental Education. She was a member of the development team for Biology Classes XI and XII Textbooks and Laboratory Manual in Biology for Classes XI and XII.

Dr. Yash Paul Sharma
Dr. Yash Paul Sharma has worked as Assistant Professor in the Central Institute of Educational Technology, NCERT, New Delhi. With PhD degree in Zoology and one year PostDoc from CSIR, Dr. Sharma has interests in Taxonomy, evolutionary Biology and integrating ICT to teach biological concepts. Dr. Sharma has discovered several new species of ants with co-workers with publications in many international journals of repute.

PROF. ALKA MEHROTRA
Faculty in the Department of Education in Science and Mathematics, NCERT, New Delhi

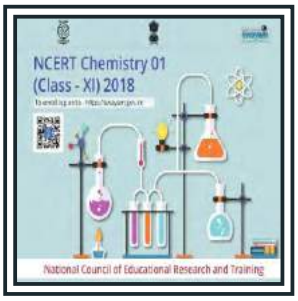
DR. AERUM KHAN
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

PROF. ANJNI KOUL
Faculty in the Department of Education in Science and Mathematics, NCERT, New Delhi

FIRST CYCLE : July 8, 2017 To Dec 31, 2017
https://swayam.gov.in/course/3898-ncert-chemistry-01-class-11

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/4931-ncert-chemistry-01-class-xi-2018

ABOUT THE COURSE



The subject of Chemistry is intimately linked to the well-being of human kind. The rate of development in this subject is too high. Keeping this in mind this course is developed, it is intended to cover Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in properties, Chemical Bonding and Molecular Structure, States of Matter, Thermodynamics and Equilibrium the following topics for the students of Class XI, Semester 1 specifically, and others interested in general. These chapters are divided into modules as per syllabus and each module will be having eContent, Video tutorial, Self Assessment questions and Weblinks. Apart from it Transcription of the video will also be provided. This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

COURSE SCHEDULE

Some Basic Concepts of Chemistry : Importance of Chemistry, Nature of Matter, properties of matter and their measurement, uncertainty in measurement, laws of chemical combinations, Dalton's atomic theory, atomic and molecular masses, mole concept and molar masses, percentage composition, stoichiometry and stoichiometric calculations

Structure of Atom : Discovery of sub-atomic Particles, Atomic models, developments leading to Bohr's model of atom, Bohr's model for hydrogen atom, quantum mechanical model of the atom

Classification of Elements and periodicity in properties : Need of classifying elements, genesis of periodic classification, modern periodic law and the present form of the periodic table, nomenclature of elements with atomic number>100, Electronic Configurations of Elements and the Periodic Table, Electronic Configurations and Types of Elements, s-, p-, d-, f- Blocks, Periodic Trends in Properties of Elements

Chemical Bonding and Molecular Structure : Kössel-Lewis Approach to Chemical Bonding, Ionic or Electrovalent Bond, Bond Parameters, The Valence Shell Electron Pair Repulsion (VSEPR) Theory, Valence Bond Theory, Hybridisation, Molecular Orbital Theory, Bonding in Some Homonuclear Diatomic Molecules, Hydrogen Bonding

States of Matter : Intermolecular Forces, Thermal Energy, Intermolecular Forces vs Thermal Interactions, The Gaseous State, The Gas Laws, Ideal Gas Equation, Kinetic Energy and Molecular Speeds, Kinetic Molecular Theory of Gases, Behaviour of Real Gases: Deviation from Ideal Gas Behaviour, Liquefaction of Gases, Liquid State

Thermodynamics : Thermodynamic Terms, Applications, Measurement of ΔU and ΔH: Calorimetry, Enthalpy Change, ΔrH of a Reaction – Reaction Enthalpy, Enthalpies for Different Types of Reactions, Spontaneity, Gibbs Energy Change and Equilibrium

Equilibrium : Equilibrium in Physical Processes, Equilibrium in Chemical Processes – Dynamic Equilibrium, Law of Chemical Equilibrium and Equilibrium Constant, Homogeneous Equilibria, Heterogeneous Equilibria, Applications of Equilibrium Constants, Relationship between Equilibrium Constant K, Reaction Quotient Q and Gibbs Energy G, Factors Affecting Equilibria, Ionic Equilibrium in Solution, Acids, Bases and Salts, Ionization of Acids and Bases, Buffer Solutions, Solubility Equilibria of Sparingly Soluble Salts

ABOUT INSTRUCTOR

Dr. Alka Mehrotra
Dr. Alka Mehrotra is Professor in Department of Education in Science and Mathematics, NCERT, she is specialized in Organic Chemistry and has vast experience in Science Education. She has been the member of NCERT's Textbook development team for Chemistry at different levels.

Dr. Anjni Koul
Dr. Anjni Koul has 13 years of Research/ Teaching experience in National and International Laboratories/ Universities. CSIR Research Associate in School of Life Sciences, Jawaharlal Nehru University, New Delhi (1991-1997). Post Doctoral Fellow in Department of Dermatology, Case Western University, Cleveland, Ohio, U.S.A (1997- 1998). Pool Scientist (CSIR) in Department of Biochemistry, Punjab University, Chandigarh (1999- 2001). Presently working as Professor of Chemistry in Department of Education in Science and Mathematics, NCERT.

Dr. Aerum Khan
Dr. Aerum Khan has worked as Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi from a long time. She has Ph.D. degrees in
Plant Physiology and Biochemistry, and Education (Science Education), and teaching experience of more than 12 years. Her areas of research interest include ICT integration in School and Higher Education, Plant Physiology and Biochemistry, and Pedagogical aspects of Science Education. She has published many Research articles/ papers, books and deliberated more than 60 Research papers in National and International Conferences and seminars. The first PG Course in 'Education' developed by her and team is launched by UGC on the SWAYAM Platform.

PROF. ALKA MEHROTRA
Faculty in the Department of Education in Science and Mathematics, NCERT, New Delhi

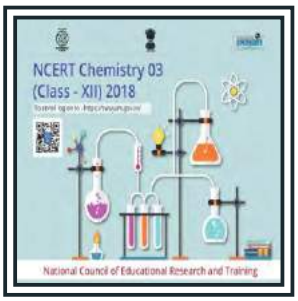
DR. AERUM KHAN
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

PROF. ANJNI KOUL
Faculty in the Department of Education in Science and Mathematics, NCERT, New Delhi

FIRST CYCLE : July 8, 2017 To Dec 31, 2017
https://swayam.gov.in/course/3899-ncert-chemistry-03-class-12

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/4932-ncert-chemistry-03-class-xii-2018

ABOUT THE COURSE



Chemistry is the study of matter and its properties. How and why substances combine or separate to form other substances, how substances interact to absorb or produce energy. Chemistry is known as the central branch of science because it touches all other natural sciences like biology, physics, geology and many more. It has made a profound impact on the society. This course is designed for class 12th on NCERT textbook pattern, it is intended to cover topics on Solid State, Solutions, Electrochemistry, Chemical Kinetics, Surface Chemistry, General Principles and Processes of Isolation of Elements, The *p*-Block Elements, *d* and *f*-Block Elements and coordination compounds for the students of Class XII, Semester 1 specific, and others interested in general. This is a 6 months course. Each week, module(s) containing eText, Video tutorial along with Self Assessment questions and Weblinks for extra study will be provided for learning.

COURSE SCHEDULE

The Solid State : General Characteristics of Solid State, Amorphous and Crystalline Solids, Classification of Crystalline Solids, Crystal Lattices and Unit Cells, Number of Atoms in a Unit Cell, Close Packed Structures, Packing Efficiency, Calculations Involving Unit Cell Dimensions, Imperfections in Solids, Electrical Properties, Magnetic Properties

Solutions : Types of Solutions, Expressing Concentration of Solutions, Solubility, Vapour Pressure of Liquid Solutions, Ideal and Non-ideal Solutions, Colligative Properties and Determination of Molar Mass, Abnormal Molar Masses

Electrochemistry : Electrochemical Cells, Galvanic Cells, Nernst Equation, Conductance of Electrolytic Solutions, Electrolytic Cells and Electrolysis, Batteries, Fuel Cells, Corrosion

Chemical Kinetics : Rate of a Chemical Reaction, Factors Influencing Rate of a Reaction, Integrated Rate Equations, Pseudo First Order Reaction, Temperature Dependence of the Rate of a Reaction, Collision Theory of Chemical Reactions, Adsorption, Catalysis, Colloids, Classification of Colloids, Emulsions, Colloids Around Us

General Principles and Processes of Isolation of Elements : Occurrence of Metals, Concentration of Ores, Extraction of Crude Metal from Concentrated Ore, Thermodynamic Principles of Metallurgy, Electrochemical Principles of Metallurgy, Oxidation Reduction, Refining, Uses of Aluminium, Copper, Zinc and Iron

The p-Block Elements : Group 15 Elements, Dinitrogen, Ammonia, Oxides of Nitrogen, Nitric Acid, Phosphorus – Allotropic Forms, Phosphine, Phosphorus Halides, Oxoacids of Phosphorus, Group 16 Elements, Dioxygen, Simple Oxides, Ozone, Sulphur – Allotropic Forms, Sulphur Dioxide, Oxoacids of Sulphur, Sulphuric Acid, Group 17 Elements, Chlorine, Hydrogen Chloride, Oxoacids of Halogens, Interhalogen Compounds, Group 18 Elements

The d-and f-Block Elements : Position in the Periodic Table, Electronic Configurations of the d-Block Elements, General Properties of the Transition Elements (d-Block), Some Important Compounds of Transition Elements, The Lanthanoids, The Actinoids, Some Applications of d- and f-Block Elements

Coordination Compounds : Werner's Theory of Coordination Compounds, Definitions of Some Important Terms Pertaining to Coordination Compounds, Nomenclature of Coordination Compounds, Isomerism in Coordination Compounds, Bonding in Coordination Compounds, Bonding in Metal Carbonyls, Stability of Coordination Compounds, Importance and Applications of Coordination

ABOUT INSTRUCTOR

Dr. Alka Mehrotra
Dr. Alka Mehrotra is Professor in Department of Education in Science and Mathematics, NCERT, she is specialized in Organic Chemistry and has vast experience in Science Education. She has been the member of NCERT's Textbook development team for Chemistry at different levels.

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PROF. APARNA PANDEY
Faculty in Department of Education in Social Sciences, NCERT, New Delhi

DR. ARCHANA
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : July 8, 2017 To Dec 31, 2017
https://swayam.gov.in/course/3900-ncert-geography-01-class-11

SECOND CYCLE : June 1, 2018 To Nov 30, 2018
https://swayam.gov.in/courses/4933-ncert-geography-01-class-xi-2018

ABOUT THE COURSE

You have studied Geography as one of the components of social sciences up to secondary stage. Now you will study Geography as an independent subject and learn about the physical environment of the earth, human activities and their interactive relationships. We live on the surface of the earth. Our lives are affected by our surroundings in many ways. We depend on the resources to sustain ourselves in the surrounding areas. This course is designed on NCERT textbook pattern. It is intended for the students of Class XI, Semester 1 specific, and others interested in general. This is a 6 months course. Each week, module(s) containing eText, Video tutorial along with Self Assessment questions and Weblinks for extra study will be provided for learning.

COURSE SCHEDULE

Unit 1 Geography as a Discipline :
1. Geography as an integrating discipline, as a science of spatial attributes.
2. Branches of geography; importance of physical geography

Unit 2 The Earth :
1.Origin and evolution of the earth
2. Interior of the earth
3. Wegener's continental drift theory and plate tectonics
4. Earthquakes and volcanoes

Unit 3 Landforms
1.Rocks and minerals – major types of rocks and their characteristics
2. Landforms and their evolution
3. Geomorphic processes – weathering, mass wasting, erosion and deposition; soils – formation

Unit 4 Climate
1.Atmosphere – compositions and structure; elements of weather and climate
2. Insolation – angle of incidence and distribution; heat budget of the earth – heating and cooling of atmosphere(conduction, convection, terrestrial radiation, advection); temperature – factors controlling
temperature; distribution of temperature – horizontal and vertical; inversion of temperature
3. Pressure – pressure belts; winds – planetary seasonal and local, air masses and fronts; tropical and extra tropical cyclones
4. Precipitation – evaporation; condensation – dew, frost, fog, mist and cloud; rainfall – types and world distribution
5. World climate - classification (Koeppen), Greenhouse effect, global warming and climate changes.

Unit. 5 Water (Oceans)
1. Hydrological Cycle
2. Oceans — submarine relief; distribution of temperature and salinity; movements of ocean water–waves, tides and currents

Unit. 6 - Life on the Earth
1. Biosphere – importance of plants and other organisms
2. Biodiversity and conservation; ecosystems, bio-geo chemical

ABOUT INSTRUCTOR

Prof Aparna Pandey

Prof. Aparna Pandey is working as Professor in Department of Education in Social Sciences, NCERT, New Delhi. Her areas of specialisation include Geography education, urban and regional planning, environmental studies, remote sensing and Geographical Information System.

Dr. Archana

Dr. Archana has worked as Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi. She has Ph.D. degree in urban Geography. Her areas of research interest include ICT and Urban Geography. She is also involved in development and

PROF. APARNA PANDEY
Faculty in Department of Education in Social Science, NCERT, New Delhi

DR. ARCHANA
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : July 8, 2017 to Dec 31, 2017
https://swayam.gov.in/course/3901-ncert-geography-03-class-12

SECOND CYCLE : June 1, 2018 to Nov 30, 2018
https://swayam.gov.in/courses/4934-ncert-geography-03-class-xii-2018

ABOUT THE COURSE

Geography is as an elective subject at the higher secondary stage. It is an academic discipline andschool subject with defined perspective, knowledge and skills. Geographical knowledge is useful in daily lives because it is a valuable medium for the education of young people. Its contribution lies in the content, cognitive processes, skills and values that geography promotes and thus helps the students explore, understand and evaluate the environmental and social dimensions of the world in a better manner. This course is designed on NCERT textbook pattern. It is intended for the students of Class XII, Semester 1 specific, and others interested in general. This is a 6 months course. Each week, module(s) containing eText, Video tutorial along with Self Assessment questions and Weblinks for extra study will be provided for learning.

COURSE SCHEDULE

Unit 1 Human Geography

1. Nature and Scope of human Geography

Unit 2. People

1. Population of the world – distribution, density and growth
2. Population change-spatial patterns and structure; determinants of population change
3. Age-sex ratio; rural-urban composition
4. Human development – concept; selected indicators, international comparisons

Unit 3. Human Activities

1. Primary activities – concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agriculture and allied activities – some examples from selected countries;
2. Secondary activities – concept; manufacturing: agro-processing, household, small scale, large scale; people engaged in secondary activities – some examples from selected countries
3. Tertiary activities – concept; trade, transport and communication; services; people engaged in tertiary activities – some examples from selected countries
4. Quaternary activities – concept; knowledge based industries; people engaged in quaternary activities – some examples from selected countries

Unit 4 Transport, Communication and Trade

1. Land transport – roads, railways – rail network; trans-continental railways
2. Water transport- inland waterways; major ocean routes
3. Air transport – Intercontinental air routes
4. Oil and gas pipelines
5. Satellite communication and cyber space
6. International trade – Basis and changing patterns; ports as gateways of international trade, role of WTO in International trade.

Unit. 5. Human Settlements

1. Settlement types – rural and urban; morphology of cities
2. Distribution of mega cities; problems of human settlements in developing countries.

ABOUT INSTRUCTOR

Dr. Tannu Malik

Dr. Tannu Malik is working as Associate Professor in Department of Education in Social Sciences, NCERT, and New Delhi. Her areas of specialisation are Geography education, Environment education and Disaster Management.

Dr. Archana

Dr. Archana has worked as Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi. She has Ph.D. degree in urban Geography. Her areas of research interest include ICT and Urban Geography. She is also involved in development and

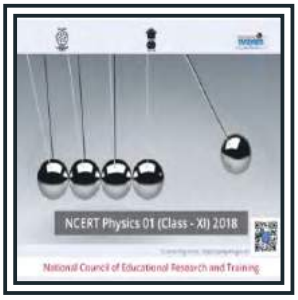
MRS. ANURADHA MATHUR
Head Mathematics (Retd.) Modern School,
Vasant Vihar, New Delhi

FIRST CYCLE : July 01, 2017 to Dec 31, 2017
https://swayam.gov.in/course/3836-ncert-physics-01-class-11

SECOND CYCLE : June 1, 2018 to Nov 30, 2018
https://swayam.gov.in/courses/4937-ncert-physics-01-class-xi-2018

ABOUT THE COURSE

The world around us has an astonishing variety of phenomenon. Physics gives us a chance to take a close look and try to understand these. We have evidence to support the work since ancient times by thinkers, philosophers and scientists, who tried to unravel the mystery around us. The excitement of learning to do systematic scientific work is the root of this course. You will learn methods of measurement-including universally accepted norms. Kinematics and Dynamics, one that helps us realise how things move and the other what causes them to move. Some energy is required to move things and we will define some scientific terminology in a way that communication about physics to others is easy. This course is designed on NCERT textbook pattern. It is intended for the students of 23 Class XI, Semester 1 specific, and others interested in general. This is a 6 months course. Each week, module(s) containing eText, Video tutorial along with Self Assessment questions and Weblinks for extra study will be provided for learning.



COURSE SCHEDULE

Unit 1 : Physical World and Measurement

Unit 2: Kinematics

Unit 3: Laws of Motion

Unit 4: Work, Energy and Power

Unit 5: Motion of System of Particles

Unit 6: Gravitation

ABOUT INSTRUCTOR

Mrs. Anuradha Mathur

Anuradha Mathur has been teaching Physics since 1975 at secondary and senior secondary level. She has also taught physics to undergraduate students at Harvard University Boston She represented Indian schools at ICT conference in Hawaii, Paris GATE Global Alliance for Transnational Education, IIT Delhi and IIM Bangalore. At Modern School Vasant Vihar New Delhi she was head of Physics and head of Resource Center . She set up the resource centre 1997 and a virtual school in 2000. She led the development of a diagnostic e-test , for the process of teaching and learning. She developed techniques to evolve net based projects, science exhibitions, science toys production and creative models, many of these were awarded at national and international level. She has been part of development team for teaching learning material for CBSE, NCERT ,NIOS ,ICSE since 1983.She was also member of Textbook Development Committee for senior secondary physics text book (2006). She is currently actively working on development of material for National Repository of Open Educational Resource (NROER) at CIET NCERT.

MRS. ANURADHA MATHUR
Head Mathematics (Retd.) Modern School,
Vasant Vihar, New Delhi

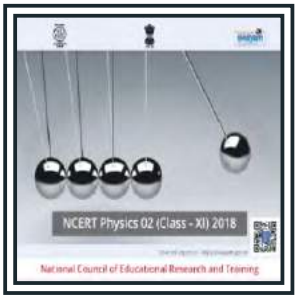
MRS. CHITRA GOEL
Principal (Retd.) Rajkiya Pratibha Vikas
Vidyalaya, New Delhi

FIRST CYCLE : June 1, 2018 to Nov 30, 2018

https://swayam.gov.in/courses/5061-ncert-physics-02-class-xi-2018

ABOUT THE COURSE

Physics Course 2 covers the second book of physics for class 11.The course starts with bulk properties of matter, giving scientific names to many phenomenon that we observe around us . Why materials show peculiar behaviour in different states is analysed .This part is therefore very exciting .We will cover kinetic theory of gases and thermodynamics .Both these units will help us to justify the behavior of gases for innumerable uses related to getting mechanical work done by heat .The challenging unit on oscillations and waves has been dealt with differently to explain kinematics and dynamic of oscillators. Wave motion as a method of energy propagation and properties of waves, the cases of superposition are explained with simplicity. The course has 4 units covered over 42 modules for better understanding. Based on feedback from teachers and students we have included modules after completion of each unit to enhance the unit by additional examples and explanations.



OBJECTIVES

- Understand bulk properties of matter
- Relate to kinetic theory of gases
- Recognise thermodynamics
- Appreciate oscillatory motion and wave propagation

COURSE SCHEDULE

Unit 7: PROPERTIES OF BULK MATTER

Unit 8: Thermodynamics

Unit 9: Behaviour of Perfect Gases and Kinetic Theory of Gases

Unit 10: Oscillations and waves

ABOUT INSTRUCTOR

Anuradha Mathur

Anuradha Mathur has been teaching Physics since 1975 at secondary and senior secondary level. She has also taught physics to undergraduate students at Harvard University Boston She represented Indian schools at ICT conference in Hawaii, Paris GATE Global Alliance for Transnational Education, IIT Delhi and IIM Bangalore. At Modern School Vasant Vihar New Delhi she was head of Physics and head of Resource Centre. She set up the resource centre 1997 and a virtual school in 37 2000.She led the development of a diagnostic e-test, for the process of teaching and learning. She developed techniques to evolve net based projects, science exhibitions, science toys production and creative models, many of these were awarded at national and international level. She has been part of development team for teaching learning material for CBSE, NCERT, NIOS, ICSE since 1983.She was also member of Textbook Development Committee for senior secondary physics text book (2006). She is currently actively working on development of material for National Repository of Open Educational Resource (NROER) at CIET NCERT.

Chitra Goel

Chitra Goel has 45 years of professional experience in teaching Physics and has worked in various capacities in the schools of the Directorate of Education GNCT Delhi. In addition to her regular teaching had also been actively associated with the NCERT, SCERT and the DOE. She designed and imparted special coaching to the needy and deserving students of various south Districts schools under DOE. This was to prepare them for common entrance tests in Engineering and Medicine resulting in high degree of success. She is the recipient of Pratibhanjali Award for academic Excellence for seven years; Teacher Excellence award by Lions Club of India in the year 2005; Dr S Radhakrishnan award for teachers of Excellence in 2006; State teacher award for excellence in imparting Education in 2008. She was Principal in Rajkiya Pratibha Vikas Vidhalaya.

MS. ANURADHA MATHUR
Head Mathematics (Retd.) Modern School,
Vasant Vihar, New Delhi

FIRST CYCLE : 01/07/2017 to 31/12/2017
https://swayam.gov.in/course/3846-ncert-physics-03-class-12

SECOND CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5061-ncert-physics-02-class-xi-2018

ABOUT THE COURSE

Course-3 in physics will cover very interesting phenomena that we have observe around us. The concepts of static electricity where we will understand electric charges and fields. We will learn methods of describing electric fields and their applications. we will also learn about charges in motion, about the two types of electricity around us- direct current and alternating current and also about generation of alternating current, behaviour of circuits with direct current and alternating current (with circuit elements like resistances, capacitors and inductors).

COURSE SCHEDULE

Unit 1: Electrostatics
Unit 2: Current Electricity
Unit 3: Magnetic Effect of Current & Magnetism
Unit 4: Electromagnetic Induction & Alternating Current
Unit 5: Electromagnetic Waves

ABOUT INSTRUCTOR

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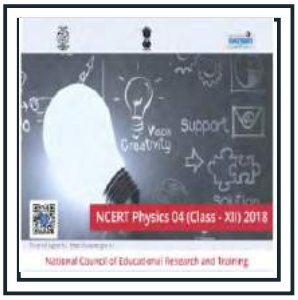
Principal (Retd.) Rajkiya Pratibha Vikas
Vidyalaya, New Delhi

FIRST CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5062-ncert-physics-04-class-xii-2018

ABOUT THE COURSE



Physics Course 4 covers the second book of physics for class 12. The units in this book provide motivation to learners to move towards intricate concepts of Physics. The nature of research and demand to know more has led to continuous and deeper understanding of reasons behind observed phenomenon. The course has 5 units spread over 43 modules. We start with optics and study it under ray optics, kind of macroscopic view of light and its interaction with objects around us. Wave optics, which proposes a microscopic explanation of the phenomenon of interference, diffraction and polarization. These cannot be explained using ray optics. The unit on dual nature of radiation and matter will present a unique view. The continuous and path breaking studies in quantum mechanics can be understood only if we understand initial scientific work which is in the unit of atoms and nuclei. Surrounded by electronics and technology, one will appreciate the unit on semiconductors and electronic devices. The unit is challenging as many new ideas will come up in the course. likewise, the unit on communication will seem very basic, as there is fast scientific development in this field. The course does not demand high level of mathematics however, you will need to be regular as connections between various segments require deeper study and higher order thinking.

OBJECTIVES

Appreciate the need to study ray and wave optics

- Learn basics of dual nature of radiation and matter
- Know composition about atoms and nuclei and distribution of its constituents, radioactivity and nuclear energy
- Understand the behaviour of semiconductors and their application in making electronic devices
- Exposure to present day communication system

COURSE SCHEDULE

Unit 6: Optics

Unit 7: Dual Nature of Radiation and matter

Unit 8: Atoms and Nuclei

Unit 9: Electronic Devices

Unit 10: Communication systems

ABOUT INSTRUCTOR

Anuradha Mathur has been teaching Physics since 1975 at secondary and senior secondary level. She has also taught physics to undergraduate students at Harvard University Boston She represented Indian schools at ICT conference in Hawaii, Paris GATE Global Alliance for Transnational Education, IIT Delhi and IIM Bangalore . At Modern School Vasant Vihar New Delhi she was head of Physics and head of Resource Center . She set up the resource centre 1997 and a virtual school in 2000.She led the development of a diagnostic e-test , for the process of teaching and learning. She developed techniques to evolve net based projects, science exhibitions, science toys production and creative models, many of these were awarded at national and international level. She has been part of development team for teaching learning material for CBSE, NCERT ,NIOS ,ICSE since 1983.She was also member of Textbook Development Committee for senior secondary physics text book (2006). She is currently actively working on development of material for National Repository of Open Educational Resource (NROER) at CIET NCERT.

Chitra Goel has 45 years of professional experience in teaching Physics and has worked in various capacities in the schools of the Directorate of Education GNCT Delhi. In addition to her regular teaching had also been actively associated with the NCERT, SCERT and the DOE. She designed and imparted special coaching to the needy and deserving students of various south Districts schools under DOE. This was to prepare them for common entrance tests in Engineering and Medicine resulting in high degree of success. She is the recipient of Pratibhanjali Award for academic Excellence for seven years; Teacher Excellence award by Lions Club of India in the year 2005; Dr S Radhakrishnan award for teachers of Excellence in 2006; State teacher award for excellence in imparting Education in 2008. She was Principal in Rajkiya Pratibha Vikas Vidhalaya.

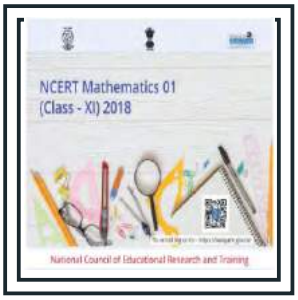
DR. TIL PRASAD SARMA
Associate Professor in Department of Education in Science and Mathematics, NCERT, New Delhi

DR. MOHD. MAMUR ALI
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : 30/10/2017 to 30/04/2018
https://swayam.gov.in/course/4325-ncert-mathematics-01

SECOND CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5031-ncert-mathematics-01-class-xi-2018

ABOUT THE COURSE



Mathematics is a human activity, a social phenomenon a set of methods used to help illuminate the world and it is part of our culture. Mathematics is a part of our life experience which we talk about. Mathematics is the foundation and vitalizing energy for the basic sciences. Mathematics is not only about the developing new concepts but also developing a new meaningful language. Mathematics is a creative process, an art form expression of the human mind motivated by insight intuition and a desire to understand the world in which we live so intended for your effective and joyful learning. This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

COURSE SCHEDULE

Unit 1-Sets and Functions

Sets Unit 1-Sets and Functions

Relations and Functions

Trigonometric Functions

Unit 2- Algebra

Principle of mathematical induction Unit 2- Algebra

Complex numbers and quadratic equations

Linear inequalities

Permutation and Combinations

Binomial Theorem

Sequence And Series

Unit 3- Coordinate geometry

Straight lines Unit

Conic sections

Introductions to 3-D geometry

ABOUT INSTRUCTOR

Educational Qualification M.Sc. , Ph.D. (Mathematics) from University of Delhi

Areas of Work Mathematics Education at School level Development of Teaching Materials,

Teacher Training Material, Textual Material Research: Primary Mathematics, Mathematics Education, Mathematics

DR. MOHD. MAMUR ALI

working as Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi. He has about 10 years experiences in research, development and teaching at various level of education.

DR. TIL PRASAD SARMA
Associate Professor in Department of Education in Science and Mathematics, NCERT, New Delhi

DR. MOHD. MAMUR ALI
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi

FIRST CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5032-ncert-mathematics-03-class-xii-2018

ABOUT THE COURSE

Mathematics is a human activity, a social phenomenon a set of methods used to help illuminate the world and it is part of our culture. Mathematics is a part of our life experience which we talk about. Mathematics is the foundation and vitalizing energy for the basic sciences. Mathematics is not only about the developing new concepts but also developing a new meaningful language. Mathematics is a creative process, an art form expression of the human mind motivated by insight intuition and a desire to understand the world in which we live so intended for your effective and joyful learning. The course will deal with the concepts from class 12th mathematics like certain Relations and Functions, Algebra , and Calculus . This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

LEARNING OUTCOMES

After completion of the course, the learners will be able to:

1. Understand relation and function including Inverse Trigonometric Functions.

2. Matrices, Determinants etc.

3. Continuity and Functions, Application of derivatives, Integrals, Applications of Integrals and Differential equation

COURSE SCHEDULE

Unit 1-Sets and Functions (19 modules=9 hrs 30 mins)
Sets
Relations and Functions
Trigonometric Functions
Unit2- Algebra (25 modules=12 hrs 30 mins)
Principle of mathematical induction
Complex numbers and quadratic equations
Linear inequalities
Permutation and Combinations
Binomial Theorem
Sequence and Series
Unit 3- Coordinate geometry (13 modules=6 hrs 30 mins)
Straight lines
Conic sections
Introductions to 3-D geometry

Unit 1-Relations and Functions(7 modules=3 hrs 30 min)
Relations and Functions
Inverse Trigonometric Functions
Unit 2- Algebra(12 modules=6 hrs)
Matrices
Determinants
Unit 3- Calculus (21 modules =10 hrs 30 mins)
Continuity and Differentiability
Application of derivatives
Integrals
Applications of Integrals
Differential Equation

ABOUT INSTRUCTOR

Educational Qualification M.Sc. , Ph.D. (Mathematics) from University of Delhi, His areas of Work Mathematics Education at School level Development of Teaching Materials, Teacher Training Material, Textual Material Research: Primary Mathematics, Mathematics Education, Mathematics.

DR. MOHD. MAMUR ALI

working as Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi. He has about 10 years experiences in research, development and teaching at various level of education.

PROF. MANJU BHATT
Faculty in Department of Education in Social Sciences,
NCERT, New Delhi

DR. SHEETAL SHARMA
Assistant Professor in Centre for European Studies,
JNU, New Delhi

FIRST CYCLE : 30/10/2017 to 30/04/2018
https://swayam.gov.in/course/4274-ncert-sociology-01-class-11

SECOND CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/4935-ncert-sociology-01-class-xi-2018

ABOUT THE COURSE

The course covers the "Introducing Sociology" textbook of NCERT class XI. This is a 6 months course. Each week, one module containing eText, Video tutorial along with Self Assessment and Weblinks for extra study will be released.

COURSE SCHEDULE

1. Concept of Sociology and Society , (Sociology and relationship with other Social Sciences)
2. Terms, Concepts and Their Use in Sociology
3. Understanding Social Institutions
4. Culture and Socialization
5. Practical in Sociology: Methods and Techniques

ABOUT INSTRUCTOR

1. Prof. Manju Bhatt is Professor in Department of of Education in Social Sciences, NCER. Her Educational Qualifications are MA, M.Phil., Ph.D. Her Areas of Interest and Specialisation are in Urban Sociology, Social Anthropology and Research Methodology.

2. Sheetal Sharma
Dr. Sheetal Sharma is Assistant Professor at the Centre for European Studies. Prior to her joining JNU, she was Lecturer since 1998 at Institute of Technology and Management, Gurgaon, India, and taught emergence of Sociological Theory in Europe and Methodology of Social Sciences as curriculum of degree program of London School of Economics and Political Science (LSE). Dr. Sharma holds a BA (Hon) in Sociology from the University of Delhi, and holds post graduate and doctorate degree in Sociology from the Centre for the Study of Social Systems, Jawaharlal Nehru University. Her research interests include social and cultural issues in contemporary Europe and India and their historical roots, Multiculturalism and Diversity, Methodology of Social Sciences, Gender and empowerment of women. Dr. Sharma avidly follows methodological and theoretical trends in Social Sciences and International Relations. She writes regularly on socially relevant issues in India and Europe for journals and magazines of national and international repute.

DR. SHEETAL SHARMA
Assistant Professor in Centre for European Studies,
JNU, New Delhi

FIRST CYCLE : 30/10/2017 to 30/04/2018
https://swayam.gov.in/course/4275-ncert-sociology-03-class-12

SECOND CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/4939-ncert-sociology-03-class-xii-2018

ABOUT THE COURSE

Sociology is a study of society but you will be puzzled to understand that what is there in this society to study the subject of sociology is very interesting as it helps us to understand the very society in which we live without sometimes realizing that it is so society in which we live without sometimes realizing that it is so society in which we live without sometimes realizing that it is so society in which we live without sometimes realizing that it is so political institutions economic institutions etc what do sociologists do sociologists try to understand the nature and composition of these various sociologists try to understand the nature and composition of these various sociologists attempt to understand that what is the structure of family say for example if you are talking about family as an institution how many family types are there what are the functions of the family so these are the various aspects that sociologists try to understand so now understanding what is sociology we can say that sociology is an academic or a systematic study of society which emerged in Europe during 17 th and 18 th century it is also very important for the students of sociology to understand that how did the discipline of sociology emerge and develop you will be exploring about the social conditions in which the academic study of society began and how various sociologists later on from Europe and later on from India contributed towards understanding of social system myself dr. Heath L Sharma along with Professor Manju Burt will be taking you through the interesting journey of making sense of social systems in which we operate in everyday life will be taking examples from everyday life to make our understanding interesting.

COURSE SCHEDULE

1.Introducing Indian Society
2.Demographic Structure
3.Social Institution
4.Market As A Social
5. Patterns of Social Inequality and Exclusion
6.Challenges of cultural Diversity
7.Suggestions for Project

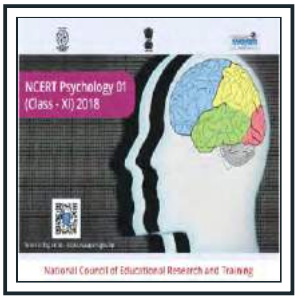
ABOUT INSTRUCTOR

Dr. Sheetal Sharma is Assistant Professor at the Centre for European Studies. Prior to her joining JNU, she was Lecturer since 1998 at Institute of Technology and Management, Gurgaon, India, and taught emergence of Sociological Theory in Europe and Methodology of Social Sciences as curriculum of degree program of London School of Economics and Political Science (LSE). Dr. Sharma holds a BA (Hon) in Sociology from the University of Delhi, and holds post graduate and doctorate degree in Sociology from the Centre for the Study of Social Systems, Jawaharlal Nehru University.

PROF. ANJUM SIBIA
Faculty in Department of Educational Psychology and
Foundations of Education, NCERT, New Delhi

FIRST CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5027-ncert-psychology-class-xi-2018

ABOUT THE COURSE



The subject of psychology, which deals with human mind, behaviour and human relationship, can most appropriately lend itself to teaching with humanistic perspective. Such a perspective aims at enriching students knowledge as well as inspiring and awakening their curiosity, positive feelings, desire to learn, openness, exploration of self and others, etc. Such an approach is also conducive to their personal development and inculcation of positive attitude and love for the subjects. As for class XI students psychology will be a new subject, it would be important to dwell on the potential of the subject, it value in daily life and various career possibilities. Students, it is expected, will be made aware of the empirical nature of the discipline and the importance of adopting scientific approach in studying human behaviour. This course consists of nine chapters on topics considered essential for an introductory course in psychology like learning, thinking, memory, motivation and emotion, etc. Efforts have been made to provide linkages across and within the chapters to maintain continuity and holistic perspective. Meaningful contexts have been provided to relate the subject matter with day-to-day life.

COURSE SCHEDULE

What is Psychology:
What is Psychology, Evolution and Development of Psychology, Branches of Psychology and Themes of Research and Applications

Methods of Enquiry in Psychology:
Goals of Psychological Enquiry, Nature of Psychological Data and Important Method of its Enquiry, Experimental Method & Correlation Research and Survey Research & Psychological testing

The Bases of Human Behaviour:
Evolutionary Perspective of the Basis of Human Behaviour, Biological Basis of Human Behaviour & Cultural Basis of Human Behaviour

Human Development:
Meaning & Context of Human Development, Developmental Stages in Human: Childhood, Adolescence, Adulthood and Old Age & Factors influencing Human Development

ABOUT INSTRUCTOR

Dr. Anjum Sibia is a Professor of Psychology and has been working at the National Council of Educational Research and Training (NCERT) for last 25 years besides having eight years of prior experience of undergraduate teaching. She has contributed to the field by conducting research studies, preparing monographs and exemplar materials in the area of emotions and learning, innovative school practices, teacher questioning, emotional intelligence, peer tutoring, qualitative techniques, caring in teaching, and aesthetics in education, assessment of personal- social qualities and has undertaken evaluation of psychology textbooks. She has also published/presented papers, contributed book chapters and book reviews in these areas. She has coordinated and contributed as author in the development of the textbooks in psychology for senior secondary stage. As a member of various course committees she also provided academic inputs for designing of psychology syllabi, B.Ed courses, and Guidance and Counseling programmes.

PROF. NEERAJA RASHMI
Faculty in Department of Education in Social Sciences,
NCERT, New Delhi

FIRST CYCLE : 01/06/2018 to 30/11/2018

https://swayam.gov.in/courses/4940-ncert-economics-01-class-xi-2018

ABOUT THE COURSE

The course on Indian Economic Development will give an idea to the learners about the foundation of Indian Economics & its development since Independence. The course will begin with a brief background of the Indian Economy on the eve of Independence. It will familiarise the learners with sectors of Indian Economy. It will also explain the planning process in India & its impact on different sectors of the economy. The reasons & processes of Economic reforms and the impact of economy will also be analysed. The learners will get an opportunity to know some of the major challenges facing the economy such as poverty, human capital formation, rural development, inflation, employment, infrastructure & sustainable development. A comparison of the development experience of India and its neighbouring countries will provide an idea of the perspective of development in these countries. We welcome you on the online course of Indian Economic Development.
The course will deal with "Indian Economic Development" from class XI Economics. This is a 6 months duration course (26 weeks). Every two week one module will deliver. Each module of the course will have four quadrants, text, video, weblinks (to know more about the concept from other resources over the web), self assessment questions (MCQs, true/false, one word answers etc.).

OBJECTIVES OF THE COURSE

This course is intended to acquaint the students with the knowledge about:

- To expose the learners to some of the key issues facing the Indian economy
- To understand about foundation of Indian Economics & its development since Independence
- To familiarise the learners with sectors of Indian Economy
- To identify the reasons & processes of Economic reforms and the impact of economy
- To acquire skills to understand macroeconomic events which occur around them,and to critically evaluate and interpret the relevant information provided by the media

COURSE SCHEDULE

1 Indian Economy on the Eve of Independence:
Low level of Economic Development under Colonial Rule, Agricultural Sector, Foreign Trade, Industrial Sector, Demographic Condition, Occupational Structure, Infrastructure
2 Indian Economy 1950-1990:
The goals of Five Year Plans, Agriculture, Industry and Trade, Trade POlicy
3 Liberalisation, Privatisation and Globalisation:
Liberalisation, Privatisation, Globalisation, Indian Economy During Reforms
4 Poverty:
Who are Poor?, How are Poor People Identified, The Number of Poor in India, Causes of Poverty, Policies and Programmes towards poverty Alleviation, poverty Alleviation Programmes
5 Human Capital Formation in INDIA:
Human Capital, Sources of Human Capital, Human Development, Education Sector in India,
6 Rural Development:
Rural Development, Credit and Marketing in Rural Areas, Agricultural Marketing System, Sustainable Development and Organic Farming
7 Employment:Growth, Informalisation and Other Issues:
Workers and Employment, Self Employed and Hired Workers, Employment in farms, factories and Offices, Unemployment, Government and Employment Generation
8 Infrastructure:
Infrastructure, Relevance of Infrastructure, The state of Infrastructure in India, Energy , Health
9 Environment and Sustainable Development:
Environment, State on India's Environment, Sustainable Development, Strategies for Sustainable Development
10 Comparative Development Experiences of India and Its Neighbours:
Developmental Path, Demographic Indicators, Gross Domestic Product, Indicators of Human Development, Development Strategies
11 Recent Government Initiatives having Demonetisation, GST and Cashless Society:
Recent Government Initiatives having Demonetisation, GST and Cashless Society

ABOUT INSTRUCTOR

She is Professor in Department of Education in Social Sciences (DESS), NCERT. Her area of interest

DR. PRABHAT K.MISHRA
Assistant Professor in Department of Education in
Social Sciences, NCERT, New Delhi

FIRST CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/5028-ncert-psychology-03-class-xii-2018

ABOUT THE COURSE

Psychology is one of the youngest sciences but one of the fastest growing. There are many who believe that the 21st century is going to be the century of biological sciences along with psychological sciences. Development in the fields of neurosciences, as well as physical sciences have opened new doors to solve the mysteries of mind and behaviour. There is no human endeavor which is going to remain unaffected by this new knowledge which is getting created. One only hopes that it will enable people to live their lives more meaningful and to organise human system better. Contents of the course will cover like variations in psychological attributes, personality, attitude psychological disorders, group processes etc., efforts have been made to provide linkages across and within the chapters to maintain continuity and holistic perspective. The course will introduce you to the fundamentals of psychology. Besides providing basic disciplinary knowledge, it focuses on enhancing your curiosity and understanding of people's behaviour and that of your own. The interactive nature of the course will help you understand psychology as a discipline as well as the practical applications of psychology in day-to-day life. The course will help you to explore yourself and the world of which you are the part.

COURSE SCHEDULE

Variations in Psychological Attributes:
Individual Differences in Psychological Attributes and its Assessment, Theories & Measurement of Intelligence, Variation in Intelligence & Creativity and Intelligence

Self and Personality:
Concept of Self & Personality, Major Approaches to the Study of Personality 1, Major Approaches to the Study of Personality 2, Major Approaches to the Study of Personality 3 & Projective Techniques & Behavioural Analysis

Meeting Life Challenges:
Nature, Types and Sources of Stress, Effect of Stress on Psychological Functioning and Coping with Stress & Stress Management Techniques & Promoting Positive Health

Psychological Disorders:
Abnormality and Psychological Disorders: An Introduction, Major Psychological Disorders 1 Major Psychological Disorders 2, & Major Psychological Disorders 3

Therapeutic Approaches:
Nature, Types and Sources of Stress, Effect of Stress on Psychological Functioning and Coping with Stress & Stress Management Techniques & Promoting Positive Health

ABOUT INSTRUCTOR

Dr. Prabhat K.Mishra has been working in the Department of Educational Psychology and Foundations of Education, NCERT, New Delhi since July, 2002. He has been involved in teaching the courses on Guidance for Human Development and Adjustment, and Basic Statistics in Diploma Course in Guidance and Counselling. Dr. Mishra has also been a Member Coordinator of the Textbooks in Psychology for Classes XI and XII brought out by the NCERT. He has also developed self-learning resource materials for teachers, teacher educators and counsellors, primarily on the theme of stress and coping. Dr. Mishra is a regular contributor of book chapters and a number of articles to various journals of repute.

DR. JAYA SINGH
Associate Professor in Department of Education in Social Sciences
(DESS), NCERT

FIRST CYCLE : 01/06/2018 to 30/11/2018
https://swayam.gov.in/courses/4941-ncert-economics-03-class-xii-2018

ABOUT THE COURSE

It is a course which offers understanding of the various principles of microeconomics. Here effort has been made to familiarize learners with the beauty of economic analysis without burdening them with the technical details. Here, there is discussion on the various aspects of consumer behavior, producer behavior and their interaction in the market. One such market i.e perfect market includes discussion on how to maximize efficiency and generate surplus for both consumers and the producers. Such a market is very rare in the economy. Thus there is also a discussion on different types of imperfect market like monopoly etc. We hope these steps will take us significantly towards the child centered education as advocated in the National Policy of Education (1986). The course will motivate the teachers to reflect on their own teaching and treat children as participant in learning.

The course will deal with " Microeconomics" from class XII Economics. This is a 6 months duration course (26 weeks). Every two week/one week one module will deliver. Each module of the course will have four quadrants, text, video, weblinks (to know more about the concept from other resources over the web), self assessment questions (MCQs, true/false, one word answers etc.).

OBJECTIVES OF THE COURSE

This course is intended to acquaint the students with the knowledge about:

- To introduces the learner to economics as a science of abstraction and reasoning
- To Understand some basic economic concepts and developing economic reasoning which the learners can apply in their day-to-day life as citizens, workers and consumers.
- To Realise the role in nation building and sensitise the learners about the economic issues that the nation is facing today.
- To equip learners with basic tools of economics and statistics to analyse economic issues.
- To develop an understanding that there can be more than one view on any economic issue and to develop the skills to argue logically with reasoning.
- To introduce some basic concepts and tools to understand economic issues of an individual or a firm and how decisions are taken in variety of markets

COURSE SCHEDULE

1 Introduction:
Simple Economy, Central Problems of Economy, Organisation of Economic activity, Positive and Normative economies, Microeconomics, Macroeconomics

2 Theory Of Consumer Behaviour:
Utility, Consumer Budget, Demand, MarketDemand, Elasticity of Demand

3 Production and Costs:
Production Function, Short Run and Long Run, Total Product, Average Product and Marginal Product, Law of Diminishing Marginal Product, Costs

4 The Theory of the Firm under Perfect Competition:
Perfect Competition, Revenue, Profit Maximisation, Supply Curve of a FIRM, Market Supply Curve, Price Elasticity of Supply

5 Market Equilibrium:
Equilibrium , Excess Demand, Excess Supply, Price Ceiling, Price Floor

6 Non Competitive Markets:
Monopoly in commodity Market, Average and Marginal Revenues, Short Run Equilibrium, Non Perfect Competitive Market, Oligopoly

ABOUT INSTRUCTOR

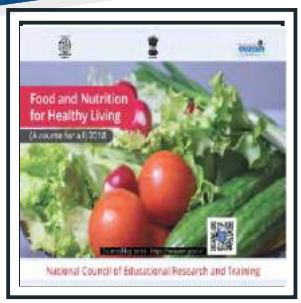
She is Associate Professor in Department of Education in Social Sciences (DESS), NCERT.

FOOD NUTRITION FOR HEALTHY LIVING

PROF. POONAM AGRAWAL
Faculty in Department of Gender Studies, NCERT, New Delhi

PROF. SUNITI SANWAL
Faculty in Department of Elementary Education, NCERT, New Delhi

DR. YASH PAUL SHARMA
Assistant Professor in Central Institute of Educational Technology, NCERT, New Delhi



FIRST CYCLE : 01/06/2018 to 30/11/2018

https://swayam.gov.in/courses/5066-food-nutrition-for-healthy-living

ABOUT THE COURSE

Who can imagine life without Food! Food is basic to our existence. Food is a key player in socialisation and social cohesion. There have been several reports of malnutrition or deaths due to poor nutrition, which have stirred the conscience of many. If you are one among those, we have this course for you. These days, nearly everyone is conscious about health and fitness. They want to know what to eat, how much to eat, how to prepare and how frequently to eat to remain active, healthy and fit. If you are one among those, this course is certainly for you. The course has 20 interesting modules which will answer most of your questions and concerns. If any remain, here are we, I and my team who will be there to interact with you and satisfy your quest for knowing what you are looking for. The 20 modules of the course deal with all aspects of Food, Nutrition, Health, Fitness and Hygiene and their interrelationships. Some of the titles include General knowledge about food selection for health and fitness; assessment of nutritional status, malnutrition; meal planning and minimising food wastage; healthy lifestyle - eating behaviour, physical activity, sleep and stress management; food labelling; food safety; nutraceuticals and functional foods etc.

Some of the things the course takers will be able to do after doing this course are

1. Assess nutritional status.
2. Preventive measures for better health.
3. Identify what lifestyle changes are required for health and wellness.
4. Interpret the food labels and make appropriate selection of foods and beverages.
5. Identify the medicinal properties of foods and food ingredients.

This is a 5 months duration course. One module shall be delivered per week. Each module of the course will have four quadrants, text, Video along with transcription; web links (to know more about the concept from other resources over the web), self assessment questions (MCQs, true/false, one word answers etc.) and learner will be motivated to have more interaction in discussion forums.

COURSE SCHEDULE

FNHL_10101 Food, Nutrition, Health and Hygiene – Interrelationships
FNHL_10102 Assessment of Nutritional Status
FNHL_10103, FNHL_10104 Common Health Problems
FNHL_10105, FNHL_10106 Nutrients in Food
FNHL_10107 Balanced Diet
FNHL_10108 Conserving and Enhancing nutritive value of Food
FNHL_10109, FNHL_101010 Food Selection for Health and Fitness
FNHL_101011, FNHL_101012 Meal Planning and minimizing food wastage
FNHL_101013, FNHL_101014 Life style for Health and Wellness
FNHL_101015 Food labels: Understanding and Interpreting
FNHL_101016 Malnutrition
FNHL_101017 Personal Hygiene
FNHL_101018 Food safety
FNHL_101019 Medicinal properties of Food ingredients
FNHL_101020 Nutraceuticals/ Functional Food

ABOUT INSTRUCTOR

1. Professor Poonam Agrawal , a scholar in Food and Nutrition possess Master's degree in Foods & Nutrition, Doctorate in Biochemistry and Post Doctorate in Biotechnology from reputed national and international academic institutions including G.B. Pant University of Agriculture and Technology, Pantnagar; IARI, New Delhi; Institute of Wool Research, Aachen and Institute for Microbiology, University of Dusseldorf, W. Germany.

ProfessorSunitiSanwalis workingin the DEE, NCERT. She also served as Professor and Head in Department of Humanities, Science, Education and Research at PSSCIEVE, Bhopal.

Dr. Yash Paul Sharma: Dr. Yash Paul Sharma has worked as Assistant Professor in the Central Institute of Educational Technology, NCERT, New Delhi. With Ph.D. degree in Zoology and one-year PostDoc from CSIR, Dr. Sharma has interests in Taxonomy, evolutionary Biology and integrating ICT to teach biological concepts. Dr. Sharma has discovered several new species of ants with co-workers with publications in many international journals of repute.

विद्याधनम् सर्वधनं प्रधानम्

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HINDI

DR.BAL KRISHNAN RAI
Assistant Director (Academics),NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug,2018 to 31st Jan,2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

हिंदी भाषी सामान्य व्यक्ति नई सूचना-क्रांति के परिणामस्वरूप आए अनेक शब्दों का प्रयोग अपने दैनिक जीवन में कर रहा है। इसके कारण साहित्य-लेखन में भी रचनाकारों की विचार-प्रक्रिया परिवर्तित हुई है। हिंदी भाषा भारत के जनतंत्र की आकांक्षाओं की पूर्ति करती है। इसी भाषा से देश के लोगों के बीच संपर्क स्थापित होता है। हिंदी भाषा का माध्यमिक स्तर का यह पाठ्यक्रम इन सभी बातों को ध्यान में रखते हुए तैयार किया गया है। यह जीवन और जगत की विभिन्न आवश्यकताओं में उपयोगी सिद्ध हो, इसी बात का ध्यान रखते हुए इसे अधिक व्यावहारिक, भाषा कौशल (सुनना, बोलना, पढ़ना और लिखना) आधारित और दैनिक जीवन से जुड़ा हुआ बनाने का प्रयास किया गया है। हम जीवन में मौखिक भाषा का सर्वाधिक प्रयोग करते हैं, अतः इस पाठ्यक्रम में सुनना और बोलना कौशल पर विशेष बल दिया गया है। व्याकरण कहीं पाठ्यक्रम को अधिक बोझिल न बना दे, इसके लिए इसे पाठ-सामग्री में ही समाहित किया गया है। इस रूप में यह पाठ्यक्रम अधिक व्यावहारिक तथा अन्य पाठ्यक्रमों से भिन्न और उपयोगी है।

LEARNING OUTCOME

- Hindi Language and Literature Learning
- Proficiency in Hindi
- Development of expression in Hindi

COURSE PLAN

Week 01 : Chapter-1 बहादुर
Week 02 : Chapter-2 दोहे
Week 03 : Chapter-3 गिल्लू
Week 04 : Chapter-4 आहवान
Week 05 : Chapter-5 राबर्ट नर्सिंग होम मैं
Week 06 : Chapter-6 भारत की ये बहादुर बेटियाँ
Week 07 : Chapter-7 आजादी
Week 08 : Chapter-8 चन्द्रगहना से लौटती बेर
Week 09 : Chapter-9 अख़बार की दुनिया
Week 10 : Chapter-10 पढ़ें कैसे
Week 11 : Chapter-11 सार कैसे लिखें
Week 12 : Chapter-12 इसे जगाओ
Week 13 : Chapter-13 सुखी राजकुमार
Week 14 : Chapter-14 बूढ़ी पृथ्वी का दुख
Week 15 : Chapter-15 अँधेर नगरी
Week 16 : Chapter-16 अपना पराया
Week 17 : Chapter-17 बीती विभावरी जाग री
Week 18 : Chapter-18 नाखून क्यों बढ़ते हैं
Week 19 : Chapter-19 शतरंज के खिलाडी
Week 20 : Chapter-20 उनको प्रणाम
Week 21 : Chapter-21 पत्र कैसे लिखें
Week 22 : Chapter-22 निबंध कैसे लिखें
Week 23 : Revision
Week 24 : Revision
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Dr.Bal Krishnan Rai is Assistant Director (Academics) at NIOS Headquarter since 28th October 2016.He attained M.A. in Mass Communication and Hindi.He also attained M. Phil(Topic - Gantantra Divas ki Shobha Yatra [Ravindernath Tyagi] : Samvedana or Shilp) and Ph.D(University of Delhi, Certificate Course in Translation) .The topic of Ph.D is 'Hindi ke Lalit Nibhandhon mein Manav Mulya'.He also done P.G. Diploma in Journalism & Mass Communication.Previously,he served as Academic Officer (Hindi) since July 2009 at NIOS, MHRD, Government of India, NOIDA;Hindi Officer since November 1999 at the NIOS, MHRD, Government of India, NOIDA and Hindi Translator at Mahanagar Telephone Nigam Ltd. since September 1996. His areas of interest are Open and Distance Learning & Adhunik Hindi Sahitya (Prose and Poetry).

ENGLISH

SAUMYA RAJAN
Assistant Director(Academic)

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

In a pluralistic and multilingual society like ours, the place of English as a link language cannot be denied. This position assumes even more importance in today's world where barriers in communication have broken down and information technologies have modified our lifestyles: we are fast moving towards a global village.

In today's time, a learner needs to be equipped with working English Language abilities so that he or she interacts meaningfully with the wide world ahead of him/her. Also, to ensure that a learner is not disadvantaged in terms of access to other courses of study and avenues of knowledge and information, knowledge of English is required.

LEARNING OUTCOME

- Learners should be able to listen to and understand short texts prescribed in the course book and react to the theme, structure and content.
- Learners should be able to repeat after a model and use English in familiar life situations.
- Learners should be able to read and understand a variety of texts critically and proficiently to demonstrate in writing or speech
- Learners should be able to write all forms of writing and texts using the conventions of Standard English as stylistically appropriate
- Learners should be able to use a Learner's Dictionary to find the meaning, usage and spelling of words

COURSE PLAN

Week 1. Snake Bite
Week 2. How the Squirrel Got His Stripes
Week 3. Kondiba - A Hero
Week 4. Tall Trees
Week 5. A Tiger Comes to Town-I
Week 6. A Tiger Comes to Town-II
Week 7. The Shoeshine
Week 8. A Birthday Letter
Week 9. Nine Gold Medals
Week 10. Noise: How It Affects Our Lives
Week 11. My Elder Brother
Week 12. Indian Weavers
Week 13. The Last Stone Mason
Week 14. Stealing and Atonement
Week 15. My Vision for India
Week 16. My Only Cry
Week 17. Caring for Others
Week 18. The Little Girl
Week 19. A Prayer for Healing
Week 20. New Good Things from Rubbish
Week 21. The Village Pharmacy
Week 22. The Truth
Week 23. The Return of the Lion
Week 24. Co-operate and Prosper
Week 25. Once Upon a Time
Week 26. Ustad Bismillah Khan, The Parrot Who Wouldn't Talk

ABOUT INSTRUCTOR

Saumya Rajan is a DPhil in English Literature from the University of Allahabad and trained and certified in Incorporating Gender Concerns in Public Policy from the Indian Institute of Public Administration, New Delhi. She is certified in Global Diplomacy- Diplomacy in the Modern World from the University of London &SOAS, University of London.

DR. R. N. MEENA
Designation: Assistant Director (Academic)

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

संस्कृतभाषा विश्वस्य प्राचीनतमा भाषा अस्ति। अस्यां भाषायां ज्ञान-विज्ञानयोः अनेके ग्रंथाः लिखिताः; ये आधुनिकस्य विज्ञानस्यापि अध्ययने सहायकाः सन्ति। न केवलं भारतस्य सर्वासु भाषासु अस्याः प्रभावः स्पष्टतया दृश्यते अपितु 'अवेस्ता' आदि वैदेशिकभाषास्वपि वर्तते। अतएव इमां भाषां ज्ञात्वा वयं अन्याः भाषाः अपि सारल्येन ज्ञातुं शक्नुमः। नवशब्दनिर्माणे अस्याः भाषायाः सामर्थ्यमनुपमम् वर्तते। संस्कृतभाषायाः अध्ययनेन वयं भारतस्य प्राचीनतमां संस्कृतिम् अपि ज्ञातुं शक्नुमः। एषः पाठ्यक्रमः सम्प्रेषण-आधरितोऽस्ति। एषः माध्यमिक-स्तरीयछात्राणां मार्गदर्शनार्थं निर्मितोऽस्ति। अनेन छात्राः संस्कृतभाषायां निहितनैतिकमूल्यैः अपि परिचिताः भविष्यन्ति स्वजीवने च तानि धरयितुं समर्थाः भविष्यन्ति। राष्ट्रनिर्माणेऽपि ते अधिकाधिकं सहायकाः भविष्यन्ति।

विशिष्ट- उद्देश्यानि

श्रवणकौशलम्

क. छात्राः संस्कृतस्य विशिष्टध्वनीन् श्रुत्वा अवगमिष्यन्ति। उदा.-पदान्तस्वरः पदान्तव्यंजनम्, विसर्गः, अनुस्वारः संयुक्ताक्षरम् इत्यादीनि।

ख. संस्कृतस्य सरलवाक्यानि तेषामर्थं श्रुत्वा ज्ञास्यान्ति तदनुसारेण च व्यवहारं करिष्यन्ति।

वाचनकौशलम्

क. संस्कृते प्रयुक्तानां विशिष्टध्वनीनां सम्यक्-उच्चारणं करिष्यन्ति (उदा-स्वरः, मात्रा, व्यंजनम्, संयुक्ताक्षाराणि इत्यादि)

ख. संस्कृतवाक्यानां सम्यक् उच्चारणं करिष्यन्ति।

ग. पद्यरचनानां सस्वरवाचनं करिष्यन्ति।

घ. पठितसामग्रीम् आश्रितानां प्रश्नानाम् उत्तराणि दास्यन्ति।

पठनकौशलम्

क. संस्कृतगद्यांशानां, पद्यांशानां, नाट्यांशानां सारम् अवगमिष्यन्ति।

लेखनकौशलम्

क. पठितपदानि वाक्यानि च श्रुत्वा शुद्धवर्तन्यां लेखितुं शक्ष्यन्ति।

ख. सन्धियुक्तपदानां समासयुक्तपदानां च वाक्यानाम् अनुलेखनं करिष्यन्ति।

ग. पठितकथायाः तस्यांशानां वा सारं संस्कृतवाक्येषु लेखितुं शक्ष्यन्ति।

घ. चित्राणि दृष्ट्वा संस्कृतभाषायां तेषां वर्णनं कर्तुं शक्ष्यन्ति।

घ प्रदत्तानि वाक्यानि घटनाक्रमानुसारेण लेखितुं शक्ष्यन्ति।

LEARNING OUTCOME

- संस्कृतभाषायाः सामान्यज्ञानवर्धनं भविष्यति ।
- संस्कृतसाहित्यं प्रति छात्रेषु अभिरुचेः वर्धनम्।
- संस्कृतसाहित्यस्य प्रमुखविधानां प्रतिनिधिचनानां ज्ञानम्।
- छात्रोषु राष्ट्रियसांस्कृतिकसामाजिकनैतिक-मूल्यानां विकासः।
- विज्ञानप्रौद्योगिकीक्षेत्रो प्राचीनभारतीयमनीषिणां योगदानैःपरिचयः।

COURSE PLAN

Week 1 पाठ 1. सुभाषितानि
Week 2 पाठ 2. प्रेरणा
Week 3 पाठ 3. त्याज्यं न धैर्यम्
Week 4 पाठ 4. कस्मात् किं शिक्षेत
Week 5 पाठ 5. प्राणस्य श्रेष्ठत्वम्
Week 6 पाठ 6. यद्भविष्यों विनश्यति
Week 7 पाठ 7. अयोध्यां प्रत्यागमनम्
Week 8 पाठ 8. विरहकातरं तपोवनम्
Week 9 पाठ 9. भारतीयविज्ञानम्
Week 10 पाठ 10. प्रहेलिका
Week 11 पाठ 11. रचनाकौशलम्
Week 12 पाठ 12. यक्ष - युधिष्ठिर संवाद
Week 13 पाठ 13. करुणापरा हि साधव:
Week 14 पाठ 14. शरीरमाध्यं खलु धर्मसाधनम्
Week 15 पाठ 15. ईश: क्व अस्ति
Week 16 पाठ 16. गीतामृतम्
Week 17 पाठ 17. स्वस्तिपन्थामनुचरेम
Week 18 पाठ 18. कर्तव्यनिष्ठा
Week 19 पाठ 19. पुत्रोऽहं पृथिव्या:
Week 20 पाठ 20. सत्याग्रहाश्रम:
Week 21 पाठ 21. तेजसां हि न वय: समीक्ष्यते
Week 22 पाठ 22. पत्रलेखनम्
Week 23 Revison
Week 24 Revison
Week 25 Revison
Week 26 Revison

ABOUT INSTRUCTOR

Dr. R.N. Meena Completed his M.A., M.Phil., Ph.D. from JNU, New Delhi. He has expertise in Language Learning, Open and Distance Learning, Philosophy and Thoughts, Theater, Screenplay writing for short film and educational videos, Linguistics, Gender, Caste and Tribal Issues

DR. RAJENDRA KUMAR NAYAK
Academic Officer (Mathematics),NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Mathematics is an indispensable subject area in the school education because of its wide application in our day today activities as well as in different fields of education. Access to quality education in Mathematics is very important for each and every learner. Mathematics is an important discipline of learning at the Secondary stage.

The present course in Mathematics has been divided into 26 lessons/chapters from six modules namely Algebra, Commercial Mathematics, Geometry, Mensuration, Trigonmetry and Statistics. Text Materials, Audio and Video programmes are provided for your better learning. The assessment has been provided you in each lesson for your self assessment purposes.

LEARNING OUTCOME

The learner will be able to:

- describe basic concepts, facts, principles, terms, symbols and processes of Mathematics.
- convert the word problems in to the mathematical forms and solve them.
- explain different ways of processing the given data and help them in arriving at conclusions.
- express the skills of quantification of experiences around them and make linkage with their life.
- solve wide variety of mathematical problems in daily life and reflect in different context of learning.
- relate mathematical knowledge and skills to solve variety problems and develop positive attitude towards Mathematics and its application.
- interpret tabular/graphical representation of the quantitative data.
- articulate logically and use the quantitative data to find many results.

COURSE PLAN

Week 01 : LESSON 1 - NUMBER SYSTEMS

Week 02 : LESSON 2 - EXPONENTS AND RADICALS

Week 03 : LESSON 3 - ALGEBRAIC EXPRESSIONS AND POLYNOMIALS

Week 04 : LESSON 4 - SPECIAL PRODUCTS AND FACTORIZATION

Week 05 : LESSON 5 - LINEAR EQUATIONS

Week 06 : LESSON 6 - QUADRATIC EQUATIONS

Week 07 : LESSON 7 - ARITHMETIC PROGRESSION

Week 08 : LESSON 8 - PERCENTAGE AND ITS APPLICATIONS

Week 09 : LESSON 9 - INSTALMENT BUYING

Week 10 : LESSON 10 - LINES AND ANGLES

Week 11 : LESSON 11 - CONGRUENCE OF TRAINGLES

Week 12 : LESSON 12 - CONCURRENT LINES

Week 13 : LESSON 13 - QUADRILATERALS

Week 14 : LESSON 14 - SIMILARITY OF TRIANGLES

Week 15 : LESSON 15 - CIRCLES

Week 16 : LESSON 16 - ANGLES IN A CIRCLE AND CYCLIC QUADRILATERAL

Week 17 : LESSON 17 - SECANTS, TANGENTS AND THEIR PROPERTIES

Week 18 : LESSON 18 - CONSTRUCTIONS

Week 19 : LESSON 19 - CO ORDINATE GEOMETERY

Week 20 : LESSON 20 - PERIMETER AND AREA OF PLANE FIGURES

Week 21 : LESSON 21 - SURFACE AREA AND VOLUME OF SOLID FIGURES

Week 22 : LESSON 22 - INTRODUCTION TO TRIGONOMETRY

Week 23 : LESSON 23 - TRIGONOMETRIC RATIOS OF SOME SPECIAL ANGLES

Week 24 : LESSON 24 - DATA AND THEIR REPRESENTATION

Week 25 : LESSON 25 - MEASURES OF CENTRAL TENDENCY

Week 26 : LESSON 26 - INTRODUCTION TO PROBABILITY

ABOUT INSTRUCTOR

Dr. Rajendra Kumar Nayak is Academic Officer (Mathematics) at NIOS Headquarters for 6 years.He attained M.SC (Mathematics) from Ravenshaw University, Odisha and M.Ed from Regional Institute of Education (RIE, NCERT)-Bhubaneswar.He also attained his Ph.D in Mathematics Education from Utkal University, PGDDE (IGNOU).Previously, he worked as Lecturer in Education at Ravenshaw University, Cuttack from 2nd May,2011 to 10th July,2012;he worked as Assistant Professor in Mathematics Education at Regional Institute of Education (NCERT), Bhubaneswar from 6th July,2010 to 30th April,2011;he worked as Lecturer in Education at Army Institute of Education, Delhi Cantt, New Delhi from 1st October,2009 to 31st May,2010 and worked as Research fellow in Education Department, Regional Institute of Education (NCERT), Bhubaneswar from 1st July,2008 to 30th September,2009. His areas of interest are Mathematics Education, Educational Statistics, Measurement and Evaluation, Teacher Education and Distance Education.

DR. SANGHMITRA SURYAPANI
Academic Officer (Biology),NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

There are Thirty Two lessons in this course and you are expected to study them. The Course has seven modules. Each module would take you through various topics like Measurement in Science, Matter in our Surroundings, Moving Things and Energy.
After studying these modules you would begin to understand the scientific principles behind many of the day to day events. Also, there are modules dedicated to the Living World, Natural Resources as well as Humans and Environment.

LEARNING OUTCOME

The learner will be able to:

- explain the science behind natural phenomena.
- enumerate the various facets of science and the role it plays in human welfare.
- develop scientific attitude so that reasoning wins over blind faith and opinions.
- formulate simple hypothesis, verify them and apply in their daily life activities.
- cultivate an interest in science and technology and be encouraged to pursue it as a career.

COURSE PLAN

Week 01 : Lesson 1 Measurement in Science & Technology

Week 02 : Lesson 2 Matter in our surroundings

Week 03 : Lesson 3 Atoms and Molecules

Week 04 : Lesson 4 Chemical Reaction & Equations

Week 05 : Lesson 5 Atomic Structure

Week 06 : Lesson 6 Periodic Classification of Elements

Week 07 : Lesson 7 Chemical Bonding

Week 08 : Lesson 8 Acid, Bases and Salts

Week 09 : Lesson 9 Motion and its Description

Week 10 : Lesson 10 Force and Motion

Week 11 : Lesson 11 Gravitation

Week 12 : Lesson 12 Sources of Energy

Week 13 : Lesson 13 Work and Energy and Lesson 14 Thermal Energy

Week 14 : Lesson 15 Light Energy and Lesson 16 Electrical Energy

Week 15 : Lesson 17 Magnetic Effects of Electric Current and Lesson 18 Sound and Communication

Week 16 : Lesson 19 Classification of Living Organisms and Lesson 20 History of Life on Earth

Week 17 : Lesson 21 Building Blocks of Life- Cells & Tissues and Lesson 22 Life Processes I Nutrition, Transportation, Respiration and Excretion

Week 18 : Lesson 23 Life Processes II Control and Coordination and Lesson 24 Life Precesses III Reproduction

Week 19 : Lesson 25 Heredity

Week 20 : Lesson 26 Air and Water

Week 21 : Lesson 27 Metal and Non-metals

Week 22 : Lesson 28 Carbon and its Compounds

Week 23 : Lesson 29 Natural Environment

Week 24 : Lesson 30 Human Impact on Environment

Week 25 : Lesson 31 Food Production and Animal Husbandry

Week 26 : Lesson 32 Health and Hygiene

ABOUT INSTRUCTOR

Dr. Sanghmitra Suryapani is Academic Officer (Biology) at NIOS Headquarters for six years.She attained her B.Sc (Environmental Science) from Maitreyi College, Delhi University and M.Sc (Environmental Botany) from Jamia Hamdard University, New Delhi.She also done her Ph.D in Botany from Jamia Hamdard University, New Delhi.She also done Post Graduate Diploma in Environmental Law and Management from Indian Law Institute, New Delhi, India; Comprehensive Disaster Risk Management Framework from National Institute of Disaster Management-GFDRR (Online Course) and pursuing M.A (Distance Education) from IGNOU. Previously, she has two years experience of Guest Faculty for "Environmental Studies" undergraduate classes (BCA & B. Pharm.) at Jamia Hamdard, New Delhi;one year experience as a Senior Technical Assistant under the plan of "Bringing Green Revolution in Eastern India" and "National Food Security Mission", Krishi Bhawan, Ministry of Agriculture, New Delhi and aldo delivered Science Talk Shows and Discussions regarding Environmental Issues, broadcasted from Yuvvani,Vividh Bharti Division and Indraprastha Channel since 2001.Her areas of interest are Plant Ecology,Plant Physiology,Plant Biotechnology,Environmental Biology & Open and Distance Learning.

SMT. TARUN
Assistant Director, NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Social Science involves the study of human society which makes us familiar with evolution of human society and covers the major civilisations of the world. You will learn about India and the world during the Ancient, Mediaeval and Modern period. Further, you will understand interrelationships between nature, environment, resources and development. You would also learn about the importance of being a good citizen who fulfils his/her duties before enjoying his/her rights. The course highlights the mutually reinforcing relationship between the State and the citizen, leading to an insight into the functions of different levels of governments- rural and urban. You would be able to appreciate the political, social and economic challenges faced by India from within and outside the country and able to identify, understand and fulfil your own role for making a positive contribution towards nation building.

LEARNING OUTCOME

- recall struggles and experiences of our previous generations;
- explain the need to judiciously use the country's resources and conserve them;
- establish that India as a functioning democracy is inspired by the values enshrined in our constitution; and
- interpret various socio-political problems in contemporary India.

COURSE PLAN

Week 01 : INTRODUCTION TO SOCIAL SCIENCE

Week 02 : MEDIEVAL WORLD

Week 03 : MODERN WORLD-1

Week 04 : MODERN WORLD-11

Week 05 : IMPACT OF BRITISH RULE ON INDIA: ECONOMIC, SOCIAL AND CULTURAL

Week 06 : RELIGIOUS AND SOCIAL AWKENING IN COLONIAL INDIA

Week 07 : POPULAR RESISTANCE TO THE BRITISH RULE

Week 08 : INDIAN NATIONAL MOVEMEN

Week 09 : PHYSIOGRAPHY OF INDIA

Week 10 : CLIMATE

Week 11 : BIO-DIVERSITY

Week 12 : AGRICULTURE IN INDIA

Week 13 : TRANSPORT AND COMMUNICATION

Week 14 : POPULATION COMPOSITION

Week 15 : CONSTITUTIONAL VALUES AND POLITICAL SYSTEM IN INDIA

Week 16 : FUNDAMENTAL RIGHTS AND FUNDAMENTAL DUTIES

Week 17 : INDIA – A WELFARE STATE

Week 18 : LOCAL GOVERNMENTS AND FIELD ADMINISTRATION

Week 19 : GOVERNANCE AT THE STATE LEVEL

Week 20 : GOVERNANCE AT THE UNION LEVEL

Week 21 : POLITICAL PARTIES AND PRESSURE GROUPS

Week 22 : PEOPLE'S PARTICIPATION IN THE DEMOCRATIC PROCESS

Week 23 : CHALLENGES TO INDIAN DEMOCRACY

Week 24 : NATIONAL INTEGRATION AND SECULARISM

Week 25 : SOCIO-ECONOMIC DEVELOPMENT AND EMPOWERMENT OF DISADVANTAGED GROUPS

Week 26 : ENVIRONMENTAL DEGRADATION AND DISASTER MANAGEMENT

ABOUT INSTRUCTOR

Smt. Tarun Assistant Director in National Institute of Open Schooling (NIOS) Regional centre Chandigarh, Ministry of HRD, Govt. of India, Academic Consultant (Full Time, against the post of Assistant Regional Director) in IGNOU, Regional Center, Karnal, Haryana, India from 10 May to 29 Dec 2010. Lecturer (on Temporary basis) of Geography in KVA DAV College for Women, Karnal, Haryana, India from 21 July 2009 to 20 March 2010. Lecturer (as a guest faculty) of Disaster Management in Govt. College for Women, Karnal, Haryana, India from Nov 2008 to 31 March 2009

Areas of Interest/Specialization

- Open and Distance Learning
- Urbanization and Land Use Patterns

Experience

- Academic Officer (Geography) in National Institute of Open Schooling (NIOS), Ministry of HRD, Govt. of India, Noida-201309 (U.P.), India from 31 Dec 2010 to till now.
- Academic Consultant (Full Time, against the post of Assistant Regional Director) in IGNOU, Regional Center, Karnal, Haryana, India from 10 May to 29 Dec 2010.
- Lecturer (on Temporary basis) of Geography in KVA DAV College for Women, Karnal, Haryana, India from 21 July 2009 to 20 March 2010.
- Lecturer (as a guest faculty) of Disaster Management in Govt. College for Women, Karnal, Haryana, India from Nov 2008 to 31 March 2009

SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy,NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will enable learner to understand economy and different types of it.During the course,learners will get a clear view of central problems of an economy and basic economic activities.Learners are introduced with some basic concepts related to consumption,production and market mechanism.

LEARNING OUTCOME

The learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources.
- explain production and distribution of goods and services.
- explain the meaning and functions of money, banks and insurance.
- discuss the challenges and sectoral aspects of Indian economy.
- describe in detail India's position in the world and with its neighbours.
- list various consumer rights and responsibilities.

COURSE PLAN

Week 01 : Chapter-1 What is Economics
Week 02 : Chapter-2 Human Wants
Week 03 : Chapter-3 Goods and Services
Week 04 : Chapter-4 Economy – Its Meaning and Types
Week 05 : Chapter-5 Central Problems of an Economy
Week 06 : Chapter-6 Basic Economic Activities
Week 07 : Chapter-7 Production
Week 08 : Chapter-8 Cost and Revenue
Week 09 : Chapter-9 Demand
Week 10 : Chapter-10 Supply
Week 11 : Chapter-11 Determination of Price and Quantity
Week 12 : Chapter-12 Market
Week 13 : Chapter-13 Role of Govt. in Determination of Price & Quantity System
Week 14 : Chapter-14 Money and its Role
Week 15 : Chapter-15 Banking and Credit
Week 16 : Chapter-16 Savings and Insurance
Week 17 : Chapter-17 Collection and Presentation of Data
Week 18 : Chapter-18 Analysis of Data
Week 19 : Chapter-19 An Overview of Indian Economy
Week 20 : Chapter-20 Sectoral Aspects of Indian Economy
Week 21 : Chapter-21 Challenges of Indian Economy
Week 22 : Chapter-22 Indian Economy in Global Context
Week 23 : Chapter-23 Environment and Sustainable Development
Week 24 : Chapter-24 Consumer Awareness
Week 25: Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Smt.Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.

SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy,NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will give the learner an awareness of the world of business.This will help the learner to get an idea of different forms of business organisations available in our country.The course also explains various service sectors.The learner will be able to understand buying,selling and distribution techniques in business.

LEARNING OUTCOME

The learner will be able to:

- understand the nature and scope of business activities and social responsibilities of business.
- classify the business activities into industry and commerce and decide the form of business organization for the same.
- list the need and importance of various aids to trade like warehousing, transport, communication, postal, banking, insurance etc.
- describe the new developments in the business world like e-banking, B.P.O., K.P.O. services etc.
- explain the channels of distribution and various types of retail trade.
- discuss the need and importance of advertising, sales promotion and personal selling.
- recall the need and importance of consumer protection and redressal of consumer grievances.
- discuss the importance of self employment and competencies required to pursue a career.
- develop the skill of doing the project work using the case study approach.

COURSE PLAN

Week 01 : Chapter-1 Nature Scope of Business

Week 02 : Chapter-2 Industry & Commerce

Week 03 : Chapter-3 Sole Proprietorship, Partnership & Hindu Undivided Family

Week 04 : Chapter-4 Cooperative Societies and Joint Stock Companies

Week 05 : Chapter-5 Transport Services

Week 06 : Chapter-6 Warehousing Services

Week 07 : Chapter-7 Communication Services

Week 08 : Chapter-8 Postal and Courier Services

Week 09 : Chapter-9 Banking Services

Week 10 : Chapter-10 Insurance Services

Week 11 : Chapter-11 Outsourcing

Week 12 : Chapter-12 Purchase and Sale

Week 13 : Chapter-13 Channels of Distribution

Week 14 : Chapter-14 Retail Trade

Week 15 : Chapter-15 Advertising

Week 16 : Chapter-16 Sales Promotion and Personal Selling

Week 17 : Chapter-17 Consumer – Rights and Responsibilities

Week 18 : Chapter-18 Consumer Protection

Week 19 : Chapter-19 Choosing a Career

Week 20 : Chapter-20 Entrepreneurship

Week 21 : Chapter-21 Project work

Week 22 : Revision

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Smt.Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.

HOME SCIENCE

DR. ANJANA AGARWAL
Senior Executive officer (SEO), NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

- Home science subject consists of five specializations, (1) Food and nutrition (2) Human Development (3) Family Resource Management (4) Textile and Apparel Science (5) extension and Communication.
- Five specializations integrates the life skills which equip the learner to face the challenges of life in changing scenario of eating habits, health, fashion, child care, family dynamics, market, media, mobile apps, entrepreneurships, laws and regulations etc. The learner finds his or her path to walk upon in future.
- Sky is limit for Home Science learners. The learner gains the knowledge, skills and abilities in each field of specializations. The learner with creative bend of mind may find career in planning and cooking healthy meals, fabric weaving and printing, work for play school, making utility articles. The learners are made sensitive towards their food habits, cooking practices and health of the all family members, care and selection of clothes, environment, safety, cleanliness, hygiene and sanitation in houses, role of ethics, values and positive attitude in people as well as consumer rights and responsibilities in the market
- Learners develop managerial skills through time, energy, and money and resource management. Home Science equips the learner in all aspects of life.

LEARNING OUTCOME

recognize their own strengths and weaknesses and work on them to achieve their maximum potential;
put into practice decision making and problem solving skills to make informed choices;
Learn the milestones of growth and development and develop sensitivity for each member of the family in different life stages;
develop lifelong ability to absorb knowledge and apply it effectively to meet the challenges to ever changing life while focusing on adolescent issues;
become aware of the national issues and challenges and identify one's own role in overcoming them.

COURSE PLAN

Week 01 : Lesson 01 What is Home Science

Week 02 : Lesson 02 Food and Nutrients, function of food, Nutrients and deficiency diseases

Week 03 : Lesson 03 Food groups

Week 04 : Lesson 04 Methods of cooking food

Week 05 : Lesson 05 Food Preservation, Food Spoilage

Week 06 : Lesson 06 Environment, Air Pollution, Water Pollution

Week 07 : Lesson 07 Health, Factors Affecting Health

Week 08 : Lesson 08 Communicable and Life Style diseases, Life Style Disease

Week 09 : Lesson 09 Care and Maintenance of Fabric

Week 10 : Lesson 10 Fibre to Fabric

Week 11 : Lesson 11 Fabric Finishes, type of finishes

Week 12 : Lesson 12 Housing

Week 13 : Lesson 13 Safety at home

Week 14 : Lesson 14 Introduction to Resources

Week 15 : Lesson 15 Time & Energy Management

Week 16 : Lesson 16 Managing Family Income

Week 17 : Lesson 17 Life Begins

Week 18 : Lesson 18 Concept of development

Week 19 : Lesson 19 Family and I

Week 20 : Lesson 20 Adolescence Charms and Challenges

Week 21 : Lesson 21 Ethics in Daily Life

Week 22 : Lesson 22 Consumer Education, Consumer Rights

Week 23 : Lesson-01, 02 Assignments

Week 24 : Lesson-03, 04 Assignments

Week 25 : Lesson-05, 06 Assignments

Week 26 : Lesson-07, 08 Assignments

ABOUT INSTRUCTOR

Dr. Anjana Agarwal is employed at National Institute of Open Schooling (NIOS) as Senior Executive officer (SEO) in Academic department, Noida. She looks after academic activities including radio talks and video making for Home Science subject at secondary and senior secondary levels. She is well versed in Home Science and specialized in Food and Nutrition. She writes scientific articles and papers in national and international journals for long and the first author of "Text Book of Human Nutrition", 2014. She owns a website- www.nutroma.in and provides dietary and nutritional counselling for health and disease. She had been academically involved for Food Science and Nutrition in various capacities in Dehradun and Mumbai for more than 16 years. She has also delivered presentations on nutrition and aromatherapy in public and corporate forums. She has achieved her higher education in Pantnagar and University of Delhi, New Delhi with fellowships.

PSYCHOLOGY

DR. SHWETA VERMA
Executive Officer (Academic), NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

- The study of psychology deals with important aspects of human behaviour and mental processes. The study of psychology is significant to one's personal growth and development and facilitates the process of social development. The way we think, feel and behave with the people and world around us influence our adjustment. The psychology course enables learners to understand the complex mental processes that govern human behaviour.
- The course offers an opportunity for learners to analyse the nature of psychology and the range of behaviours and mental processes. The course highlights on basic psychological processes, human development and social psychological process. You will also be able to learn about health and well being, work life and environmental concerns as well as the significance of psychology to understand the world of work.
- The course also introduces the learners to the concept of Yoga and its significance in day to day life.
- In all its essence the course collectively enables you to understand yourself and others around you to have a healthy life.

LEARNING OUTCOME

- explain the basic concepts of psychology and their application;
- relate oneself positively to family, neighbourhood and society;
- behave responsibly and in a value based manner;
- learn to live a purposeful life of health and happiness.

COURSE PLAN

Week 01 : Introduction to Psychology, Methods of Psychology
Week 02 : INDIVIDUAL DIFFERENCES
Week 03 : SENSORY PROCESSES
Week 04 : Memory
Week 05 : Thinking and Problem Solving
Week 06 : Motivation and emotion
Week 07 : NATURE AND DETERMINANTS
Week 08 : Childhood
Week 09 : Adolescence and its challenges
Week 10 : Adulthood and Aging
Week 11 : Group and leadership
Week 12 : Communication
Week 13 : Attitude
Week 14 : Social and Educational Problem
Week 15 : Happiness and well being
Week 16 : Mental Disorders and Their Treatment
Week 17 : Mental Health and Hygiene
Week 18 : Aptitude, Interest and Job Requirements
Week 19 : Preparation for the Vocational Role
Week 20 : The World of Organisations
Week 21 : Environmental Stress
Week 22 : Healthy Mind in Healthy Body
Week 23 : Self development and Yoga
Week 24 : Nurturing the whole being _ An Indian Perceptive Part
Week 25 : CONTROLLING AND DISCIPLINING THE MIND
Week 26 : Quiz

ABOUT INSTRUCTOR

Name : Dr Shweta Verma
Designation: Executive Officer (Academic)
Department: NIOS, Academic Department PhD in Psychology from H.P.U. Shimla University, Worked with various government organizations as psychologist and counsellor and having a university teaching experience of more than 2 years. Presently working with NIOS in the academic department.

INDIAN CULTURE AND HERITAGE

DR.AZMAT NOORI
Academic Officer(History)

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

India is one of the ancient civilizations of the world which has stood the test of time. In fact what makes Indian culture unique among other ancient civilizations is its ability to accommodate and assimilate external influences and weave them into its own cultural fabric. This composite influence has not only enriched the cultural milieu of India, it has also made it stronger. Indian art, architecture, music, language, philosophy and religion reflect this diversity of influence that has occurred through centuries. This is the beauty of Indian Culture and Heritage. As Indian citizens not only do we need to be proud of this pluralistic and rich cultural heritage but also to study it objectively and assess it critically.

LEARNING OUTCOME

- To familiarize learners with various aspects of the culture and heritage of India.
- To acquaint learners with the contributions of our ancestors in the areas of religion, philosophy, science, arts, education, languages and literature.
- To enable learners to appreciate the underlying unity amidst diversity in all aspects of India's culture.
- To acquaint learners with the impact of Indian culture in different countries of the world
- To enable learners to appreciate the composite nature of Indian culture.

COURSE PLAN

Week1: Lesson 1: Culture: An Introduction
Week 2: Indian Culture
Week 3: Ancient India
Week 4: Medieval India
Week 5: Modem India
Week 6: Indian Languages and Literature-I
Week 7: Indian Languages and Literature-II
Week 8: Religion and Philosophy in ancient India
Week 9: Religion and Philosophy in Medieval India
Week 10: Religious Reform Movements in Modem India
Week 11: Indian Painting
Week 12: Performing Arts: Music. Dance and Drama
Week 13: Indian Architecture
Week 14: Science and Technology in India
Week 15: Scientists of Ancient India
Week 16: Science and Scientists of Medieval India
Week 17: Scientists of Modern India
Week 18: Education in India
Week 19: Indian Social Structure
Week 20: Socio-Cultural Issues in Contemporary India
Week 21: Spread of Indian Culture Abroad
Week 22: Revision
Week 23: Revision
Week 24: Revision
Week 25: Revision
Week26: Revision

ABOUT INSTRUCTOR

Name : Dr. Azmat Noori
Designation : Academic Officer (History)
Qualification: Ph.D (History), 2010, Aligarh Muslim University, Aligarh
M.A (History), 2005, Aligarh Muslim University, Aligarh
B.A (Hons), History, 2003, Aligarh Muslim University, Aligarh
P.G Diploma in Women Studies,2008, Aligarh Muslim University, Aligarh

ACCOUNTANCY

SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy,NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will help the learners to understand the basic concepts in accounting.The course enables the learner to understand the rules of debit and credit.After studying this course,the learners will develop the skill to prepare journal,other subsidiary books,trial balance and financial statements.During the course,learners will also get an idea of computers in accounting.

LEARNING OUTCOME

The learner will be able to:

- understand the meaning, objectives, advantages, basic concepts and conventions of Accountancy.
- develop the skill of preparing the accounting equation.
- classify the accounts into different categories, understand the rules of debit and credit and develop the skill of preparing accounting vouchers.
- prepare the various books of accounts like journal, cash book, other subsidiary books and ledger.
- develop bank reconciliation statement.
- post the transactions from journal and other subsidiary books to ledger and prepare the trial balance.
- identify the accounting errors and to learn their rectification.

COURSE PLAN

Week 01 : Chapter-1 Introduction of Accounting
Week 02 : Chapter-2 Accounting Concepts and Conventions
Week 03 : Chapter-3 Accounting Terms
Week 04 : Chapter-4 Accounting Equation
Week 05 : Chapter-5 Double Entry System
Week 06 : Chapter-6 Journal
Week 07 : Chapter-7 Cash Book
Week 08 : Chapter-8 Bank Reconciliation Statement
Week 09 : Chapter-9 Purchase and Sales Book
Week 10 : Chapter-10 Ledger
Week 11 : Chapter-11 Trial Balance and Accounting Errors
Week 12 : Chapter-12 Depreciation
Week 13 : Chapter-13 Provisions and Reserve
Week 14 : Chapter-14 Financial Statements (without adjustments)
Week 15 : Chapter-15 Financial Statements (with adjustments)
Week 16 : Chapter-16 Computers in Accounting
Week 17 : Chapter-17 Introduction to Tally
Week 18 : Revision
Week 19 : Revision
Week 20 : Revision
Week 21 : Revision
Week 22 : Revision
Week 23 : Revision
Week 24 : Revision
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Smt.Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.

PAINTING

MS. SANCHITA BHATTACHARJEE
SEO (Painting)

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Painting is nothing but skills to express oneself through colour and proportion and it also helps cultivate aesthetic sense. It further aims to develop the visual sense of the learner and to help him/her appreciate expressive value of line, texture, space, rhythm etc.

LEARNING OUTCOME

- Learner will be to appreciate the History and Evaluation of Indian Art
- Explain the medium, techniques and styles of Indian Folk Art
- Create different shapes effectively in producing a composition
- Draw human figure with proportion

COURSE PLAN

PRACTICAL

Week 1. TOOLS AND MATERIALS
Week 2. OBJECT STUDY
Week 3. NATURE STUDY
Week 4. HUMAN FIGURE
Week 5. STUDY OF ANIMALS AND BIRDS
Week 6. COMPOSITION

THEORY

Week 7. History and Appreciation of Art(From 3000 BC to 600 AD) 01
Week 8. History and Appreciation of Art 05(From 7th Century AD to 12th Century AD)
Week 9. History and Appreciation of Art (from13th Century AD to 18th Century AD.)
Week 10. Folk Art of India 13
Week 11. Renaissance 17
Week 12. Impressionism 21
Week 13. Cubism, Surrealism and Abstract Art 24
Week 14. Pioneers of Contemporary Indian Art 27
Week 15. Contemporary Indian Art 30
Week 16. Revision
Week 17. Revision
Week 18. Revision
Week 19. Revision
Week 20. Revision
Week 21. Revision
Week 22. Revision
Week 23. Revision
Week 24. Revision
Week 25. Revision
Week 26. Revision

ABOUT INSTRUCTOR

Presently working as a Senior Executive Officer (Performing Arts Education) in National Institute of Open Schooling from July 2001. She hold master degree M. A. in Drawing and Painting from Maharaja Tomar University, Madhya Pradesh. She has been engaged in the conducting Meeting, Development of Curriculum, Learning Objectives, Study Materials, Audio and Video Material, Marking Schema, Tutor Mark Assignment, Question Item for On Demand Examination and organizing workshops in different parts of the Country in the field of Art and Culture.

DATA ENTRY OPERATION

RADHIKA B
Academic Officer (ICT), NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Data Entry Operations is an introductory course provides students with the opportunity to practice using computer, operating systems, documents, spreadsheets and presentation. In this subject student will learn about word processing which helps them to format their document and merge their document with data. Also student will learn about spreadsheet which helps them to analyse their data and presentation software helps them to present their views or ideas to audience.

LEARNING OUTCOME

- define basic components of computer system;
- explain the features of Operating System;
- develop the skills of creating, printing and formatting the documents;
- handle different features of Spreadsheet;
- format spreadsheet and insert charts;
- create PowerPoint presentations.

COURSE PLAN

Week 01 : Basics of Computer
Week 02 : Video for L-01
Week 03 : Operating System
Week 04 : Video for L-02
Week 05 : Basics of Word Processing
Week 06 : Video for L-03
Week 07 : Formatting Documents
Week 08 : Video for L-04
Week 09 : Mail Merge
Week 10 : Video for L-05
Week 11 : Basics of Spreadsheet
Week 12 : Video for L-06
Week 13 : Formatting Worksheet
Week 14 : Video for L-07
Week 15 : Formulas, Functions and Charts
Week 16 : Video for L-08
Week 17 : Creating Presentation
Week 18 : Video for L-09
Week 19 : L-01 Quiz
Week 20 : L-02 Quiz
Week 21 : L-03 Quiz
Week 22 : L-04 Quiz
Week 23 : L-05 Quiz
Week 24 : L-06 Quiz
Week 25 : L-07 Quiz
Week 26 : L-08 Quiz

ABOUT INSTRUCTOR

Name : Radhika B
Designation: Academic Officer (ICT), NIOS.
Having post graduation in Master of Computer Applications. Around 7+ years of intensive work experience in various projects and also gained experience and knowledge of the software development processes in the relevant technologies. Last six years associated in the content development of ICT courses in Academic and vocational courses of NIOS

DR. SANGHMITRA SURYAPANI
Academic Officer (Biology)

TYPE OF COURSE : Sr.Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

Learner will be able to understand the concept of "learning by doing" which in turn helps in developing scientific temper.

LEARNING OUTCOME

The course content begins from Biodiversity classification; Structure and function of the living; their reproduction and development and also Genetics, Molecular Biology, Biotechnology and Immunology which are the modern fields of Biology. An exhaustive treatment of the environment in all its aspects is also contained in the curriculum and so are topics like some common human diseases and health and nutrition which are closely related to human welfare. Module-I Diversity and Evolution of Life, Module-II Forms and Functions of Plants and Animals Module-III Reproduction and Heredity Module-IV Environment and Health and Module-V Emerging Areas in Biology.

COURSE PLAN

Week : 1 Origin and Evolution of Life and Introduction to Classification

Week : 1 The Kingdom Monera, Protoctista and Fungi

Week : 1 Kingdom Plantae and Animalia

Week : 2 Cell Structure and Function

Week : 2 Tissues and other Level of Organization

Week : 3 Root system

Week : 3 Shoot system

Week : 4 Absorption, Transport and Water Loss in Plants

Week : 4 Nutrition in plants - Mineral Nutrition

Week : 4 Nitrogen Metabolism

Week : 5 Photosynthesis

Week : 5 Respiration in Plants

Week : 6 Nutrition and Digestion

Week : 6 Respiration and Elimination of Nitrogenous Wastes

Week : 7 Circulation of Body Fluids

Week : 7 Locomotion and Movement

Week : 8 Coordination and Control - The Nervous and Endocrine Systems

Week : 8 Homeostasis: The Steady State

Week : 9 Reproduction in Plants

Week : 9 Growth and Development in Plants

Week : 10 Reproduction and Population Control

Week : 11 Principles of Genetics

Week 12,13 : Molecular Inheritance and Gene Expression

Week 14: Genetics and Society

Week 15,16: Principles of Ecology

Week 17,18: Conservation and Use of Natural Resources

Week 19: Pollution

Week 20: Nutrition and Health

Week 21,22: Some Common Human Diseases

Week 23,24: Biotechnology

Week 25,26: Immunobiology: An Introduction

ABOUT INSTRUCTOR

Dr. Sanghmitra Suryapani is working as an Academic Officer (Biology) at National Institute of Open Schooling (NIOS), NOIDA Uttar Pradesh. Dr. Suryapani has her Ph.D in Botany from Jamia Hamdard, University New Delhi. She has also done diploma in Environmental law and management from Indian Law Institute, New Delhi. She is a Subject Matter Specialist (SME) for Science and Technology at the Massive Open Online Courses (MOOC) platform for Swayam. She is also a State Coordinator; Mizoram for Diploma in Elementary Education (D. El. Ed) programme for in-service untrained teachers launched by NIOS an initiative of Ministry of Human Resource Development. She has developed self learning material of biology at Senior Secondary level. In addition to that she prepared learners guide for secondary, Science and Technology and developed various audio programmes through Muktavidyavani and video programs for MOOCs at NIOS. She has represented at various national, international and corporate platforms for writing and presenting talks.

CHEMISTRY

DR.RAJEEV PRASAD
Assistant Director(Academic),NIOS

TYPE OF COURSE : Sr.Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

According to present scheme of school education at Senior Secondary stage, chemistry emerges out as a separate discipline. The present chemistry course has been developed basically around the themes: Why do chemical reactions occur? What is the quantitative relationship among reacting constituents in a chemical reaction? How far and how fast will a chemical reaction proceed under a given set of conditions? Can we predict whether a chemical reaction will occur or not? What is the relation between the structure of a chemical substance and its functions/properties? In what way is a chemical reaction relevant for getting new types of substances and materials for daily life and chemical industries?

Some interdisciplinary aspects have also been provided to make the course more meaningful and functional. This Chemistry Course has three parts, I and II consist of theory portion and part III is a practical manual. Part I and II of theory portion has eight modules. Part-I consists of five modules namely as : Some basic concepts of chemistry, Atomic Structure and Chemical Bonding, States of matter, Chemical Energetics, and Chemical Dynamics. Part-II consists of three modules namely: Chemistry of Elements, Chemistry of Organic Compounds, and Chemistry in Everyday Life. Each module is further divided into different lessons.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain the principles, theories and laws of chemistry responsible for various chemical processes/ reactions
- realise the role of chemistry in production of many elements (metals/non-metals) and compounds useful in industries and daily life
- identify the chemical nature of inorganic and organic substances around him/her
- choose various vocational, professional and applied courses of choice based on knowledge of chemistry gained
- perform chemical calculations to know about the chemical reactions and chemical compounds
- explain chemical reactions, concepts and phenomenon
- develop awareness about uses and abuses of chemical substances
- develop skills of arranging/setting apparatus, handling apparatus and chemicals properly ; and analyse and synthesise simple compounds.

COURSE PLAN

Week 1: Atoms, Molecules and Chemical Arithmetic

Week 2: Atomic Structure & Periodic Table and Periodicity in Properties

Week 3: Chemical Bonding

Week 4: The Gaseous State and Liquid State & The Solid State

Week 5: Solutions & Colloids

Week 6: Chemical Thermodynamics & Spontaneity of Chemical Reactions

Week 7: Chemical Equilibrium & Ionic Equilibrium

Week 8: Electrochemistry

Week 9: Chemical Kinetics & Adsorption and Catalysis

Week 10: Occurrence and Extraction of Metals & Hydrogen and s-Block Elements

Week 11: General Characteristics of the p-block Elements

Week 12: p-block Elements and their Compounds – I

Week 13: p-block Elements and their Compounds - II

Week 14: d-Block and f-Block Elements & Coordination Compounds

Week 15: Nomenclature and General Principles

Week 16: Hydrocarbons

Week 17: Compounds of Carbon Containing Halogens (Haloalkanes and Haloarenes)

Week 18: Alcohols, Phenols and Ethers

Week 19: Alcohols, Phenols and Ethers

Week 20: Aldehydes, Ketones and Carboxylic Acids

Week 21: Aldehydes, Ketones and Carboxylic Acids

Week 22: Compounds of Carbon Containing Nitrogen

Week 23: Biomolecules

Week 24: Drugs and Medicines

Week 25: Soaps, Detergents and Polymers

Week 26: Environmental Chemistry

ABOUT INSTRUCTOR

I Dr.Rajeev Prasad, Assistant Director(Academic), NIOS welcomes you all in this course. I have been working with NIOS from last eight years. I worked as Academic Officer(Chemistry), NIOS from 2011 to 2016 and developed and revised Senior Secondary Chemistry (313) of NIOS. My Specialisation is in Organic Chemistry. I have 11 years of Teaching experience at Senior Secondary Chemistry in reputed academic Institutions as Lecturer/PGT.

DR. SAUMYA RAJAN
Designation: Assistant Director (Academic)

TYPE OF COURSE : Sr.Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

After completing this course, the learner will be able to:
develop listening skills;
develop speaking skills;
develop reading skills;
develop writing skills.
This course will also focus on elements of language – grammar and vocabulary. Special efforts will be made to enrich the vocabulary of students.

LEARNING OUTCOME

- Listening Skills
- Speaking Skills
- Reading Skills
- Writing Skills
- Study Skills
- Literary Skills

COURSE PLAN

Week 1 My First Steps
Week 2 Leisure
Week 3 Reading With Understanding
Week 4 Father Dear Father
Week 5 Fuel of the Future
Week 6 My Grandmothers House
Week 7 Reading With Understanding
Week 8 A Case of Suspicion
Week 9 My Son will not a Beggar be
Week 10 Where the Mind is Without Fear
Week 11 Reading With Understanding
Week 12 If I Were You
Week 13 The Tiger in the Tunnel
Week 14 The Road not Taken
Week 15 Reading With Understanding
Week 16 I Must Know the Truth
Week 17 India-Her Past and Future
Week 17 Night of the Scorpion
Week 18 Reading With Understanding
Week 18 Reading With Understanding
Week 19 Reading With Understanding
Week 19 Reading With Understanding
Week 20 Reading With Understanding
Week 20 Reading With Understanding
Week 21 Bholi
Week 22 The Reception Desk and You
Week 22 Face to face Communication in Business
Week 23 Managing The Telephone
Week 23 Writing Memos and Letters
Week 24 Analysing Turns in Telephoning
Week 24 Writing e-mails
Week 25 Controlling Strategies and Out-Going Calls
Week 25 Writing Reports
Week 26 Aids for a Receptionist
Week 26 Writing Job Applications & Appearing for an Interview

ABOUT INSTRUCTOR

Saumya Rajan is a DPhil in English Literature from the University of Allahabad and trained and certified in Incorporating Gender Concerns in Public Policy from the Indian Institute of Public Administration, New Delhi. She is certified in Global Diplomacy- Diplomacy in the Modern World from the University of London &SOAS, University of London.

HINDI

DR.BAL KRISHNAN RAI
Assistant Director (Academics),NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

हिंदी अपने साहित्यिक एवं बोलचाल के रूप के माध्यम से आरम्भ से ही जन आकाक्षाओं की अभी व्यक्ति करती रही है,हिंदी साहित्य की समृधि का यह हुत बड़ा कारण है कि हिंदी ने समयनुसार अपने आप को परिवर्तित एवं समृद्ध किया है , आज के समय में एक तरफ तो हिंदी में अनेक विधाओं का हित्य लिखा जा रहा है दूसरी तरफ हिंदी मीडिया का भी विस्तार हुआ है हिंदी भाषी सामान्य व्यक्ति नई सूचना-क्रांति के परिणामस्वरूप आए अनेक शब्दों का प्रयोग अपने दैनिक जीवन में कर रहा है। इसके कारण साहित्य-लेखन में भी रचनाकारों की भाषिक क्षमता एवं विचार-प्रक्रिया परिवर्तित हुई है। हिंदी भाषा भारत के जनतंत्र की आकांक्षाओं की पूर्ति करती है। इस भाषा से देश के लोगों केबीच संपर्क स्थापित होता है। हिंदी भाषा का उच्चतर माध्यमिक स्तर का यह पाठ्यक्रम इन सभी बातों को ध्यान में रखते हुए तैयार किया गया है। यह जीवन और जगत की विभिन्न आवश्यकताओं में उपयोगी सिद्ध हो यह हमारा उद्देश्य है ,इसी बात का ध्यान रखते हुए इसे अधिक व्यावहारिक,भाषा कौशल (सुनना,बोलना,पढ़ना और लिखना) आधारित और दैनिक जीवन से जुड़ा हुआ बनाने का प्रयास किया गया है। हम जीवन में मौखिक भाषा का सर्वाधिक प्रयोग करते हैं,अतः इस पाठ्यक्रम में सुनना और बोलना कौशल पर विशेष बल दिया गया है। व्याकरण कहीं पाठ्यक्रम को अधिक बोझिल न बना दे,इसके लिए इसे पाठ-सामग्री में ही समाहित किया गया है। इस रूप में यह पाठ्यक्रम अधिक व्यावहारिक तथा अन्य पाठ्यक्रमों से भिन्न और उपयोगी है।

LEARNING OUTCOME

भाषिक और साहित्यिक योग्यता का विकास कर उनका प्रयोग कर सकेंगे;
हिंदी की व्याकरण-सम्मत, समाज-संदर्भित और व्यावहारिक अभिव्यक्ति का विकास कर सकेंगे;
हिंदी की साहित्यिक-सामाजिक संवेदना की समझ विकसित कर सकेंगे और उसे परंपरा से जोड़ कर प्रस्तुतु कर सकेंगे;
साहित्यिक, प्रयोजनपरक और व्यावहारिक भाषा के विविध रूपों की तुलना कर सकेंगे

COURSE PLAN

week 1 कविता कैसे पढ़ें
week 1 रैदास
week 2 तुलसीदास
week 2 मीरांबाई
week 3 रहीम
week 3 गद्य कैसे पढ़ें
week 4 एक था पेड़ और एक था ठूँठ
week 4 दो कलाकार
week 5 अच्छा कैसे लिखें
week 5 सार कैसे करें
week 6 बिहारी
week 6 पद्माकर
week 7 सूर्यकांत त्रिपाठी 'निराला'
week 7 महादेवी week 8अनुराधा
week 8 अनपढ़ बनाए रखने की साजिश
week 9 पीढ़ियां और गिट्टियां
week 9 कुटज
week 10 पत्र कैसे लिखें
week 10 भाव पल्ल वन
week 11 प्रतिवेदन, टिप्पण और प्रारूपण
week 11 रामधारी सिंह 'दिनकर'
week 12 गजानन माधव 'मुक्तिबोध
'week 12 राजेंद्र उपाध्या'य
week 13 हिंदी कविता की विकास यात्रा
week 13 क्रोध
week 14आखिरी चट्टान
week 14 जिजीविषा की विजय
week 15 निबंध कैसे लिखें
week 15 तालिका, आरेख निर्माण आदि
week 16 परियोजना कैसे लिखें
week 17,18,19 उपन्यास
week 20,21 तीन लघुकथाएं
week 22 सूचना प्रौद्योगिकी : स्वरूप और महत्त्व
week 22 संचार माध्यम और उनके प्रकार
week 23 संचार की प्रक्रिया
week 23 संचार माध्यम के प्रमुख अवयव
week 24 संचार माध्यम की भाषा
week 24 वैज्ञानिक दृष्टि और वैज्ञानिक विकास
week 25 भारतीय विज्ञान
week 25 जनसंख्या वृद्धि और विज्ञान
week 26 कंप्यूटर और हिंदी

ABOUT INSTRUCTOR

Qualification:
•M.A. (Mass Communication and Hindi),
•M. Phil. Topic - Gantantra Divas ki Shobha Yatra (Ravindernath Tyagi) : Samvedana or Shilp
•Ph.D., (University of Delhi, Certificate Course in Translation) Topic: Hindi ke Lalit Nibhandhon mein Manav Mulya
•P.G. Diploma in Journalism & Mass Communication

Areas of Interest/Specialization
•Open and Distance Learning
•Adhunik Hindi Sahitya (Prose and Poetry)

Specialization:
•Translation, Editing and Mass Communication

Experience:
•Assistant Director since 28 October 2016 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
•Academic Officer (Hindi) since July 2009 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
•Hindi Officer since November 1999 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
•Hindi Translator at Mahanagar Telephone Nigam Ltd. Since September 1996

MATHEMATICS

DR. RAJENDRA KUMAR NAYAK
Academic Office (Mathematics),NIOS

TYPE OF COURSE : Sr.Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

There are basically four parts of Mathematics course under Swayam platform. These are 1.Text part 2. Audio and Video tutorials 3. Self Assessment 4. Discussion forum

Under text part, all efforts have been made to give related illustrations and sufficient examples for your better understanding. You must go through all solved examples and try to solve all problems under check your progress and Terminal exercises.

Along with text materials, lesson wise video tutorials are also provided for your clarification and better understanding. In some of the lessons concept wise certain audio clips are also provide you. Lesson wise Multiple Choice Questions (MCQs) are provided you after each lesson for the self progress purposes. A discussion forum is also provided to you in this platform, where you can able to share with me your doubts, difficulties and any suggestions. Remember in Swayam platform, one of the important aspects of learning Mathematics is you must have to carefully observe the Videos and practice the quiz items for your self assessment purposes.

LEARNING OUTCOME

After completing this course, learner will be able to:

describe basic concepts, facts, principles, terms, symbols and processes of Mathematics.
convert the word problems in to the mathematical forms and solve them.
explain different ways of processing the given data and help for arriving at conclusions.
express the skills of quantification of experiences and make linkage with day-today life.
solve wide variety of mathematical problems in daily life and reflect in different context of learning.
relate mathematical knowledge and skills to solve variety of problems and develop positive attitude towards Mathematics and its application.

COURSE PLAN

Week 1: Sets
Week 2: Relations and Functions-I
Week 3: Trigonometric Functions-I & Trigonometric Functions-II
Week 4: Relation between Sides and Angles of a triangle
Week 5: Sequences and Series & Some special sequences
Week 6: Complex Numbers
Week 7: Quadratic Equations and Linear Inequalities & Principle of Mathematical Induction
Week 8: Permutations and Combinations & Binomial Theorem
Week 9: Cartesian system of rectangular co-ordinates & Straight Lines
Week 10: Circles & Conic Sections
Week 11: Measures of Dispersion & Random experiments and events.
Week 12: Probability
Week 13: Matrices
Week 14: Determinants & Inverse of a Matrix and its Applications
Week 15: Relation and Functions-II Inverse Trigonometric Functions
Week 16: Limits and Continuity
Week 17: Differentiation
Week 18: Differentiation of Trigonometric functions & Differentiation of exponential and Logarithmic functions
Week 19: Application of Derivatives
Week 20: Integration
Week 21: Definite Integrals
Week 22: Differential equations
Week 23: Introduction to 3-D
Week 24: Vectors & Plane
Week 25: Straight Line
Week 26: Linear Programming Mathematical Reasoning

ABOUT INSTRUCTOR

Dr. Rajendra Kumar Nayak, M.Sc (Mathematics), M.Ed, Ph.D (Utkal University) presently working as Academic Office (Mathematics) in the Academic Dept., NIOS from 13/07/2012. Before joining of NIOS Dr. Nayak worked as Assistant Professor of Mathematiocs Education at Regional Institute of Education (NCERT), Bhubaneswar , Army Institue of Education, New Delhi and Ravenshaw University, Cuttack, Odisha.

The Interest area of teaching and learning - Mathematics, Mathematics Education, Educational Statistics, and Distance Education.

Dr. Nayak always believe on research based teaching and experince based learning. Based on this philosophy awarded Ph.D on the topic" Effectiveness of Construcivist Approach on Learning Process and Learning Achivement in Mathematics and Creativity of Primary School Children" from Utkal Univerdity, Odisha.

PAINTING

MS. SANCHITA BHATTACHARJEE
SEO (Painting)

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and age 15 yr

OBJECTIVE OF COURSE

This course is provided with necessary inputs of practical work and skill to the learner's familiarity of the theory of art through the ages. This will further help in aesthetic development, ability to appreciate and discover the beauty of life and integrate it into one's own personality. Thus, art will make more sense to the Cultural Heritage, environment and develop a creative attitude in day-to-day activities. When you will go through this book you will know about the brief introduction and appreciation of Indian Art. In theory part there is detailed and systematic description of indian art history (early to Modern period) such as Art of indus valley Civilization, Art of Mauryan to Gupta period , Ajanta Caves , Mural Painting, Temple Art and Sculpture, Architecture of Indo-Islamic period ,Miniature painting of Mugals School, Rajasthan School, Pahari School, Company School, Bengal School and Folk Painting In practical part we have fundamental of painting, how to draw an object from nature ,how to compose Sketching from life and memory and how to do traditional folk painting. In practical paper it is also mention that you need to submit Portfolio with 12 original paintings and one sketch book. This course will offer good opportunity to you in your creative and self expressional development.

LEARNING OUTCOME

- develop knowledge and understanding of visual. art;
- develop skill, ability and aesthetic attitude
- acquaint about the development of art and various styles of art expression and their salient features;
- learn the visual aspects of composition, division of space, rhythm, texture, tonal gradation and expressive value of line;
- work with harmony and contrast of colour, having various drawing and painting materials such as pencils, pastels, water and oil colour, ink etc

COURSE PLAN

Week 1L-1 Art of Indus Valley Civilization

Week 2L-2 Art From Maurya To Gupta Period

Week 3L-3 Ajanta Caves

Week 4L-4 Temple Art And Sculpture

Week 5L-5 Indian Bronzes

Week 6L-6 Indo- Islamic Architecture

Week 7L-7 Mughal School

Week 8L-8 Rajasthani School Of Painting

Week 9L-9 Pahari School Of Miniature Painting

Week 10L-10 Deccan School Of Painting

Week 11L-11 Company School

Week 12L-12 Pioneers Of Contemporary Art Movements In India

Week 13L-13 Contemprary Art Of India

Week 14L-14 Folk Painting

Painting Practical Syllabus

Week 15L-1 Object Drawing

Week 16L-2 Nature Study

Week 17L-3 Fundamentals Of Painting

Week 18L-4 Composition

Week 19L-5 Sketching From Life And Memory

Week 20L-6 Folk Art As Motif

Painting (Practical Guidelines)
List of Practical

Week 21

1. Study And Draw Basic Shapes And Volume Of Objects In Individual And Group
2. Differentiate between the man made and natural objects.

Week 22

3. Use of light and Shade to achieve volume and depth in terms of perspective.
4. Study of rhythm, harmony, balance and texture.

Week 23

5. Application of primary, secondary and complementary cool and warm colours according to the need of the composition.
6. Arrangement of forms in pictorial space after assimilation of elements studied.

Week 24

7. Create composition to express feelings and emotions.
8. Documentaion of visual experience, capture the movement, mood and the characteristics with instant perception

Week 25

9. Manifest forms from stored perception of studies of visual experience in the memory.
10. Study the traditional folk motifs. Week 2611. Study of methods and materials of folk art.

ABOUT INSTRUCTOR

Presently working as a Senior Executive Officer (Performing Arts Education) in National Institute of Open Schooling from July 2001. She hold master degree M. A. in Drawing and Painting from Maharaja Tomar University, Madhya Pradesh. She has been engaged in the conducting Meeting, Development of Curriculum, Learning Objectives, Study Materials, Audio and Video Material, Marking Schema, Tutor Mark Assignment, Question Item for On Demand Examination and organizing workshops in different parts of the Country in the field of Art and Culture.

PHYSICS

BIJAYALAXMI PRADHAN
senior executive officer(Physics),NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and age 15 yr

OBJECTIVE OF COURSE

Physics is a fundamental science because it deals with the basic features of the world such as time, space, motion, charge, matter and radiation. Study of physics is a means of rationally understanding nature. Physics lies behind all technological advancements, such as computer, internet, launching of rockets and satellites, lasers, etc. It also finds applications in such simple activities of men as lifting a heavy weight or making a long jump. Physics is, thus, an all pervading science and its study helps us in finding answers to whys and hows of our day to day happenings.

Physics course has been so designed that it not only focuses on the basic concepts of Physics but relates them to the daily life activities. The basic themes of Physics which would be of interest to all, particularly to those who are interested in pursuing Physics as a career in life have been selected to form core content of the course. Besides, this course also includes such emerging areas as electronics, communication, nuclear physics which find immense applications in our life.

LEARNING OUTCOME

After completing this course, the learner will be able to:

develop understanding of concepts, fundamental laws, principles and processes in the area of physics
establish relationship between causes and effects of physical phenomenon
explain the contributions of physics towards improving quality of life
create interest in physics and foster a spirit of enquiry
develop experimental skills like taking observations, manipulation of equipment, and communicative skills such as reporting of observations and experimental results
develop problem solving ability e.g. analyzing a situation or data, establishing relationship between cause and effect
develop scientific temper of mind by making judgment on verified facts and not opinions, by showing willingness to accept new ideas and discoveries
develop awareness of the dangers inherent in the possible misuse of scientific knowledge.

COURSE PLAN

Week 1: Units, Dimensions and Vectors
Week 2: Motion in a Straight Line
Week 3: Laws of Motion
Week 4: Motion in a Plane & Gravitation
Week 5: Gravitation & Work, Energy and Power
Week 6: Work, Energy and Power & Motion of a Rigid Body
Week 7: Elastic Properties of Solids & Properties of Fluids
Week 8: Properties of Fluids
Week 9: Kinetic Theory of Gases
Week 10: Thermodynamics
Week 11: Heat Transfer and Solar Energy & Simple Harmonic Motion
Week 12: Wave Phenomena
Week 13: Electric Charge and Electric Field
Week 14: Electric Potential and Capacitors
Week 15: Electric Current
Week 16: Magnetism and Magnetic Effect of Electric Current
Week 17: Electromagnetic Induction and Alternating Current
Week 18: Reflection and Refraction of Light & Dispersion and Scattering of light
Week 19: Dispersion and Scattering of light & Wave Phenomena and Light
Week 20: Wave Phenomena and Light & Optical Instruments
Week 21: Structure of Atom & Dual Nature of Radiation and Matter
Week 22: Dual Nature of Radiation and Matter & Nuclei and Radioactivity
Week 23: Nuclear Fission and Fusion
Week 24: Semiconductors and Semiconducting Devices
Week 25: Applications of Semiconductor Devices
Week 26: Communication Systems

ABOUT INSTRUCTOR

Ms. Bijayalaxmi Pradhan is senior executive officer(Physics) in National Institute of Open Schooling(NIOS).Her qualification is M.Sc.(Physics),B.Ed.,PGDDE. She has been involved in various academic activities of Physics subject at senior secondary level and Science and Technology at secondary level in NIOS such as development of question bank,TMA,Video programmes,live audio programmes for webradio etc. She has also experience of teaching of Physics at senior secondary level. She was also involved in research and academic activities in science education in institutions like NCERT and Vigyan Prasar.

DR. R. N. MEENA
Designation: Assistant Director (Academic)

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Mpnths (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

अस्मिन् स्तरे संस्कृतभाषायाः शिक्षणस्य उद्देश्यानि सन्ति-

सामान्य-उद्देश्यानि

- संस्कृतभाषायाः संस्कृतवाङ्मयस्य च विषये रुचिवर्धनम्:;
- संस्कृतसाहित्यस्य विविधविधानां परिचयः;
- संस्कृतभाषाकौशलेषु दक्षताविकासः;
- राष्ट्रियस्तरे सामाजिक-सांस्कृतिक-वैज्ञानिकाध्यात्मिकसंचेतनाविकासः;
- आचारशुद्धिमाध्यमेन छात्राणां चारित्रिकविकासः।

विशिष्ट-उद्देश्यानि

श्रवणं भाषणाच

- छात्राः दैनन्दिनव्यवहारे शिष्टाचारपालने संस्कृतस्य प्रयोगं कुर्युः;
- सरलसंस्कृते प्रश्नं प्रष्टुं समर्थाः भवेयुः
- सरलसंस्कृतप्रश्नानां मौखिकरूपेण उत्तरदाने समर्थाः भवेयुः;
- वर्णानां शुद्धम् उच्चारणं कर्तुं समर्थाः भवेयुः;

LEARNING OUTCOME

- संस्कृतभाषायाः सामान्यज्ञानवर्धनं भविष्यति ।
- स्कृतसाहित्यं प्रति छात्रेषु अभिरुचेः वर्धनम्।
- संस्कृतसाहित्यस्य प्रमुखविधानां प्रतिनिध्रिचनानां ज्ञानम्।
- छात्रोषु राष्ट्रियसांस्कृतिकसामाजिकनैतिक-मूल्यानां विकासः।
- विज्ञानप्रौद्योगिकीक्षेत्रो प्राचीनभारतीयमनीषिणां योगदानैःपरिचयः।

COURSE PLAN

Week 1 thou-lans'k%
Week 2- ;fn tkukfl rn~ on
Week 3- vkjksX;a ijea lq[ke~
Week 4- okpka e.Mua lR;e~
Week 5- vfryksHk% u dÙkZO;%
Week 6- jktrs [kyq dU;kdqekjh
Week 7- ,rn~ mikL;e~
Week 8- ijkFksZ vkReksRlxZ%
Week 9- dkys Qyfr lkSHkkX;e~
Week 10- irfUr ijihMdk%
Week 11- vuqPNsnys[kue~
Week 12- laoknys[kue~
Week 13- o"kZrqZo.kZue~
Week 14- ve`rL; iUFkk%
Week 15- fgeky;ks uke uxkf/kjkt%
Week 16- ekuks fg egrka /kue~
Week 17- dYiukdhfrZ% fot;rs , i;kZoj.kL; laj{k.ke~
Week 18- Øks/kks·uFkZdkjd%, vuUr%Kkulkxj%
Week 19- 'kY;fpfdRlktud% lqJqr% ,d"Va U;klL; j{k.ke
Week 20- ân; ifjorZue, i=a fy[kke%
Week 21- ifj;kstuk&fuekZ.ke ,
Week 22- lelkef;da laLÑrlkfgR;e, laLÑrL; iz;kstuewydrk
Week 23- Hkkjrh;KkufoKkuijEijk, tul×pkjek/;e%
Week 24- laLÑre~ vU;k% Hkkjrh;k% Hkk"kk% p , laLÑri=dkfjrk
Week 25- Hkkjrh;laLÑrkS laLdkjk% ~ if=dkizk:ie~
Week 26- eqnz.k=qfV'kks/kue~-

ABOUT INSTRUCTOR

Dr. R.N. Meena Completed his M.A., M.Phil., Ph.D. from JNU, New Delhi. He has expertise in Language Learning, Open and Distance Learning, Philosophy and Thoughts, Theater, Screenplay writing for short film and educational videos, Linguistics, Gender, Caste and Tribal Issues.

GEOGRAPHY

BIJAYALAXMI PRADHAN
senior executive officer(Physics),NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

- This course has been divided into 10 modules and 32 lessons. First Module is The study of Geography in India. It talks about the development of Geography as a discipline, the approaches of learning geography and its branches.
- The Module 2 is on Changing Face of the Earth. The earth we can see and know is the result of evolution taken place in a very long time. This module helps students to understand the origin and evolution of the earth. It talks about different theories related to the dynamic surface of the earth i.e. isostasy and continental drift.
- Module 3 is The domain of the water on the Earth. As the name refers its talk about oceans, the movement of oceanic water, ocean reliefs and its influence on human and climate.
- 4th Module The Domain of Air on the Earth covers the atmospheric structure and composition, insolation, winds, precipitation and other elements of weather and climate.
- Module 5 talks about The Domain of Life on Earth. It explains the biosphere and life in different biomes. It also let you think about the global climatic changes and its impact on human society. So that we can take a step to achieve sustainable development.
- The next module is The Physical Setting of India. This module has covers the physiography, drainage system and climate of India. It also help you to analyse the natural disaster prone areas in India and efforts to be made to cope up with it.
- Module 7 talks about Natural Resources and their Development in India. This module will help to understand the resources available in India and their wise use and distribution.
-
- The very next Module is on Economic Activities and Infrastructural Development. It discusses about available resources, their distribution and related economic activities. The module also covers the transport and communication system in India.
- Module 9 covers the Human Resource Development in India. This will help you to analyse the demography of India along with human development index and settlement patterns in India.
- Module 10 is Optional Module. You have to select any one module either Local Area Planning or Geography of Tourism in India.

LEARNING OUTCOME

- explain the terms, key concepts and basic principles of geography
- explore the processes and patterns of the spatial arrangements of the natural as well as human phenomena
- explain the complex relationship that exists between physical and human environment
- apply geographical knowledge and methods of enquiry to emerging issues and problems at different levels – local, regional, national and global
- develop an understanding of diverse physical resource base, economic activities and regional inequalities in India
- summarize the concept of unity in diversity in India and its demographic structure and recognize the spirit and purpose of geography as a discipline in the modern world.

COURSE PLAN

Week 1 : L-1 and 2: Nature of Geography as a Discipline, Earth's Interior and Its Material

Week 2 : L-3: Dynamic Surface of the Earth

Week 3 : L-4 and 5: Evolution of Landforms Due To Internal Forces, the Work of Running Water and Underground Water

Week 4 : L-6: The Work of Moving Ice, Wind and Sea Wave

Week 5 : L-7: Major Landforms and Their Economic Significance

Week 6 : L-8: Oceans: Submarine Relief and Water Circulation

Week 7 : L-9 and 10: Atmosphere Composition and Structure, Insolation and Temperature

Week 8 : L-11: Pressures and Wind

Week 9 : L-12 and 13: Humidity and Precipitation, Weather and Climate

Week 10 : L-14 and 15: Biosphere, Biomes

Week 11 : L-16: India - Physical Features

Week 12 : L-17 and 18: Climate of India, Natural Disasters

Week 13 : L-19 and 20: Our Resources, Land, Soil and Vegetation Resources In India

Week 14 : L-21 and 22: Our Water Resources, Land Use and Agriculture

Week 15 : L-23 and 24: Development of Mineral and Energy Resources, Industrial Development

Week 16 : L- 25: Transport, Communication and Trade in India

Week 17 : L-26: Population Density, Distribution and Growth in India

Week 18 : L-27: Population Composition in India

Week 19 : L-28: Human Development

Week 20 : L-29: Human Settlement

Week 21 : Optional Module 10 A Lesson 30/ 10 B Lesson 30

Week 22 : Optional Module 10 A Lesson 31/ 10 B Lesson 31

Week 23 : Optional Module 10 A Lesson 32/ 10 B Lesson 32

Week 24 : Practical Lesson 1 and 2

Week 25 : Practical Lesson 3 and 4

Week 26 : Practical Lesson 5

ABOUT INSTRUCTOR

Name : Mr. Vivek Singh
Designation : Sr. Executive Officer (Academic)
Department : Academic Department
MA (Geography) from A.P.S. University, Rewa and MBA (HRM) from Institute of Management Technology-CDL. More than 10 years of experience in Open and Distance Learning. His interest area is Geography, Open and Distance Learning and Basic Education.

PSYCHOLOGY

DR. SHWETA VERMA
Executive Officer (Academic), NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

- Psychology is a discipline which is relevant to all walks of life. Its applications to the various areas of personal, organizational and social functioning are well recognized. All of us use various psychological concepts without knowing them. This course at the Senior Secondary level has been designed in such a way that the learners will know the basics of psychology in simple language. Attention has also been paid to the Indian context.
- This field has a large number of opportunities for employment, some of these are:
- Clinical psychologists: Clinical psychologists aim to reduce the distress and improve the psychological wellbeing of their clients.
- Counsellor: As a counselling psychologist one uses psychological theory and research in therapeutic work to help clients with a variety of problems such as difficult life issues and mental health conditions.
- Educational psychologists: Educational psychologists help children or young people who are experiencing problems that hinder their successful learning and participation in school and other activities. These problems can include a range of emotional and social problems or learning difficulties.
- Occupational psychologists: Occupational psychologists apply expert knowledge to all levels of working and may work on organisational issues, such as culture and change, as well as issues at an individual or team level.
- Primary care graduate mental health workers: Primary care graduate mental health workers provide a range of treatments, support and advice to people suffering from common mental health issues, such as anxiety and panic attacks.
- There are other varied options like to work as a rehabilitation counsellor/psychologist, health psychologist, sports psychologist etc

LEARNING OUTCOME

- develop an understanding about the basics in psychology for understanding mind and behaviour.
- demonstrate the knowledge and understanding of theory in the areas of learning, memory and problem solving.
- develop an overview of the nature of human development.
- understand self and others for personal growth and development
- adapt effectively in the environment around
- appreciate the importance of planning for career development
- become responsible citizens and serve towards the refinement of society

COURSE PLAN

Week 01 : Psychology: Understanding Self and Others
Week 02 : How Psychologists Study?
Week 03 : Biological and Cultural Shaping Of Mind and Behaviour
Week 04 : Becoming Aware of the World around Us
Week 05 : Attention and Perception
Week 06 : Learning Process and Acquiring Skills
Week 07 : Remembering and Forgetting
Week 08 : Going Beyond the Reality: Thinking and Reasoning
Week 09 : Motivation
Week 10 : Emotions
Week 11 : Development: It's Nature
Week 12 : Domains of Development
Week 13 : Adolescence
Week 14 : Adulthood and Aging
Week 15 : Understanding Individual Differences: The Case Of Intelligence
Week 16 : What Is Self?
Week 17 : Self and Psychological Processes
Week 18 : Personality Theories, Personality Assessment
Week 19 : Psychological Disorders, Group Processes, Person Perception and Interpersonal Attraction
Week 20 : Man-Environment Interaction
Week 21 : Psychotherapy, Health Psychology
Week 22 : Education and Work, Career Development, Vocational Choice And Vocational Adjustment
Week 23 : Stress and Your Health, Stress Management and Well-Being
Week 24 : Developmental Patterns in Early Childhood
Week 25 : Play Centre: Objectives, Play Centre: Structural Details
Week 26 : Planning And Conducting Programmes, Involvement of Parents and Community in a Play Centre

ABOUT INSTRUCTOR

A Doctorate of philosophy in Psychology from Himachal Pradesh University. Availed University scholarship during MA in Psychology. I have served various government and non government (NGO) institutions in Himachal Pradesh as Psychologist/Counselor. During my stay with Red Cross Dharamshala(NGO) as a Psychologist I was given an additional responsibility of creating awareness among the Health Workers of Kangra Distt. about the various mental health issues. Besides this I have served as a faculty with Shiva Institute of Engineering and Technology Bilaspur, H.P. and the job role included training and mentoring students for soft skills. Apart from this I have worked with the Lovely Professional University, Jalandhar, Punjab as an Assistant professor in Psychology for quite a long time. I am currently working with NIOS for the past two years where the job role requires to work on the academic activities like standardization of marking scheme in psychology ,developing Tutor Marked Assignments for learners in Psychology etc. Besides this the job role also requires to deliver Personal Contact programme through Mukta Vidya Vani every month and through Swayam Prabha and Swayam Porta also. My passion is to teach and train the learners through various modes of teaching and I believe in learning while teaching. I hope we will have fun learning on this platform.I wish you all a happy learning

COMPUTER SCIENCE

RADHIKA B
Academic Officer (ICT), NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

- The syllabus of Computer Science for Senior Secondary course developed by NIOS to provide knowledge and understanding of basic components of computer and their working, uses of Internet, C++ programming and problem solving skills.
- This course has two modules. The first module explains about Computer Fundamentals. The second module explains about C++ programming.

LEARNING OUTCOME

- identify the basic components of computer and their working; use of operating system
- list the types of computer network
- Use of various services provided by internet
- practice basics of Java programming language
- Use of C++ programming
- State basic concepts of OOP
- Use of control statements in C++ programming
- define library and user defined functions in C++ programming;
- Use of one dimensional and two dimensional arrays
- select members of the class
- explain the concept of inheritance; use pointers in arrays
- Use of files in C++ programming.

COURSE PLAN

Week 1 - L-1: Anatomy of a Digital Computer
Week 2 - L-2: Data Processing Concept
Week 3 - L-3: Computer Software
Week 4 - L-4: Operating Systems
Week 5 - L-5: Data Communication and Networking
Week 6 - L-6: Fundamentals of Internet and Java Programming
Week 7 - L-7: Introduction to C++
Week 8 - L-8: General Concept of OOP
Week 9 - L-9: Control Statements
Week 10 - L-10: Functions
Week 11 - L-11: Array
Week 12 - L-12: Structure, Typedef & Enumerated Data Type
Week 13 - L-13: Classes & Objects with Constructors/Destructors
Week 14 - L-14: Inheritance Extending Classes
Week 15 - L-15: Pointer
Week 16 - L-16: Files
Week 17 - L-1 Quiz
Week 18 - L-2 Quiz
Week 19 - L-3 Quiz
Week 20 - L-4, 5 Quiz
Week 21 - L-6, 7 Quiz
Week 22 - L-8, 9 Quiz
Week 23 - L-10, 11 Quiz
Week 24 - L-12, 13 Quiz
Week 25 - L-14, 15 Quiz
Week 26 - L-16 Quiz

ABOUT INSTRUCTOR

Name: Radhika B
Designation: Academic Officer (ICT), NIOS.
Having post graduation in Master of Computer Applications. Around 7+ years of intensive work experience in various projects and also gained experience and knowledge of the software development processes in the relevant technologies. Last six years associated in the content development of ICT courses in Academic and vocational courses of NIOS

HOME SCIENCE

DR. SANDHYA KUMAR
Deputy Director (Academic), NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

Home Science trains the learners in life skills and equips both men and women in in following aspects through 5 modules and 2 optional modules.
I- The Art and Science of Managing Home" focuses on concept of the subject in three lessons.
2: Food and Nutrition details about Food, Nutrition, cooking and Health via six lessons.
3: Resource Management trains in management of Resources, Time, Energy, Income Space, Household Equipments, Environment, Energy and the Consumer.
4: Human Development includes different aspects of growth and development in different stages of life.
5: Textiles and Clothing talks about fibre, yarn, fabric, textile finishes and also the selection and care of fabric.
Two optional modules are meant for choice. One is Housekeeping and second is Creative hand embroidery.

LEARNING OUTCOME

- develop skills that help in bringing a positive change in daily life style and solving problems; develop creative thinking and a rational approach towards everyday life
- develop scientific temper and a spirit of inquiry
- Sensitivity to values of ethical living.

COURSE PLAN

Week 01 : L-1 Home, family and Home science

Week 02 : L-2 Ethics in daily life, Family and L-3 health and Security

Week 03 : L-4 Food, nutrition and health and L-5 Meal planning

Week 04 : L-6 Nutritional status

Week 05 : L-7 Purchase and storage of food

Week 06 : L-8 Preparation of food and L-9 Food preservation

Week 07 : L-10 Family resource management

Week 08 : L-11 Time and energy management book

Week 09 : L-12 Space management

Week 10 : L-13 Income management

Week 11 : L-14 Energy conservation and L-15 Environment management

Week 12 : L-16 Household equipment

Week 13 : L-17 Consumer education

Week 14 : L-18 Growth and development (0-5 year)

Week 15 : L-19 Growth and development (6-12 year)

Week 16 : L-20 Adolescence

Week 17 : L-21 Concerns and issues in human development

Week 18 : L-22 Introduction to fabric science and L-23 Yarn and its construction

Week 19 : L-24 Fabric construction

Week 20 : L-25 Textile finishes

Week 21 : L-26 Selection of textiles and clothing

Week 22 : L-27 Care and maintenance

Week 23 : Module A, L-28 Introduction to housekeeping and Module A, L-29 Cleaning and cleaning materials

Week 24 : Module A, L-30 Maintenance of premises and Module A, L-31 Aesthetics at home

Week 25 : Module B, L-28 Creative hand embroidery and Module B, L-29 The design

Week 26 : Module B, L-30 Colour, Module B, L-31 Embroidery stitches

ABOUT INSTRUCTOR

Dr. Sandhya Kumar (Designation: Deputy Director (Academic))

- Ph D (Education), MEd, MSc (Home Science)
- Serving NIOS for more than two decades (15 years as Academic Officer, 5 years as Assistant Director at Regional Center Dehradun,
- Current status as Deputy Director at Head Quarter of NIOS
- intensively involved in organising variety of workshops and conferences etc
- Developed self Learning material (SLM) for Home Science, vocational subjects , Quality Assurance Policy of NIOS in collaboration with COL Institution of "Reading Hour" in the Library, SOP etc.
- Initiated many projects in the Academic Department

SOCIOLOGY

DR. SUKANT KUMAR MAHAPATRA
Academic Officer, NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

The world we live in today, is simultaneously shrinking and expanding, growing and under constant pressure for change. The large-scale changes in use of technology, the great increase in the traffic in culture and political and economic changes are the cause of the changes around the world. Understanding these socio-cultural changes requires studying the social world scientifically and developing some understanding of the character of society. Sociology is the scientific study of society & its institutions, social interactions, organizations and groups.

It investigates the practices and processes operating in the society. By observing the broad range of activities in society and getting a space for exploring topics such as family, caste, class, gender, religion, socialization & population dynamics, Sociologists provide a base for in-depth understanding & perspectives on our social order and processes of social change. Sociology provides an important platform which is useful both to personal wellbeing and social development as well. Sociology is among the broadest of the social sciences and thus provides the opportunity for the learners to understand the broad range of the social issues operating in the space between individual, community and society.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- define basic concepts in Sociology;
- draw generalizations about various social institutions and social divisions in society;
- explain the process of change and development in society in general and with reference to Indian society in particular;
- extrapolate the different dimensions of Indian society; evaluate social realities objectively; and
- develop the ability to perceive social realities scientifically

COURSE PLAN

WEEK 01 - L1: AN INTRODUCTION TO SOCIOLOGY

WEEK 02 - L2 : EMERGENCE AND DEVELOPMENT OF SOCIOLOGY

WEEK 03 - L3 : SOCIOLOGY ITS RELATIONSHIP WITH OTHER SOCIAL SCIENCES

WEEK 04 - L4 : METHODS AND TECHIQUES IN RESEARCH OF SOCIOLOGY

WEEK 05 - L5 : SOCIETY COMMUNITY ASSOCIATION AND INSTITUTION

WEEK 06 - L6 : SOCIAL GROUP, L7 : SOCIAL STRUCTURE AND SOCIAL SYSTEM

WEEK 07 - L8 : NORMS AND VALUES, L9 : STATUS AND ROLE

WEEK 08 - L10 : CO-OPERATION COMPETITION AND CONFLICT

WEEK 09 - L11 : ACCULTURATION ASSIMILATION AND INTEGRATION

WEEK 10 - L12 : MARRIAGE, L13 : FAMILY

WEEK 11 - L14 : KINSHIP, L15 : ECONOMY POLITY AND RELIGION

WEEK 12 - L16 : SOCIAL STRATIFICATION

WEEK 13 - L17 : FACTORS OF SOCIAL CHANGE

WEEK 14 - L18 : PROCESSES OF SOCIAL CHANGE, L19 : SOCIALIZATION AS A PROCESS OF LEARNING

WEEK 15 - L20 : SOCIAL CONTROL, L21 : SOCIAL DEVIANCE

WEEK 16 - L22 : SOCIETY AND ENVIRONMENT

WEEK 17 - L23 : INDIAN SOCIAL THINKERS, L24 : UNITY AND DIVERSITY

WEEK 18 – L25 : NATIONAL INTEGRATION : CONCEPT AND CHALLENGE, L26 : INDIAN SOCIETY : TRIBAL RURAL AND URBAN

WEEK 19 – L27 : CASTE SYSTEM IN INDIA, L28 : MAJOR RELIGIOUS COMMUNITIES IN INDIA

WEEK 20 - L29 : MAJOTR SOCIAL PROBLEMS OF INDIA

WEEK 21 - L30 : PROBLEMS OF SCHEDULED CASTES AND SCHEDULESD TRIBES

WEEK 22 - L31 : PROBLEMS OF OTHER DEPRIVED SECTIONS

WEEK 23 - L32A : STATUS OF WOMEN IN INDIAN SOCIETY : A SOCIO-HISTORICAL PERSPECTIVE OR L32B : CULTURE : CONCEPT AND CHARACTERISTICS

WEEK 24 - L33A : GENDER DISCRIMINATION AND GENDER EQUALITY OR L33B : INDIAN CULTURAL HERITAGE

WEEK 25 - L34A : PROBLEMS OF WOMEN OR L34B : CULTURAL PLURALISM

WEEK 26 - L35A : WOMEN'S EMPOWERMENT AND EMANCIPATION OR L35B : IMPACT OF MEDIA ON CULTURE

ABOUT INSTRUCTOR

Dr. Sukanta Kumar Mahapatra is working as an Academic Officer (Sociology) in National Institute of Open Schooling under Ministry of HRD, Government of India He has teaching experience of more than seven years. He has done his Doctorate from School of Social Sciences, Tata Institute of Social Sciences Mumbai Campus. Dr. Sukanta does the research in Sociology of Education, Pedagogic Theory, Educational Policy and Social Stratification, Open Schooling and E-Learning.

MANJU CHRUNGU
Assistant Librarian NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

This course will not only help you use a Library in a more efficient way for your day to day studies, but this will also help you by introducing another option for your further studies, and hence taking up library and information science as a profession. This material is designed in such a way that it can help anybody in using library resources in a better manner for their personal growth or research. The course structure is developed keeping in view needs of the society and learners.

This course is developed in Modular form which includes- four Core Modules and two optional Modules. The four core modules aim to impart comprehensive knowledge on different areas of Library and Information Science. It is compulsory for learners to study all the four Core Modules, you will have the choice to select one out of the two optional modules. Further, the course also includes practical. We would like you to use the modules in the same sequence as the modules are arranged because there are references and cross references in each subsequent lesson.

LEARNING OUTCOME

After completing this course, the learner will be able to

- explain information storage, searching and retrieval system
- develop library and information related skills
- inculcate interest in the library and information science to opt this subject as a career; explain various information sources and their use
- organize different sources of information
- develop necessary skills for utilizing the library
- use of ethical information

COURSE PLAN

WEEK 01 - L1 : LIBRARY AND INFORMATION CENTRES : CONCEPT AND ROLE IN SOCIETY

WEEK 02 - L2 : TYPES OF LIBRARIES AND INFORMATION CENTRES

WEEK 03 - L3 : MODERN LIBRARY: AUTOMATED, DIGITAL & VIRTUAL

WEEK 04 - L4 : FIVE LAWS OF LIBRARY SCIENCE SOURCES

WEEK 05 - L5 : OVERVIEW OF INFORMATION SOURCES

WEEK 06 - L6 : TYPES OF INFORMATION SOURCES

WEEK 07 - L7 : REFERENCE SOURCES

WEEK 08 - L8 : ELECTRONIC RESOURCES

WEEK 09 - L9 : ORGANIZATION OF LIBRARY MATERIAL: CONCEPT, NEED AND PURPOSE

WEEK 10 - L10 : PROCESSING OF LIBRARY MATERIAL: CLASSIFICATION AND CATALOGUING

WEEK 11 - L11 : ARRANGEMENT & MAINTENANCE OF LIBRARY MATERIAL

WEEK 12 - L12 : LIBRARY AND INFORMATION SERVICES FOR THE USERS

WEEK 13 - L13 : TRADITIONAL LIBRARY SERVICES: RESPONSIVE AND ANTICIPATORY

WEEK 14 - L14 : MODERN LIBRARY SERVICES

WEEK 15 - L15 : LIBRARY SYSTEM AND MANAGEMENT

WEEK 16 - L16 : INFORMATION RETRIEVAL SYSTEM: CONCEPT

WEEK 17 - L17 : LIBRARY STAFF

WEEK 18 – L18 : INFORMATION RETRIEVAL TOOLS: CATALOGUES, INDEXES, SUBJECT HEADING LISTS

WEEK 19 – L19 : LIBRARY USERS

WEEK 20 - L20: SEARCH TECHNIQUES: BASIC AND ADVANCED

WEEK 21 - L21 : LIBRARIANSHIP AS A CAREER

WEEK 22 - L22 : SEARCH TECHNIQUES: WEB BASED SEARCH

WEEK 23 - L23 : PRACTICALS (P1, P2, P3 & P4)

WEEK 24 - L24 : PRACTICALS (P5, P6, P7 & P8)

WEEK 25 - L25 : PRACTICALS (P9, P10, P11 & P12)

WEEK 26 - L26 : PRACTICALS (P13, P14 & P15)

ABOUT INSTRUCTOR

Manju Chrungu is B.Sc & M.Lib.Sc Qualified. She is having work experience of more than 25 years. Her subject interest is Science and Library Science. Library Science helps you to go through oceans of material. Which helps you to gain knowledge and apply same in different fields.

ECONOMICS

DR. MANISH CHUGH
Academic Officer (Economics) NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

Economics has become a very sought-after subject in the field of Social Science. The knowledge of Economics is very important in pursuing various activities in everyday life such as production, consumption and investment. In Consumption, every individual wants to utilize the income in the best possible manner so as to get maximum satisfaction from the goods and services purchased. Similarly, as producer, the individual/firm/industry uses the resources to minimize cost and get maximum output/profit. At the economy level, everybody wants that there should be economic growth and development through higher income and employment. Study of economics is very useful to achieve these goals.

At NIOS, students are introduced to the subject of Economics at Secondary stage. The level at this stage is elementary in nature. However, at the Senior Secondary level, students will be exposed to more areas of economics. They are also expected to know the use of tables and graphs/statistical tools to understand and explain various concepts and theories of economics.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources;
- explain production and distribution of goods and services;
- explain the meaning and functions of money, banks and insurance;
- discuss the challenges and sectoral aspects of Indian economy;

COURSE PLAN

WEEK 01 - L1 : OVERVIEW OF INDIAN ECONOMY

WEEK 02 - L2 : ECONOMIC PLANNING IN INDIA

WEEK 03 - L3 : ECONOMIC GROWTH & ECONOMIC DEVELOPMENT

WEEK 04 - L4 : THE PROBLEMS OF UNEMPLOYMENT, POVERTY & INEQUALITY

WEEK 05 - L5 : MEANING, SCOPE AND ITS NEED IN ECONOMICS

WEEK 06 - L6 : COLLECTION AND CLASSIFICATION OF DATA

WEEK 07 - L7 : PRESENTATION OF DATA

WEEK 08 - L8 : MEASURES OF CENTRAL TENDENCY

WEEK 09 - L9 : MEASURES OF DISPERSION

WEEK 10 - L10 : CORRELATION ANALYSIS

WEEK 11 - L11 : INDEX NUMBERS

WEEK 12 - L12 : INTRODUCTION TO THE STUDY OF ECONOMICS

WEEK 13 - L13 : CENTRAL PROBLEMS OF AN ECONOMY

WEEK 14 - L14 : CONSUMER'S EQUILIBRIUM

WEEK 15 - L15 : DEMAND, L16 : INFORMATION RETRIEVAL SYSTEM: CONCEPT

WEEK 16 - L17 : PRODUCTION FUNCTION

WEEK 17 – L18 : COST OF PRODUCTION

WEEK 18 – L19 : SUPPLY, L20 : PRICE ELASTICITY OF SUPPLY

WEEK 19 - L21 : FORMS OF MARKET

WEEK 20 - L22 : PRICE DETERMINATION UNDER PERFECT COMPETITION

WEEK 21 – L23 : REVENUE AND PROFIT MAXIMISATION OF A COMPETITVE FIRM

WEEK 22 - L24 : NATIONAL INCOME AND RELATED AGGREGATES

WEEK 23 - L25 : NATIONAL INCOME AND ITS MESUREMENT

WEEK 24 - L26 : CONSUMPTION, SAVING AND INVESTMENT

WEEK 25 - L27 : THEORY OF INCOME DETERMINATION

WEEK 26 - L28 : MONEY AND BANKING, L29 : MONEY AND BANKING

ABOUT INSTRUCTOR

Dr. Manish Chugh is working as Assistant Director (Acad. Economics) with NIOS. Earlier He has worked with many management colleges & schools. He has been teaching & doing research and consultancy in the area of strategy and economics for the last 12 years. He has been associated with NIOS for last 08 years. Besides MA & PhD in Economics, He is MIB -Gold Medallist. He had the opportunity to act as Programme co-ordinator of PGDBM programme of AIMST Udaipur.

ENVIORNMENTAL SCIENCE

DR. NEELAM GUPTA
SEO (EVS) NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

Environmental Science is an interdisciplinary academic field that integrates physical, biological and information sciences including but not limited to Ecology, Biology, Physics, Chemistry, Zoology, Mineralogy, Oceanology, Limnology, Soil Science, Geology, Atmospheric Sciences, Geography etc. to the study of the environment and solution of environmental problems. Environmental Sciences emerged from the field of natural history and medicine during the enlightenment. Environmental Science assesses the impact of human activity on the global environment and develop scientific, risk based solutions to help secure and sustainable global environment. It encompasses both the biological and the earth sciences.

The course covers all the major components of the environment including origin and evolution of earth and life, natural resources, ecological principles and population dynamics, pollution, wildlife conservation and impact of individualization. In addition it also addresses related some economic, cultural and ethical aspects which are important to ensure a sustainable future for humans. This course also provides information related to Environmental issues related to sustainable livelihood and human welfare.

Some important topics includes in Environmental Science Senior Secondary course as follows:

1. Origin, Evolution and its uses by humans
2. Principles of Ecology
3. Human settlement and their impact on environment
4. (a) Environmental Pollution and Natural Disasters
(b) National and Global Environmental Issues
5. Conservation of biodiversity and other natural resources
6. Sustainable development with regards to agriculture and cleaner technology
7. Environmental Management (ethics, legislation and organization related to environment)
8A. Water Resource Management
8B. Energy and Environment

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources;
- explain production and distribution of goods and services;
- explain the meaning and functions of money, banks and insurance;
- discuss the challenges and sectoral aspects of Indian economy;

COURSE PLAN

WEEK 01 - L1 : ORIGIN OF EARTH AND EVOLUTION OF THE ENVIRONMENT

WEEK 02 - L2 : ENVIRONMENT AND HUMAN SOCIETY

L3 : DEGRADATION OF NATURAL ENVIRONMENT

WEEK 03 - L3 : PRINCIPLES OF ECOLOGY

WEEK 04 - L4 : ECOSYSTEM

WEEK 05 - L5 : NATURAL ECOSYSTEM

WEEK 06 - L6 : HUMAN MODIFIED ECOSYSTEMS, L8 : HUMAN SOCIETIES

WEEK 07 – L9 : DEFORESTATION

WEEK 08 - L10 : ENVIRONMENTAL POLLUTION

WEEK 09 - L11 : ENVIRONMENT AND HEALTH

WEEK 10 - L12 : DISASTERS AND THEIR MANAGEMENT

WEEK 11 - L13 : NATIONAL ENVIRONMENTAL ISSUES

WEEK 12 - L14 : GLOBAL ENVIRONMENTAL ISSUES

WEEK 13 - L15 : BIODIVERSITY CONSERVATION, L16 : CONSERVATION OF OTHER NATURAL RESOURCES

WEEK 14 - L17 : CONSERVATION OF SOIL AND LAND

WEEK 15 - L18 : WATER AND ENERGY CONSERVATION

WEEK 16 - L19 : CONCEPT OF SUSTAINABLE DEVELOPMENT

WEEK 17 – L20 : MODERN AGRICULTURE

WEEK 18 – L21 : CONCEPT OF SUSTAINABLE AGRICULTURE

WEEK 19 - L22 : CLEANER TECHNOLOGIES

WEEK 20 - L23 : ENVIRONMENTAL LEGISLATION

WEEK 21 – L24 : ENVIRONMENTAL IMPACT ASSESSMENT

WEEK 22 - L25 : ENVIRONMENT RELATED INSTITUTIONS AND ORGANISATIONS

WEEK 23 - L26 : ENVIRONMENTAL ETHICS AND GANDHIAN APPROACH

WEEK 24 - L27A : GLOBAL CIRCULATION OF WATER OR L27B : IMPORTANCE OF ENERGY IN SOCIETY, L28A : GROUND WATER RESOURCES OR L28B : NON-RENEWABLE SOURCES OF ENERGY

WEEK 25 - L29A : FRESH WATER RESOURCES OR L29B : RENEWABLE SOURCES OF ENERGY-I, L30A : METHODS OF WATER HARVESTING OR L30B : RENEWABLE SOURCES OF ENERGY-II

WEEK 26 - L31A : WATER CONSERVATION AT DIFFERENT LEVELS OR L31B : ENERGY CONSERVATION

ABOUT INSTRUCTOR

Neelam Gupta is M.Sc. (Botany), M.Phil. (Botany), B.Ed. from Agra University, Agra and Certificate course in Russian language from University of Delhi. More than 23 years experience in the field of Open and Distance Education. Area of interest is course development; evaluation strategies; e-content development; training, and Open Basic Education.

DR. P. K. CHAUHAN
Senior Executive Officer (Y & N), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and 12th Pass

OBJECTIVE OF COURSE

'योग शिक्षक प्रशिक्षण कार्यक्रम' योग विज्ञान के क्षेत्र में एक महत्वपूर्ण पाठ्यक्रम है। जो लोग योग के क्षेत्र में रुचि रखते हैं या कार्य कर रहे हैं और 'योग शिक्षक बनने के इच्छुक हैं, उन सभी लोगों को ध्यान में रखते हुए इस पाठ्यक्रम को विकसित किया गया है। यह पाठ्यक्रम यौगिक अभ्यास और योग शिक्षा का गहन ज्ञान प्रदान करता है। भारतीय नागरिकों के साथ - साथ विदेशी नागरिक भी इस पाठ्यक्रम में प्रवेश ले सकते हैं।

भारतीय ज्ञान परम्परा में योग का बहुत महत्व है। प्राचीनकाल से ही योग हमारी जीवन शैली में समाहित रहा है। योग स्वस्थ जीवन जीने की कला है जो मन एवं शरीर के बीच सामञ्जस्य स्थापित करता है। योग अनुशासन का भी विज्ञान है जो शरीर, मन तथा आत्मशक्ति का सर्वांगीण विकास करता है। आज स्वस्थ एवं चुस्त-दुरुस्त रहने की दृष्टि से योग, सभी को अपनी ओर आकृषित कर रहा है अत: समाज में योग शिक्षा की विषेशरूप से मांग है।

LEARNING OUTCOME

- योग सिद्धांतों तथा योग क्रिया विज्ञान को समझा सकेंगे
- मानव शरीर विज्ञान और शरीर क्रिया विज्ञान की मूलभूत जानकारी रखने और स्वास्थ्य, स्वच्छता, आहार व यौगिक संस्कृति के अवधारणा पर प्रकाश डाल सकेंगे
- योग के एकीकृत दृष्टिकोण के अनुप्रयोगों को लागू करने, योग कक्षाएं संचालित करने में और शिक्षार्थियों को योग शिक्षा देने में सक्षम हो सकेंगें

COURSE PLAN

Week 01 : Chapter-1
Week 02 : Chapter-1 Contd.
Week 03 : Chapter-2
Week 04 : Chapter-2 Contd.
Week 05 : Chapter-3
Week 06 : Chapter-3 Contd.
Week 07 : Chapter-4
Week 08 : Chapter-4 Contd.
Week 09 : Chapter-5
Week 10 : Chapter-5 Contd.
Week 11 : Chapter-6
Week 12 : Chapter-6 Contd.
Week 13 : Chapter-7
Week 14 : Chapter-7 Contd.
Week 15 : Chapter-8
Week 16 : Chapter-8 Contd.
Week 17 : Chapter-9
Week 18 : Chapter-9 Contd.
Week 19 : Chapter-10
Week 20 : Chapter-10 Contd.
Week 21 : Revision
Week 22 : Revision
Week 23 : Revision
Week 24 : Revision
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Dr.P.K.Chauhan is Senior Executive Officer (Y & N) in Vocational Education Department at NIOS. He attained his M.Sc.(Zoology),B.Ed and NDDY(Diploma in Naturopathy & Yoga). He is currently pursuing Masters in Yoga.

PANCHKARMA ASSISTANT

MS. KIRTI AILANI
Senior Executive Officer (Health & Paramedical), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and 10th Pass

OBJECTIVE OF COURSE

यह कोर्स छात्र को कौशल और शिक्षा प्रधान करेगा ताकि छात्र स्वयं नियोक्ता प्राप्त कर सकें। पाठ्यक्रम को पूरा करने के पश्चात, बिस्तर पर पड़ें रोगियों को घर पर ही उपचार उपलब्ध कराकर स्व: रोजगार प्राप्त कर पाएगा।

- पंचकर्मा चिकित्सालय
- आयुर्वेदिक हस्पताल
- आयुर्वेदिक आहार केन्द्र
- आयुर्वेदिक हर्बल नर्सरी
- आयुर्वेदिक हर्बल नर्सरी
- जीवन शैली केन्द्र स्वास्थ्य केन्द्र
- स्वास्थ्य स्पा तथा रिसोर्ट
- आयुर्वेदिक कॉस्मेटिक क्लीनिक
- आदि में सहायक के रूप में कार्य कर सकते है।

LEARNING OUTCOME

- मरीज, उपकरण, थेरेपी रूम, दवाओं की तैयारी करके पंचाकर्मा के पहले और उसके दौरान चिकित्सक की सहायता करना
- पंचकर्मा थेरेपी से गुजर रहे मरीजों को बुनियादी देखभाल प्रदान करें
- पंचकर्मा से संबंधित परामर्श

COURSE PLAN

Week 01 : Chapter-1 पंचकर्म के सिद्धांत
Week 02 : Chapter-1 पंचकर्म के सिद्धांत Contd.
Week 03 : Chapter-2 स्नेहन और स्वेदन विधि
Week 04 : Chapter-2 स्नेहन और स्वेदन विधि Contd.
Week 05 : Chapter-3 वमन और विरेचन विधि
Week 06 : Chapter-3 वमन और विरेचन विधि Contd.
Week 07 : Chapter-4 बस्ति विधि
Week 08 : Chapter-4 बस्ति विधि Contd.
Week 09 : Chapter-5 नस्य विधि एवं रक्तमोक्षण
Week 10 : Chapter-5 नस्य विधि एवं रक्तमोक्षण Contd.
Week 11 : Chapter-6 धारा (पिझिचिल)
Week 12 : Chapter-6 धारा (पिझिचिल) Contd.
Week 13 : Chapter-7 बाह्य बस्ति (शिरो/जानु/कटि बस्ति आदि)
Week 14 : Chapter-7 बाह्य बस्ति (शिरो/जानु/कटि बस्ति आदि) Contd.
Week 15 : Chapter-8 पोटली स्वेद (पिंड या किषि स्वेदन)
Week 16 : Chapter-8 पोटली स्वेद (पिंड या किषि स्वेदन) Contd.
Week 17 : Chapter-9 अभ्यंग, उदर्वतन एवं क्रियाकल्प
Week 18 : Chapter-9 अभ्यंग, उदर्वतन एवं क्रियाकल्प Contd.
Week 19 : Chapter-10 विविध पंचकर्म प्रक्रियाएं
Week 20 : Chapter-10 विविध पंचकर्म प्रक्रियाएं Contd.
Week 21 : Chapter-11 पंचकर्म में पथ्य-अपथ्य
Week 22 : Chapter-11 पंचकर्म में पथ्य-अपथ्य Contd.
Week 23 : Chapter-12 पंचकर्म सामग्री
Week 24 : Chapter-12 पंचकर्म सामग्री Contd.
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Name: Ms. Kirti Ailani
Designation: Senior Executive Officer (Health & Paramedical)
Experience: 4.5 yrs as Project Manager cum R&D (Biotechnology)

BEE KEEPING

DR. NEELIMA PANT
Academic officer (Agriculture), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and literate

OBJECTIVE OF COURSE

देश में मधुमक्खी पालन के विकास की अतिबृहत गुंजाइश है। शहद का वैश्विक उत्पादन लगभग १५% सालाना बढ़ रहा है। वैश्विक उत्पादन का लगभग एक तिहाई हिस्सा एशिया का है जिसमें भविष्य में १५ से २०% की वृद्धि होने की उम्मीद है। लगभग १५ देश वैश्विक उत्पादन में ९०% योगदान देते हैं। प्रमुख शहद उत्पादक देश चीन, भारत, मेक्सिको, यूएसए, अर्जेंटीना, यूक्रेन, तुर्की, रूस हैं। २०१० के बाद से शहद की वैश्विक मांग प्रति वर्ष लगभग १९ हजार टन प्रति वर्ष औसतन बढ़ी है, जिसकी आपूर्ति मुख्य रूप से संयुक्त राज्य अमेरिका द्वारा होती है। २०१५-१६ में पश्चिम बंगाल, उत्तर प्रदेश, पंजाब और बिहार ने देश के शहद उत्पादन में ६१% योगदान दिया। कृषि पर राष्ट्रीय आयोग ने देश में १२ प्रमुख कृषि फसलों को परागण के लिए १५० मिलियन मधुमक्खी उपनिवेशों को तैनात करने की आवश्यकता को देखा। वर्तमान में, उन कृषि फसलों की उपज बढ़ाने के लिए २०० मिलियन मधुमक्खी उपनिवेशों की आवश्यकता है जो २१५ लाख लोगों को रोजगार प्रदान करेगी और १० मिलियन टन शहद का उत्पादन करेगी और फसल उत्पादन में भी वृद्धि होगी।
इस कोर्स को पूरा करने के बाद शिक्षार्थी एक मधुमक्खी पालक / शहद तकनीशियन / शहद पूर्तिकार के रूप मे स्व रोजगार अथवा किसी के फार्म में काम कर सकता है।

LEARNING OUTCOME

- बेहतर परागण के लिए मधुमक्खियों, उनकी विभिन्न प्रजातियों, उनके जीवन चक्र और व्यवहारिक विज्ञान की जानकारी।
- मधुमक्खी पालन संबंधी विभिन्न उपकरणों की पहचान, प्रदर्शन, रखरखाव और संचालन।
- मौनालय स्थल का चुनाव, मौनालय की स्थापना, प्रबंधन और निरीक्षण के लिए संस्तुत कौशल।
- मौनगृह में नाशीजीव एवं रोग प्रबंधन।
- मौनगृह उत्पादों का उत्पादन, प्रसंस्करण एवं विपणन संबन्धित ज्ञान एवं कौशल।

COURSE PLAN

Week 01 : Chapter-1
Week 02 : Chapter-1 Contd.
Week 03 : Chapter-2
Week 04 : Chapter-2 Contd.
Week 05 : Chapter-3
Week 06 : Chapter-3 Contd.
Week 07 : Chapter-4
Week 08 : Chapter-4 Contd.
Week 09 : Chapter-5
Week 10 : Chapter-5 Contd.
Week 11 : Chapter-6
Week 12 : Chapter-6 Contd.
Week 13 : Chapter-7
Week 14 : Chapter-7 Contd.
Week 15 : Chapter-8
Week 16 : Chapter-8 Contd.
Week 17 : Chapter-9
Week 18 : Chapter-9 Contd.
Week 19 : Chapter-10
Week 20 : Chapter-10 Contd.
Week 21 : Revision
Week 22 : Revision
Week 23 : Revision
Week 24 : Revision
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

D.Neelima Pant is Academic Officer (Agriculture) at NIOS Headquarters for six years.She done her Ph.D. (Vegetable Science) with 'Major in Vegetable Science & Minor in Genetics & Plant Breeding' from G.B. Pant University of Agriculture & Technology, Pantnagar, distt. Udham Singh Nagar (Uttarakhand). Previuosly, she worked as Post Doctoral Fellow (Horticulture) at Krishi Vigyan Kendra, Ranichauri, Tehri Garhwal from 9th August, 2010 to 8th February, 2012 and she worked as Senior Research Fellow in the project entitled "Production of Quality Seeds and Planting materials of Vegetables and Spices" from 27th November, 2006 to 31st October, 2007. Her areas of interest are Agriculture and Animal Husbandry, Horticulture and Vegetable Science.

BEAUTY THERAPY

DR. PRAVEEN CHAUHAN
Academic officer (Home Science), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and literate

OBJECTIVE OF COURSE

आज कल के आधुनिक समाज में हम सभी अपने सौन्दर्य को लेकर अधिक जागरूक हो गये है। ब्यूटी पार्लर्स, सैलोन, स्पा इत्यादि जाने वाले लोगों में लगातार बढोतरी हो रही है, जिससे सौंदर्य के क्षेत्र में रोजगार के अवसर भी बढ़ रहें है। एनएसडीए की एक रिपोर्ट के अनुसार इस क्षेत्र में २०% की दर से सालाना बढोतरी हो रही है.इसलिए व्यावसायिक प्रशिक्षित स्टॉफ की आवश्यकता भी बढ़ रही है।
इस पाठ्यक्रम को कर के आप पार्लर में असिसटेंट ब्यूटीशन के तौर पर कार्य कर सकते है। यदि आपका रूझान किसी एक क्षेत्र में ज्यादा है तो आप उसी क्षेत्र में अपना कैरियर बना सकते है। जैसे आप नेलआर्ट के लिए अलग से सैलोन स्थापित कर सकते है, हेयर स्टाइलिस्ट या मेकअप आर्टेस्ट बन सकते है।

LEARNING OUTCOME

- You will learn about services like basic skin treatments, removal of superfluous hair, manicure and pedicure, skin and hair service and the art of makeup.
- You will also learn about proper maintenance of work area, care of beauty salon and the art of creating a positive impression at work.
- A basic knowledge of these areas will help you in assisting the beautician in her work in the salon.

COURSE PLAN

Week 01 : Chapter-1
Week 02 : Chapter-1 Contd.
Week 03 : Chapter-1 Contd
Week 04 : Chapter-2
Week 05 : Chapter-2 Contd.
Week 06 : Chapter-2 Contd.
Week 07 : Chapter-3
Week 08 : Chapter-3 Contd.
Week 09 : Chapter-3 Contd.
Week 10 : Chapter-4
Week 11 : Chapter-4 Contd.
Week 12 : Chapter-4 Contd.
Week 13 : Chapter-5
Week 14 : Chapter-5 Contd.
Week 15 : Chapter-5 Contd.
Week 16 : Chapter-6
Week 17 : Chapter-6 Contd.
Week 18 : Chapter-6 Contd.
Week 19 : Chapter-7
Week 20 : Chapter-7 Contd.
Week 21 : Chapter-7 Contd.
Week 22 : Chapter-8
Week 23 : Chapter-8 Contd.
Week 24 : Chapter-8 Contd.
Week 25 : Revision
Week 26 : Revision

ABOUT INSTRUCTOR

Name: Dr.Praveen Chauhan
Designation: Academic Officer (Home Science)
Qualification:
Ph.D (Clothing and Textiles)

COURSE 501: ELEMENTARY EDUCATION IN INDIA: A SOCIO-CULTURAL PERSPECTIVE

DR. MADHUR BHATIA
Academic officer in Teacher Education, NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

This course presents an overview of the elementary education at the national and global levels. It is aimed at describing the historical progression of elementary education to help the teachers understand the nature and development of elementary education in a holistic way. This course has been designed based on the needs of the society and varied life experiences to facilitate fair understanding of elementary education in the contemporary Indian society.

Working on the suggested readings and activities given at the end of each unit will provide profound understanding of elementary education.

LEARNING OUTCOME

- To develop an understanding of the trends, issues and challenges being faced by elementary education.
- To develop an overview of the universalization of education at the national and international levels.
- To appreciate the role of various initiatives such as, DPEP, SSA, RTE, etc., for universalization of elementary education
- To develop an understanding on the status of elementary education in pre-independence and post- independence periods.

COURSE PLAN

Week 01 : Block 1 UNIT 1 INDIAN EDUCATION SYSTEM -1
Week 02 : Block 1 UNIT 1 INDIAN EDUCATION SYSTEM -1 Contd.
Week 03 : Block 1 UNIT 2 INDIAN EDUCATION SYSTEM – II
Week 04 : Block 1 UNIT 2 INDIAN EDUCATION SYSTEM – II Contd.
Week 05 : Block 1 UNIT 3 EDUCATION AS A FUNDAMENTAL RIGHT
Week 06 : Block 1 UNIT 3 EDUCATION AS A FUNDAMENTAL RIGHT Contd.
Week 07 : Block 1 UNIT 4 ORGANIZATION STRUCTURE FOR UEE
Week 08 : Block 1 UNIT 4 ORGANIZATION STRUCTURE FOR UEE Contd.
Week 09 : Block 2 UNIT 5 STRATEGIES FOR UEE-I
Week 10 : Block 2 UNIT 5 STRATEGIES FOR UEE-I Contd.
Week 11 : Block 2 UNIT 6 STRATEGIES FOR UEE-II
Week 12 : Block 2 UNIT 7 PLANNING AND MANAGEMENT OF UEE
Week 13 : Block 3 UNIT 8 PREPARING TEACHERS FOR ELEMENTARY EDUCATION
Week 14 : Block 3 UNIT 8 PREPARING TEACHERS FOR ELEMENTARY EDUCATION Contd.
Week 15 : Block 3 UNIT 9 EDUCATION OF DISDAVANTAGED STUDENTS
Week 16 : Block 3 UNIT 9 EDUCATION OF DISDAVANTAGED STUDENTS Contd.
Week 17 : Block 3 UNIT 10 INTERNATIONAL SCENARIOS IN ELEMENTARY EDUCATION

ABOUT INSTRUCTOR

Dr.Madhur Bhatia is Academic Officer in Teacher Education at NIOS Headquarter for five years.She attained her M.Sc in Botany.She also attained her Ph.D. in Education from Jamia Millia Islamia University, New Delhi.She also done Advanced Diploma in Computer Applications and System Management (DCA). Previously, she worked as TGT (Biology) in C.B Ganj Inter College, Bareilly, and Govt. of U.P. from December, 2005- January, 2011;Visiting Faculty (Education) for B.A. (Prog.) in School of Open Learning (SOL), University of Delhi for session 2011-12 and Assistant Professor, Department of Education, Shyama Prasad Mukherji College for Women, University of Delhi from March, 2011-May, 2012. Her areas of interest are Teacher Education, Educational Technology, Early Childhood Care and Education, Emotional Intelligence, Curriculum Development and Gender issues.

COURSE 502: PEDAGOGIC PROCESSES IN ELEMENTARY SCHOOLS

DR. MANOJ KUMAR THAKUR
Research and Evaluation Officer, NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

Teacher Education is one of the important components to determine the quality of a teacher. Untrained teachers remains deprived of becoming aware realizing many good qualities of a teacher. Teaching is a profession which requires development of typical the feelings and skills of harnessing the good qualities in a learner.

The crux of all pedagogic efforts is to enhance the quality and extent of learning experience of children within the confines of schooling conditions. With this pedagogic perspective teacher and teaching are considered facilitators and facilitating process of learning.

This course will focus on equipping the prospective teachers with conceptual clarity of pedagogic processes so that they can select and use most appropriate methods and strategies for effective teaching in different contexts. They will assess the children's progress in diverse situations basing on which they shall undertake appropriate modifications in the teaching learning process. Pedagogic study will enable teachers to understand school subjects with specific context of children and process of learning.

LEARNING OUTCOME

- To help the teachers in understanding the nature of children and the ways the children learn in the school/classroom situations.
- To develop capacities of teachers to reflect, reason and make conceptual understanding of pedagogic practices and learning process.
- To empower teachers to select, integrate and use most appropriate methods and strategies for effective facilitation of learning of children.
- To expose the teachers to different modes of assessment of learning and enable them to uses those effectively to promote classroom learning.
- To acquaint the teachers with the different tools and techniques of ICT available for enriching the learning processes in and out of classroom.

COURSE PLAN

Week 01 : Block 1 UNIT 1 LEARNING AND TEACHING DURING EARLY SCHOOLING
Week 02 : Block 1 UNIT 2 APPROACHES TO LEARNING AND TEACHING
Week 03 : Block 1 UNIT 3 METHODS OF LEARNING AND TEACHING
Week 04 : Block 1 UNIT 4 LEARNER AND LEARNING- CENTRED APPROACHES
Week 05 : Block 2 UNIT 5 MANAGEMENT OF CLASSROOM PROCESSES
Week 06 : Block 2 UNIT 6 TEACHING AND LEARNING MATERIALS
Week 07 : Block 2 UNIT 7 MANAGEMENT OF MULTI-GRADE AND MULTI-LEVEL SITUATIONS
Week 08 : Block 3 UNIT 8 PLANNING LEARNING ACTIVITIES
Week 09 : Block 3 UNIT 9 INTEGRATED LEARNING AND TEACHING PROCESSES
Week 10 : Block 3 UNIT10 CONTEXTUALIZING LEARNING PROCESSES & MATERIALS
Week 11 : Block 3 UNIT 11 ICT IN LEARNING
Week 12 : Block 3 UNIT 12 COMPUTER ASSISTED LEARNING
Week 13 : Block 4 UNIT 13 BASICS OF ASSESSMENT AND EVALUATION
Week 14 : Block 4 UNIT 14 LEARNING AND ASSESSMENT
Week 15 : Block 4 UNIT 15 TOOLS AND STRATEGIES OF ASSESSMENT
Week 16 : Block 4 UNIT 16 USING THE RESULTS OF ASSESSMENT FOR IMPROVING LEARNING

ABOUT INSTRUCTOR

Dr.Manoj Kumar Thakur is Research and Evaluation Officer at NIOS Headquarter.He attained B.A., M.Sc., M.A., B.Ed., and M.Ed.He also attained his Ph.D. in Education. He has eight years of teaching experience B.Ed.(Four years integrated course) at college and university level and BA. His areas of interest are Research in Open Schooling and Distance Education, Curriculum Development, Guidance and Career Counseling, Educational Technology & Measurement and Evaluation.

COURSE 503: LEARNING LANGUAGES AT ELEMENTARY LEVEL

CHANCHAL KUMAR SINGH
Training Officer (Languages/Linguistics/Literature), NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

This course has been developed to enable you to know about various aspects of language. We hope that after completing this course your sensitivity to language will increase and you will become more sensitive learners and teach the language classes in a more pleasant and efficient way.

LEARNING OUTCOME

- To enable teachers to grasp general principles in language learning and teaching.
- To develop classroom management skills, procedures and techniques for teaching language.
- To examine issues in language assessment and their impact on classroom teaching.
- To develop competence in teaching languages at the elementary level
- To develop understanding about language – concept, nature, structure, functions, importance.
- To develop insight into the process of language learning and acquisition.
- To develop acquaintance with various approaches, methods and techniques of language teaching.
- To sharpen the skills needed to become an effective language teacher.

COURSE PLAN

Week 01 : Block 1 UNIT 1 WHAT IS LANGUAGE?
Week 02 : Block 1 UNIT 1 WHAT IS LANGUAGE? Contd.
Week 03 : Block 1 UNIT 2 INDIAN LANGUAGES
Week 04 : Block 1 UNIT 2 INDIAN LANGUAGES Contd.
Week 05 : Block 1 UNIT 3 LANGUAGE LEARNING AND TEACHING
Week 06 : Block 1 UNIT 3 LANGUAGE LEARNING AND TEACHING Contd.
Week 07 : Block 2 UNIT 4 LISTENING AND SPEAKING
Week 08 : Block 2 UNIT 4 LISTENING AND SPEAKING Contd.
Week 09 : Block 2 UNIT 5 READING
Week 10 : Block 2 UNIT 5 READING Contd.
Week 11 : Block 2 UNIT 6 WRITING
Week 12 : Block 2 UNIT 6 WRITING Contd.
Week 13 : Block 3 UNIT-7 LITERATURE AND LANGUAGE
Week 14 : Block 3 UNIT 8 LANGUAGE TEACHING METHODS IN CLASSROOM SETTINGS
Week 15 : Block 3 UNIT 9: EDUCATIONAL MATERIALS: SOME NEW DIMENSIONS
Week 16 : Block 3 UNIT 10: ASSESSMENT

ABOUT INSTRUCTOR

Name: Mr. Chanchal Kumar Singh
Designation: Training Officer (Languages/Linguistics/Literature)
Qualification: M.A., B.Ed., Diploma of Hindi Translator

COURSE 504: LEARNING MATHEMATICS AT ELEMENTARY LEVEL

DR. RAM SINGH
Training Officer (Languages/Linguistics/Literature), NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 10 weeks (1st Jun, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

The revised syllabus of mathematics formulated on the basis of NCF 2005 for the elementary stage of education reflects the recent developments and trends in mathematics education. It emphasizes conceptual understanding, skill proficiencies and thinking skills in the teaching and learning of mathematics. These competencies are integral to the development of mathematical problem solving ability. Emphasis is also need to be given to reasoning, applications, and use of technology. Advances in technology have changed the way we teach and learn mathematics technology.

Students need to have opportunities to discover reason and communicate mathematics. They are required engage in stimulating discussions and activities where they can explore possibilities and make connections. These qualitative changes require a change in the teaching and learning approaches, incorporating activity-based and learner – centered methodologies.

LEARNING OUTCOME

This course will enable the prospective teacher to:

reflect on the status and issues related to Elementary Mathematics Education.

attain mastery over the basics of elementary mathematics.

acquire pedagogical skills of teaching mathematics at elementary stage.

make effective use of a variety of mathematical tools including technology tools in learning and teaching of mathematics.

acquire skills of assessing young children's learning and performance in Mathematical concepts and in using those in enhancing their understanding and performance in Mathematics.

COURSE PLAN

Week 01 :

Week 02 : Block 1 UNIT 1 HOW CHILDREN LEARN MATHEMATICS

Week 03 : Block 1 UNIT 1 HOW CHILDREN LEARN MATHEMATICS Contd.

Week 04 : Block 1 UNIT 2 MATHEMATICS AND MATHEMATICS EDUCATION

Week 05 : Block 1 UNIT 2 MATHEMATICS AND MATHEMATICS EDUCATION Contd.

Week 06 : Block 1 UNIT 3 GOALS AND VISION OF MATHEMATICS EDUCATION Block 1

Week 07 : Block 1 UNIT 3 GOALS AND VISION OF MATHEMATICS EDUCATION Contd.

Week 08 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL

Week 08 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL

Week 09 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL Contd.

Week 10 : Block 2 UNIT 5 NUMBERS AND THE OPERATION ON NUMBERS Block 2

Week 11 : Block 2 UNIT 5 NUMBERS AND THE OPERATION ON NUMBERS Contd.

Week 12 : Block 2 UNIT 6 SHAPES AND SPATIAL UNDERSTANDING

Week 13 : Block 2 UNIT 6 SHAPES AND SPATIAL UNDERSTANDING Contd.

Week 14 : Block 2 UNIT 7 MEASURES AND MEASUREMENTS

Week 16 : Block 2 UNIT 8 DATA HANDLING

Week 17 : Block 2 UNIT 8 DATA HANDLING Contd.

Week 18 : UNIT 9 ALGEBRA AS GENERALIZED ARITHMETIC

Week 19 : UNIT 9 ALGEBRA AS GENERALIZED ARITHMETIC Contd.

Week 20 : Block 3 UNIT 10 APPROACHES TO ASSESSMENT OF LEARNING MATHEMATICS

Week 21 : Block 3 UNIT 10 APPROACHES TO ASSESSMENT OF LEARNING MATHEMATICS Contd.

Week 22 : Block 3 UNIT 11 TOOLS AND TECHNIQUES OF ASSESSMENT

Week 23 : Block 3 UNIT 11 TOOLS AND TECHNIQUES OF ASSESSMENT Contd.

Week 24 : Block 3 UNIT 12 FOLLOW UP OF ASSESSMENT OF LEARNING MATHEMATICS

ABOUT INSTRUCTOR

Name: Dr.Ram Singh

- Member of Quality development of Higher Education, Govt. of Jharkhand.
- Ambassador, Mission knowledge- UNESCO
- Member APEX Body of Academic Committee – NIOS
- Awarded National CBSE Teachers Award- 2015 President, Ranchi Sahodaya School Complex
- Eminent Educationist Award by Hindustan (a leading Media group) in 2012.
- Awarded the prestigious prize for innovations & excellence in school education from ASSCHOM.
- Best Principal Award by Hindustan Media.
- Best Principal Award by Science Olympiad Foundation.
- PRATIBHA SAMAAN 2015 by Prabhat Khabar given by The Honourable Governor of Jharkhand.
- International School Award (ISA) from the British Council 2015-18.
- Avantika Priyadarshani award 2015.

COURSE 503: LEARNING ENVIRONMENTAL STUDIES AT PRIMARY LEVEL

DR. BABLI CHOUDHURY
Assistant Professor (M.Ed Classes), Gauhati University, Guwahati

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 months (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

The present EVS syllabus for primary classes is designed to forge an integrated perspective for the primary stage of schooling that draws upon insights from Science, Social Science and Environmental Education. Environmental education is about helping learners become global citizens with critical thinking skills; sensitivities and respect for the natural environment; and pragmatism towards the socio-economic environment. This Course will help you strengthen your understanding of environment and environmental education. It will also help you to develop a holistic perspective of environment and the significance of environmental studies at the primary stage of education.

Within the formal education system, the curriculum and textbooks provide the vital link between policy and practice; however no learning process can be successful if left only to the curriculum and textbooks. The key to the formal education system is the teacher. Teacher's active participation and innovativeness is crucial for effective teaching and learning to take place. In addition to the subject of 'environment', the Course also deal with a variety of teaching- learning techniques which will help you create a learning environment in your classrooms which is congenial for child-centred and child-driven learning. The Course module has been designed in a way so that it will empower you with new ideas for effective transaction of environmental studies at the primary stage of education. We hope that you will find this Course useful in accomplishing the mission of environmental studies in formal education.

LEARNING OUTCOME

The Course will enable the Teachers:
To understand the importance and concept of 'Environment'.
To develop a holistic perspective of Environment.
To realize the importance of learning about 'Environment' at the primary level.
To identify local learning resources and expertise related to teaching-learning of EVS.
To design appropriate teaching-learning activities for primary children with focus on interactive and experiential learning.
To assess learning levels of each child, identify learning difficulties and design appropriate strategies for future enrichment.

COURSE PLAN

Week 01 : No material
Week 02 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING
Week 03 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING Contd.
Week 04 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING Contd.
Week 05 : Block 1 UNIT2 OBJECTIVES & SCOPE OF TEACHING-LEARNING EVS AT THE PRIMARY STAGE
Week 06 : Block 1 UNIT2 OBJECTIVES & SCOPE OF TEACHING-LEARNING EVS AT THE PRIMARY STAGE Contd.
Week 07 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS
Week 08 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.
Week 09 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.
Week 10 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.
Week 11 : Block 1 UNIT 4 CURRICULAR PROVISIONS OF EVS AT THE PRIMARY STAGE
Week 12 : Block 1 UNIT 4 CURRICULAR PROVISIONS OF EVS AT THE PRIMARY STAGE Contd.
Week 13 : Block 2 UNIT 5 APPROACHES FOR TEACHING - LEARNING EVS
Week 14 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS
Week 15 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.
Week 16 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.
Week 17 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.
Week 18 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS
Week 19 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS Contd.
Week 20 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS Contd.
Week 21 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS
Week 22 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.
Week 23 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.
Week 24 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.
Week 25 : Block 3 UNIT 9 ASSESSING LEARNING IN EVS
Week 26 : Block 3 UNIT 9 ASSESSING LEARNING IN EVS Contd.
Week 27 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS
Week 28 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS Contd.
Week 29 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS Contd.
Week 30 : Block 3 UNIT 11 USING ASSESSMENT RESULTS FOR ENHANCEMENT OF STUDENTS' UNDERSTANDING
Week 31 : Block 3 UNIT 11 USING ASSESSMENT RESULTS FOR ENHANCEMENT OF STUDENTS' UNDERSTANDING Contd.

ABOUT INSTRUCTOR

Name: Dr.Babli Choudhury
Designation: Assistant Professor (M.Ed Classes), Gauhati University, Guwahati
Qualification: M.A. in Education,Sociology and Social Work / B.Ed
Teaching Experience: 15 Years
Paper Published: 30 in National Journals / 20 in International Journals.
Associated with CCRT, NCTE, SCERT Guwahat

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July 2018

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