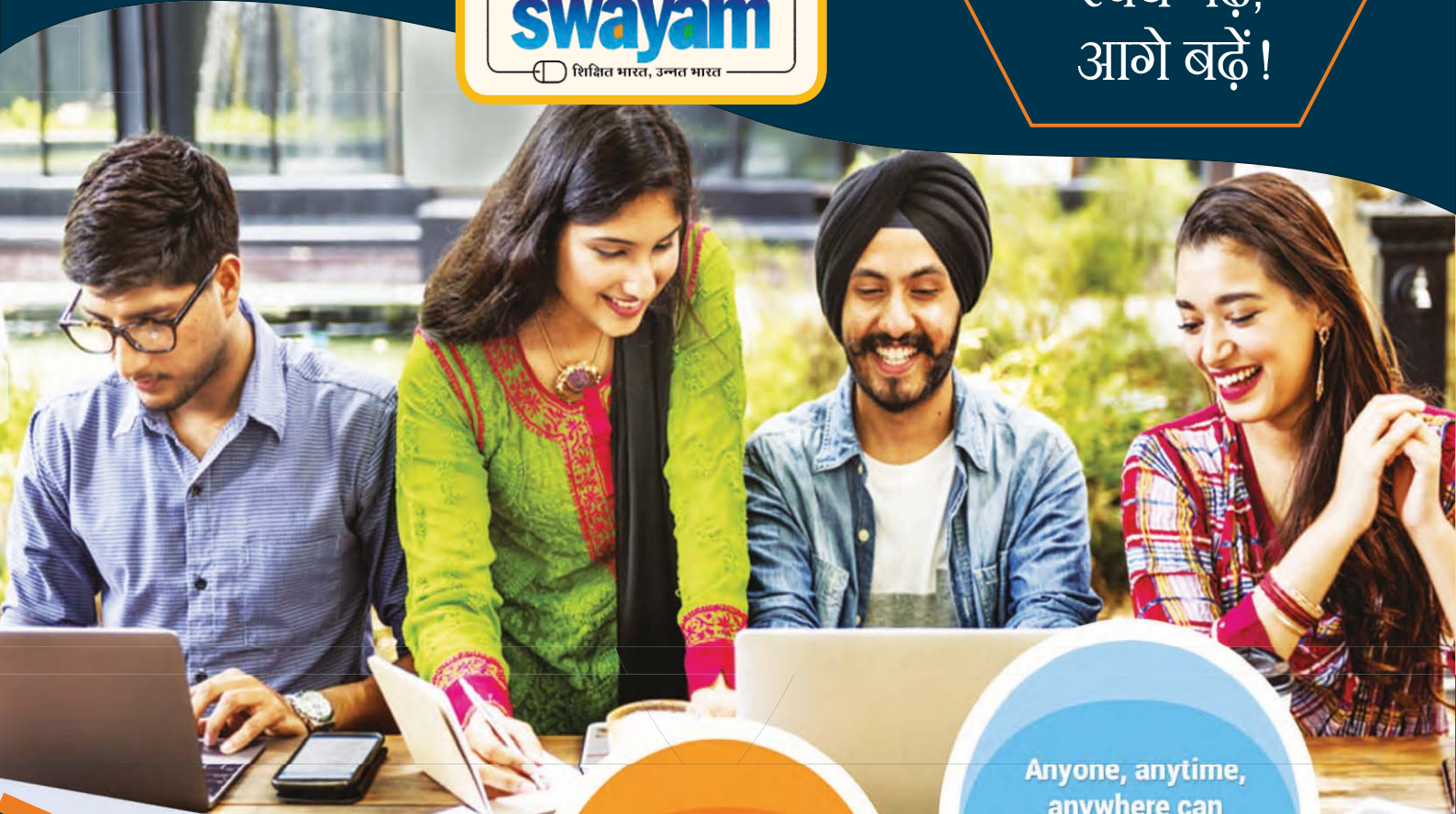


# SWAYAM Courses: At a Glance



स्वयं पढ़ें,  
आगे बढ़ें!



Thousands of  
Massive Open  
Online Courses available  
by best teachers from  
top institutions.

Anyone, anytime,  
anywhere can  
learn through mobile or  
laptop absolutely  
free.



Ministry of Human Resource Development  
Government of India

July 2018



## Message of the Chairman



The Indian higher education system is one of the oldest and largest in the world with 903 universities including Institutions 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 and promoting 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 of Active Learning for Young Aspiring Minds), an indigenously developed platform aimed at providing learning opportunities 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 are compiled 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.

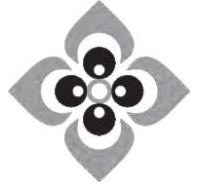
The MOOCs on SWAYAM follow a Four Quadrant Approach comprising of Quadrant-I - e-Tutorial, which contains Video and Audio Content in an organised form, Animation, Simulations, video demonstrations, Virtual Labs, etc. , Quadrant-II - e-Content, which contains PDF, Text, e-Books, illustrations, video demonstrations, 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



Consortium for  
Educational Communication

## Non-Technology Under-Graduate Courses



MHRD

सत्यमेव जयते



# Arts Literature and Language Courses

## Contents

Sr. No.	Course	Page
1.	ANCIENT GREEK AND MEDIEVAL PHILOSOPHY	75
2.	VISION TO MISSION INDIAN PHILOSOPHY	76
3.	Modern and Contemporary Western Philosophy	77
4.	Introduction to Aesthetics	78
5.	Critical Survey of Sanskrit Literature	79
6.	Classical Sanskrit Literature (Drama)	80
7.	Study of Prose and Poetic Forms in Urdu Literature	81
8.	Study of Urdu Classical Ghazal	82





## 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)

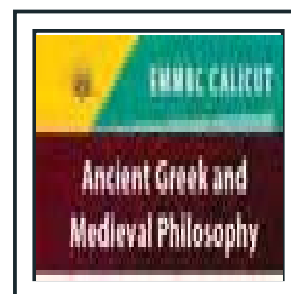
**EXAM DATE** : November 12, 2018

**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



**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 Anekanta Vada, 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 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 Epistemology, 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.



**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****COURSE DURATION : 6 weeks (8/6/2018 to 11/18/2018)**  
**EXAM DATE : Approximately 10 days after completion of the course****PRE-REQUISITES : उत्तरमाध्यमिककक्षायाम् 10+2****NO OF CREDITS : 6**

द्विसंस्कृतमेकविषयमादाय उत्तीर्णः संस्कृतभाषायांभाषणेबोधने च समर्थः छात्राः छात्रा वा पाठ्यक्रमेभागंस्वीकर्तुं शक्नोति ।

**OBJECTIVE OF COURSE**

सी.बी.सी.एस.इत्याधरितोत्थितम् षष्ठपत्रपत्रसंज्ञितममल वीं दौतपत्र स्पजमतंजनतमः, संस्कृतसाहित्यस्य समालोचनात्मकसर्वेक्षणम्, इतिनामकः पाठ्यक्रमः स्नातक/बी.ए. कक्षायाः द्वितीयसत्रास्य कृते विद्यते । अस्य पाठ्यक्रमस्य उद्देश्यमस्ति सरसतया सरलतया च संस्कृतानुरागिणां जिज्ञासूनां छात्राणां वैदिकसाहित्य-रामायण-महाभारत-पुराण-व्याकरण-दर्शन-साहित्यादिग्रन्थाध्ययने अभिमुखीकरणम् । अस्य पाठ्यक्रमस्य यथाविधि अध्ययनेन जिज्ञासवः छात्राः अल्पेनैव प्रयासेन संस्कृतभाषायां निबन्धनां ग्रन्थानां प्रमुखसिद्धान्तान् ज्ञातुं सक्षमास्तु भविष्यन्त्येव सहैव अमूल्यसिद्धान्तकारणाणां संस्कृतग्रन्थानाम् अध्ययने गवेषणे च सहजतया प्रवृत्ता अपि भविष्यन्ति ।

**LEARNING OUTCOME**

अस्य पाठ्यक्रमस्य उद्देश्यमस्ति सरसतया सरलतया च संस्कृतानुरागिणां जिज्ञासूनां छात्राणां वैदिकसाहित्य-रामायण-महाभारत-पुराण-व्याकरण-दर्शन-साहित्यादिग्रन्थाध्ययने अभिमुखीकरणम् । अस्य पाठ्यक्रमस्य यथाविधि अध्ययनेन जिज्ञासवः छात्राः अल्पेनैव प्रयासेन संस्कृतभाषायां निबन्धनां ग्रन्थानां प्रमुखसिद्धान्तान् ज्ञातुं सक्षमास्तु भविष्यन्त्येव सहैव अमूल्यसिद्धान्तकारणाणां संस्कृतग्रन्थानाम् अध्ययने गवेषणे च सहजतया प्रवृत्ता अपि भविष्यन्ति । पाठ्यक्रमस्य सफलसमाप्तेरनन्तरं छात्राः स्नातकोपाधि तुल्यन्त एव सहैव अन्यप्रतियोगिपरीक्षास्वपिसाफल्यं लप्स्यन्ते ।

**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 सहाचार्योऽध्यक्ष 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 नवदेहलीस्थराष्ट्रीयसंस्कृतसंस्थानस्य मानितविश्वविद्यालयस्य जयपुरपरिसरे साहित्यविभागे सहायकाचार्यपदे अध्यापनं कृतवान् ।
- अनेन प्रणीताः नैके शोधलेखाः, पाठाः, सम्पादिता नैकाः पत्रिकादयश्च सन्ति प्रकाशिताः ।
- विविधासु राष्ट्रियसङ्घीषु शोधपत्रण्यपि अनेन पठितान्यभवन् ।
- साम्प्रतमयं साहित्य-व्याकरण-दर्शनादीनि शास्त्राणि आश्रित्य अध्ययनेऽध्यापने च प्रवर्तते ।





## 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 वर्तते 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:-** Abhijnannasakuntalam-Kalidasa I & IV\_Episode (1,2,3,4,5)
- Week 05:-** Abhijnannasakuntalam-Kalidasa I & IV\_Episode (6,7,8,9)
- Week 06:-** Abhijnannasakuntalam-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 स्वनामधेयैः प्रो. सुधाकरदीक्षितप्रभृतिभ्यः आचार्यैः समधिगतन्यायादिशास्त्राः यथाकालं समस्तपरीक्षासु लब्धप्रथमस्थाना एते प्राचीनभारतीयविद्यासंरक्षणसंवर्धनतत्परता वर्तन्ते ।
- सम्पूर्णानन्दसंस्कृतविश्वविद्यालय - राष्ट्रियसंस्कृतसंस्थान - लालबहादुरशास्त्री - राष्ट्रियसंस्कृतविद्यापीठप्रभृति संस्थानेषु 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





### 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
- Origin and Development of Urdu Ghazal, Nazm, Mathnavi, Qaseedah and Marsiya
- Poetic Techniques and Craftsmanship
- Basics of some important Prose Genres of Urdu Literature 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.



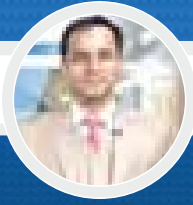
#### COURSE PLAN

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 Qasedah 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 NovelKaAagazWalrtiqa

#### 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.





### 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. Firaq 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 Irtiqā
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

## Contents

Sr. No.	Course	Page
1.	PSYCHOLOGY OF DEVELOPMENT AND LEARNING PROCESS	85
2.	Psychology through special reference to Physical Education	86
3.	Perspectives on Education	87
4.	Art And Science Of Teaching English Language	88
5.	Curriculum Pedagogy Of Teaching Physical Science	89
6.	Core and Pedagogy of Mathematics	90
7.	Child development	91
8.	Cognition and Learning	92
9.	Learning, Teaching and Assessment	93
10.	Braille Assistive Devices	94
11.	Sensory Disabilities	95
12.	Neuro-developmental disorders	96
13.	Television Journalism	97
14.	Orientation and Mobility	98
15.	Introduction to Audio-Visual Media	99
16.	Radio Production	100
17.	Documentary - Theory _ Production	101
18.	Major Film Movements _ The Auteurs	102
19.	Communication, Media _ Society- Models _ Processes	103
20.	Communication, Media _ Society_ Key Theoretical Concepts	104
21.	Advertising and Public Relations	105
22.	Hindi Cinema	106
23.	Language of Cinema	107
24.	Introduction to Mass Communication	108
25.	Yoga	109
26.	Basics of Management	110
27.	Business Planning and Project Management	111
28.	Communication and Business Correspondence	112
29.	Banking and Insurance	113

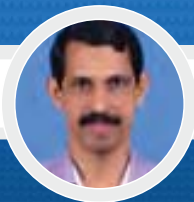


# Management and Professional Courses

30.	Financial Accounting	114
31.	Management Control Systems	115
32.	Principles of Marketing	116







**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)**

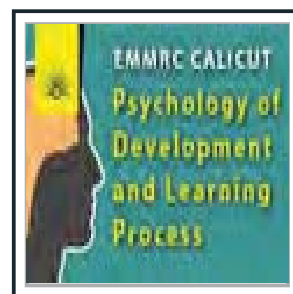
**EXAM DATE : 13<sup>th</sup> October 2018**

**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).





**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

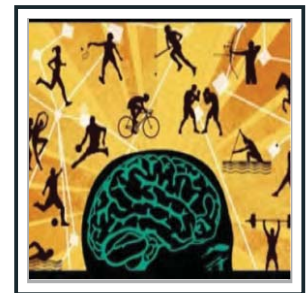
**OBJECTIVE OF COURSE**

- 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.



**DR. UMER FAROOQUE, T.K.**

Assistant Professor of Education  
University of Calicut

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG

**PRE-REQUISITES** : Any Graduation

**COURSE DURATION** : 15 weeks (16/07/2018 & 21/10/2018)

**EXAM DATE** : 05/11/2018 Tentative

**NO OF CREDITS** : 4

**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 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).



**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)

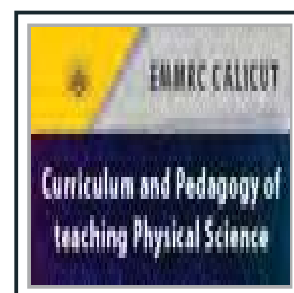
**EXAM DATE** : 25th November 2018

**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**

<b>Week 1:</b> Nature and Scope of Physical Science	<b>Week 19:</b> Pedagogic Analysis of Physics Class X
<b>Week 2:</b> Aims and Objectives of Teaching Physical Science	<b>Week 20:</b> Scientific Method - I
<b>Week 3:</b> Methods of Teaching Physical Science	<b>Week 21:</b> Scientific Method - II
<b>Week 4:</b> Models of Teaching	<b>Week 22:</b> Evaluation in Science Teaching - I
<b>Week 5:</b> Individualised and Innovative Methods of Teaching Physical Science	<b>Week 23:</b> Evaluation in Science Teaching - II
<b>Week 6:</b> Microteaching Instruction	<b>Week 24:</b> The Professional Science Teacher
<b>Week 7:</b> Learning as a Generative Process and Process Skills in science	<b>Week 25:</b> Science Library and Laboratory
<b>Week 8:</b> Basic Theories of Learning Science	<b>Week 26:</b> Resource Materials in Science Teaching
<b>Week 9:</b> Curriculum Development	<b>Week 27:</b> Computer and Digital Resources in Science Teaching - I
<b>Week 10:</b> Curricular Reforms in India and Abroad	<b>Week 28:</b> Computer and Digital Resources in Science Teaching - II
<b>Week 11:</b> School Science Curriculum	<b>Week 29:</b> Co-curricular Activities and Action Research in Science
<b>Week 12:</b> National Curriculum Framework NCF 2005	<b>Week 30:</b> Science Education for Exceptional Children
<b>Week 13:</b> Planning Instruction	<b>Week 31:</b> Science for the Better Development of the Society
<b>Week 14:</b> Pedagogic Analysis of Chemistry Class VIII	<b>Week 32:</b> Science Scholarship Programmes for Children
<b>Week 15:</b> Pedagogic Analysis of Physics Class VIII	<b>Week 33:</b> ICT for Better Teaching and Learning in Science - I
<b>Week 16:</b> Pedagogic Analysis of Chemistry Class IX	<b>Week 34:</b> ICT for Better Teaching and Learning in Science - II
<b>Week 17:</b> Pedagogic Analysis of Physics Class IX	<b>Week 35:</b> Techno Pedagogical and Content Knowledge (TPACK)
<b>Week 18:</b> Pedagogic Analysis of Chemistry Class X	<b>Week 36:</b> 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.



**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)

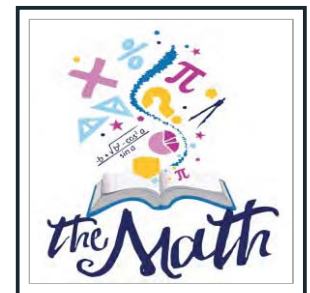
**EXAM DATE** : 29/11/2018

**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-MATRICES 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.



**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 (ISR), London.



**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**

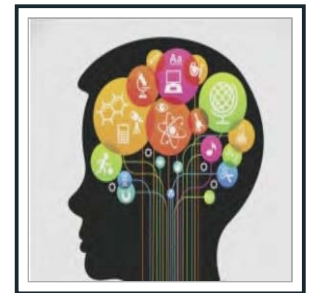
- 15 The Process of Problem Solving from Identification to Solution
- 16 Kinds of Problems and Approaches to Problem Solving
- 17 Lateral Thinking, Making choices, Development of creative thinking

**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.





**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 possess 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 Constructivism: 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.





## 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 possess 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. Braille 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

17. 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 researches 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.





**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 possess 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 -II
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.



**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 possess 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. Strategies 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.





## SUBHA DAS MOLLICK

Visiting faculty ILead College, Kolkata

**TYPE OF COURSE :** UG/PG

**INTENDED AUDIENCE :** UG/PG

**PRE-REQUISITES :** Class XII pass preferably with English as the medium of instruction

**COURSE DURATION :** 14 weeks (6<sup>th</sup> Aug, 2018 to 7<sup>th</sup> Nov, 2018)

**EXAM DATE :** Tentatively Dec, 2018

**NO OF CREDITS :** 4

### 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.





## 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

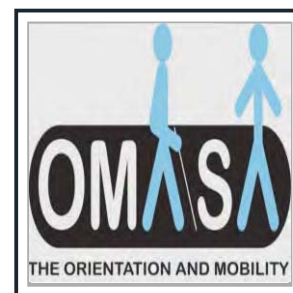
**PRE-REQUISITES** : -Should have completed higher secondary  
Should possess a basic interest towards visual impairment & special education

### 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.





## DR. KRISHNA SANKAR KUSUMA

Assistant Professor (Sr. Grade), AJKMCR, 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

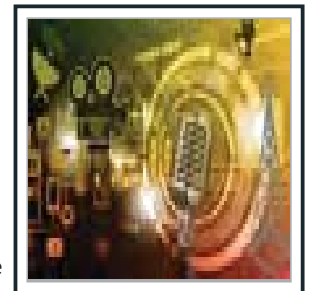
- Introduction to Audio-Visual Media is, designed to impart knowledge on three components of audio-visual media a) Radio b) Television c) Cinema/Film.
- The course covers both theory and practical elements of the three mediums.
- The lectures and supported text will help the students get not only the 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 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-Production (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 AJKMCR, 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 AJKMCR, he worked with CEDEC-NISWASS in Bhubaneswar, Orissa, Tezpur central university.





## 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

**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:**

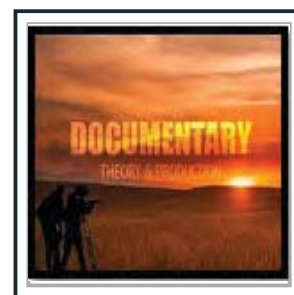
Module 13: Documentary Part 2

Module 14: Activism Documentary 1

**COURSE DURATION** : 7 weeks (6<sup>th</sup> Aug, 2018 to 21<sup>st</sup> Sep, 2018)

**EXAM DATE** : Tentatively Dec 2018

**NO OF CREDITS** : 3



Module 15: Activism Documentary 2

Module 16: Researching the Documentary

**Week 05:**

Module 17: Getting Ideas for Your Films

Module 18: Honing 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.





## 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

**COURSE DURATION** : 9 weeks (06/08/18 to 06/10/18)

**EXAM DATE** : NA

**NO OF CREDITS** : 4

**PRE-REQUISITES** : 10+2

### 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 Dicaica, 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.





**SOUMYA SUVARA DAS**  
Teaching faculty at NSHM, Kolkata

**TYPE OF COURSE** : UG/PG

**INTENDED AUDIENCE** : UG/PG

**COURSE DURATION** : 7 weeks (6<sup>th</sup> Aug, 2018 to 21<sup>st</sup> Sep, 2018)

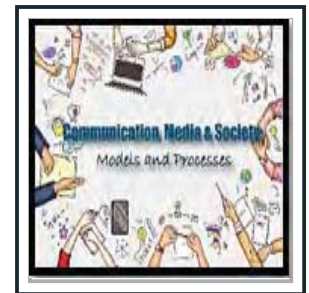
**EXAM DATE** : Tentatively Dec, 2018

**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 in 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 studied 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.





**SUSHMITA PANDIT**

Assistant Professor Future Media School  
Kolkata

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**PRE-REQUISITES** : 10+2 with any background

**COURSE DURATION** : 9 weeks (6<sup>th</sup> Aug, 2018 to 21<sup>st</sup> Sep, 2018)

**EXAM DATE** : Tentatively Dec, 2018

**NO OF CREDITS** : 3

**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.





## DR. KRISHNA SANKAR KUSUMA

Assistant Professor (Sr. Grade), AJKMCR, Jamia Millia Islamia, N. Delhi

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 15 weeks (17/08/2018 to 07/12/2018)

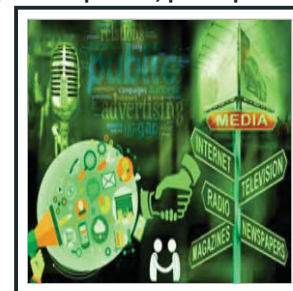
**EXAM DATE** : December 2018 (Tentative)

**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 advertising 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 AJKMCR, 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.





### SAAYAN CHATTOPADHYAY

Assistant Professor Department of Journalism & Mass Communication  
Baruipur College

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**PRE-REQUISITES** : 10+2 in any stream

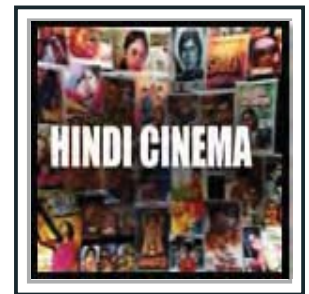
**COURSE DURATION** : 5 weeks (6<sup>th</sup> Aug, 2018 to 7<sup>th</sup> Sep, 2018)

**EXAM DATE** : Tentatively Dec, 2018

**NO OF CREDITS** : 2

#### 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 dominates 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.





### ANINDYA SENGUPTA

Assistant Professor, Department of Film Studies,  
Jadavpur University, Kolkata

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 7 weeks (6<sup>th</sup> Aug, 2018 to 21<sup>st</sup> Sep, 2018)

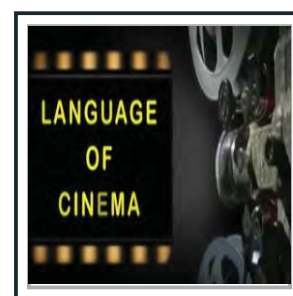
**EXAM DATE** : Tentatively Dec, 2018

**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, a 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.
- Pursuing 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.





## PROF. FARHAT BASIR KHAN

Professor, AJK MCRC, Jamia Millia Islamia, N. Delhi

<b>TYPE OF COURSE</b> : Certificate	<b>COURSE DURATION</b> : 37 Modules (6 <sup>th</sup> Aug to 30 <sup>th</sup> Nov, 2018)
<b>INTENDED AUDIENCE</b> : Under Graduate, Post Graduate, Diploma	<b>EXAM DATE</b> : Yet to be decided
<b>PRE-REQUISITES</b> : 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.	<b>NO OF CREDITS</b> : 4

### 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

**PRE-REQUISITES** : 10+2

**COURSE DURATION** : 6 weeks (07-09-2018 & 22-10-2018)

**EXAM DATE** : 06-11-2018 (Tentative)

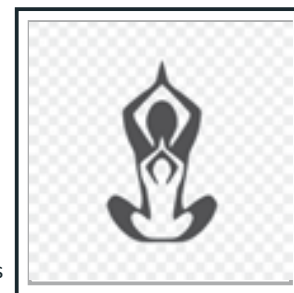
**NO OF CREDITS** : 2

#### 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 reduce 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-Suryabhedhi, 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.



**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: “DeenDayalUpadhyayKaushal 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





## DR. RAVI AHUJA

Assistant Professor, Skill Development Centre,  
Savitribai Phule Pune University

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG/certificate

**COURSE DURATION** : 8 weeks (10 Sep to 03 Nov 2018)

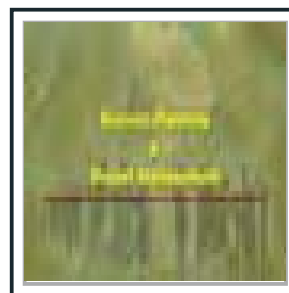
**EXAM DATE** : 30 Sept. 2018

**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: “DeenDayalUpadhyayKaushal 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





### 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

- Enable the student to recognize the relationship of effective communications skills to success in academic, work and social environments.
- Develop both written and oral communication skills to produce clear, complete, accurate messages.
- Understand message strategies and formats appropriate for professional communication situations.
- 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.



**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

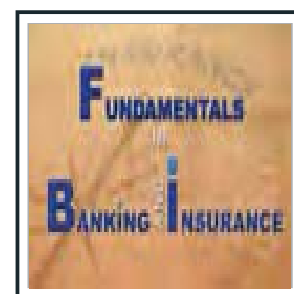
**PRE-REQUISITES** : 1.Any bonafide student of approved college / institution / university in India (Ideally after Class XII)  
2.Any citizen of India keen to learn about Fundamentals of Banking and Insurance.

**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.



**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

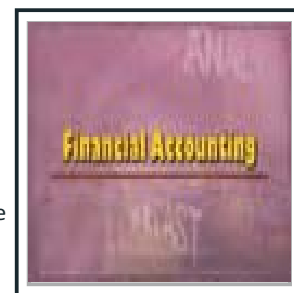
**PRE-REQUISITES** : Any bonafide student of approved college / institution / university in India (Ideally after Class XII)  
Any citizen of India keen to learn about various aspects of Information Technology.

**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.





## 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.

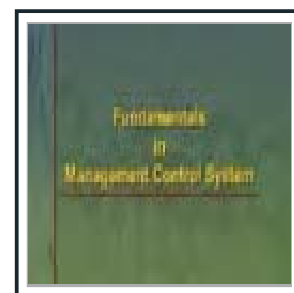
### OBJECTIVE OF COURSE

- 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

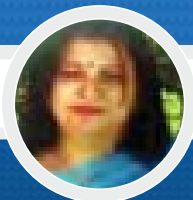
**Week 05:-** Decision Support Systems, Expert Systems, Management Control of Projects, Project Planning

**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.





## 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 MARKETING-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

## Contents

Sr. No.	Course	Page
1.	CYBER LAW	118
2.	INFORMATION SECURITY	119
3.	PROBABILITY AND STATISTICS	120
4.	Algebra and Trigonometry	121
5.	Discrete Mathematics	122
6.	Genetics and Genomics	123
7.	Information Thechnology	124
8.	Cytogenetics	125
9.	Metmorphic Petrology	126
10.	Field Crops	127
11.	Diseases of Horticultural crops and their management	128
12.	Weed Management	129
13.	Agri Business Management	130
14.	Course Booklet Information for Advanced Microbiology	131
15.	Industrial Microbiology and Immunology	132
16.	Molecular Biology	133
17.	Microbial Cytology, Physiology and Recombinant DNA	134
18.	Plant Systematics	135
19.	Petrology	136
20.	Stratigraphy and Palaeontology	137
21.	Atomic Structure & Chemical Bonding	138
22.	Quantum Chemistry, Spectroscopy Photochemistry	139
23.	Organic Chemistry - I	140
24.	Solutions, Phase Equilibrium, Conductance, Electrochemistry &Functional Group Organic Chemistry - II	141
25.	Inorganic Materials of Industrial Importance	142
26.	Ecology and Environmental Pollution	143
27.	Phycology and Microbiology	144
28.	Molecular Biology	145



**DR VISHAL GOYAL**

Associate Professor, Department of Computer Science,  
Faculty of Computing Science,  
Punjabi University, Patiala

<b>TYPE OF COURSE</b>	: UG	<b>COURSE DURATION</b>	: 7 weeks (10/09/2018 & 31/10/2018)
<b>INTENDED AUDIENCE</b>	: UG/PG/Diploma/Certificate/ School	<b>EXAM DATE</b>	: 1/12/2018
<b>PRE-REQUISITES</b>	: 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





**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  
**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.

**COURSE DURATION :** 8 weeks (10/09/2018 & 5/11/2018)  
**EXAM DATE :** 2/12/2018(tentative)  
**NO OF CREDITS :** 2

### 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 would 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

<b>Week 01:</b> Information Security	<b>Week 04:</b> Animated Cursor Vulnerability - Proof of Concept - I	<b>Week 07:</b> Wi-Fi Technology
Week 01: Network Security	Week 04: Animated Cursor Vulnerability - Proof of Concept - II	Week 07: Wi-Fi Security Protocol
Week 01: Computer Network Reference Models	Week 04: Electronic Mail	Week 07: Bluetooth Networks and Security Protocols
Week 01: TCP/IP Reference Model	Week 04: Email Security Protocols	Week 07: Virtual Private Networks
Week 01: Protocol Stack	Week 04: WWW Security	Week 07: WiMAX Technology and its Security
<b>Week 02:</b> Transmission Control Protocol	<b>Week 05:</b> Mobile Code Security	<b>Week 08:</b> Introduction to Mobile IP and Addressing
Week 02: Data Link Layer	Week 05: Transmission Media	Week 08: Cloud Computing Architecture
Week 02: Medium Access Control Protocols	Week 05: Ethernet and Fast Ethernet	Week 08: Cloud Computing Security
Week 02: TCP/IP Model-IP Addressing – I	Week 05: Ethernet Security	Week 08: GSM Architecture
Week 02: TCP/IP Model-IP Addressing – II	Week 05: Gigabit Ethernet	Week 08: MANET - I
<b>Week 03:</b> TCP - Connection Management and Flow Control	<b>Week 06:</b> 10 Gigabit Ethernet	<b>Week 09:</b> MANET – Routing Protocols
Week 03: IPV4 & IPV6	Week 06: ISDN	Week 09: 3G Network and Security
Week 03: UDP - User Datagram Protocol	Week 06: Stream Control Transmission Protocol	Week 09: 4G LTE
Week 03: IPSec Security Protocol	Week 06: ATM Network Security Protocol	Week 09: 5G
Week 03: Network Topologies	Week 06: Wireless Networks	Week 09: VoIP Protocols
		<b>Week 10:</b> 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.





## 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

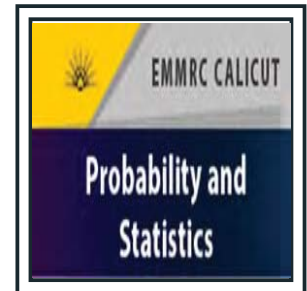
#### Week 15

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.





## 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)

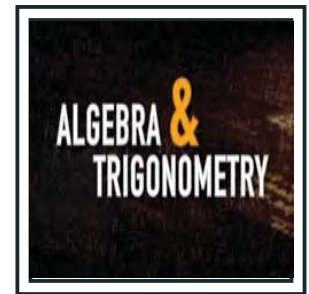
### OBJECTIVE OF COURSE

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. Familiarize with Direct and Inverse Circular and Hyperbolic Functions.
10. Study Summation of Series.



### COURSE PLAN

36 modules come under the following topics:

- |   |   |
|---|---|
| 1 Relations   | 19 Theory of Equations 3  |
| 2 Equivalence Relations                                       | 20 Theory of Equations 4  |
| 3 Functions   | 21 Theory of Equations 5  |
| 4 Congruent Modulo n  | 22 Groups   |
| 5 Matrices  | 23 Isomorphic Binary Structures                                       |
| 6 Adjoint and Inverse of Matrices                             | 24 Properties of Groups and Subgroups                                 |
| 7 Rank of a matrix and Elementary Transformations             | 25 Cyclic subgroups and Cyclic Groups                                 |
| 8 Determination of Rank using transformations                 | 26 Permutations   |
| 9 Elementary Matrices   | 27 Orbits and Cycles  |
| 10 Fundamental Results Rank and Inverse using transform       | 28 Cosets and Theorem of Lagrange                                     |
| 11 Solution of Homogeneous System of Equations                | 29 Homomorphisms  |
| 12 Method to find solution of Homogeneous System of Equations | 30 Rings and fields   |
| 13 Non Homogeneous System of Equations                        | 31 Integral Domains and Characteristic of a ring                      |
| 14 Characteristic Roots and Vectors                           | 32 De Moivre's Theorem  |
| 15 Characteristic Space                                       | 33 Direct and Inverse Circular Hyperbolic Functions                   |
| 16 Cayley Hamilton Theorem                                    | 34 Logarithm of Complex Quantity Expansion of Trigonometric Functions |
| 17 Theory of Equations 1                                      | 35 Summation of Series  |
| 18 Theory of Equations 2                                      | 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.



**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)

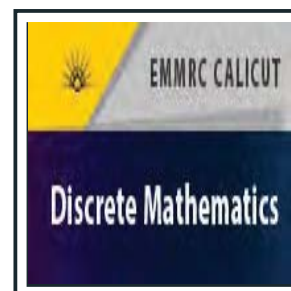
**EXAM DATE** : 30/10/2018

**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.





## 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, Mendel's 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)

Structure 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).

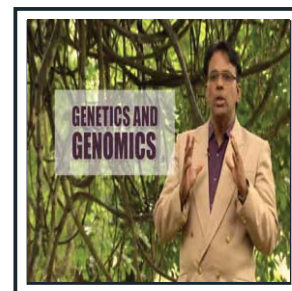
2003 - Awarded Fast Track Young Scientist Project (a grant of Indian Rs. 12 lakhs), by Dept. of Science and Technology, Govt. of India.

1. Programm Director for an electronic program 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 stresses 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

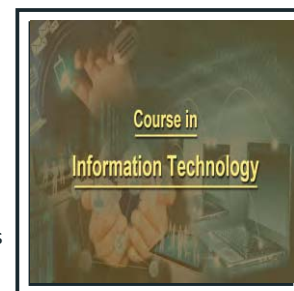
**TYPE OF COURSE** : Certificate  
**COURSE DURATION** : 8 weeks (01/10/2018 & 24/11/2018)  
**INTENDED AUDIENCE** : UG/Certificate  
**EXAM DATE** : 30 November 2018 -tentative  
**NO OF CREDITS** : 3  
**PRE-REQUISITES** : Any bonafide student of approved college / institution / university in India (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.





**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 animals) cells

Structure of viruses - general structure, properties of viral envelopes and enzymes (principles of virus taxonomy)

Overview of phages, viroids, mycoplasma and Escherichia coli

Structure, properties and functions of the immune cells & organs - hematopoiesis, 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, interference 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

Cytochemical techniques: spectrophotometry: mass spectrometry, X-ray diffraction analysis. Flow cytometry: fluochromes, 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 membrane 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: euchromatin, 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-chromosomal inheritance: chloroplast mutation/ variegation in four o' clock plant and Chlymodonas.

Mitochondrial mutations, maternal effects and ineffective heredity

**Week 8**

Cytoskeleton 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.



**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 (6<sup>th</sup> Aug 2018 & 10<sup>th</sup> Dec.2018)

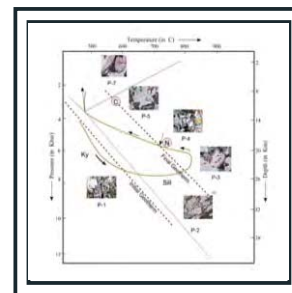
**EXAM DATE** : 13/14 December, 2018 - tentative

**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 definitely 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 definitely 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 isograd 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.

**Week 13:** 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 calcareous 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. JAMKHOGINLUNGDIM**

Assistant Professor (Sr. Scale), College of Agriculture,  
Central Agricultural University, Imphal

<b>TYPE OF COURSE</b>	: Certificate Course	<b>COURSE DURATION</b>	: 12 weeks (24/09/2018 to 28/12/2018)
<b>INTENDED AUDIENCE</b>	: UG/PG/Diploma/Certificate/ School	<b>EXAM DATE</b>	: 12/03/2019
<b>PRE-REQUISITES</b>	: Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course		

**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. Sesame, 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. Rapeseed & 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 Lungdim 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. Lungdim 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.





## DR. BIRESHWAR SINHA

Assistant Professor, College of Agriculture,  
Central Agricultural University, Imphal

<b>TYPE OF COURSE</b>	: Certificate Course	<b>COURSE DURATION</b>	: 12 weeks (24/09/2018 to 21/12/2018)
<b>INTENDED AUDIENCE</b>	: UG/PG/Diploma/Certificate/ School	<b>EXAM DATE</b>	: 06/03/2019
<b>PRE-REQUISITES</b>	: Students who have cleared/passed XII standard (both Science and Arts streams) are eligible to join the course		
<b>NO OF CREDITS</b>			: 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. Crucifers 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).



**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

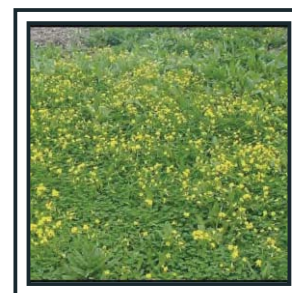
**PRE-REQUISITES** : Should have completed higher secondary(10+2)  
Should possess a basic interest towards Agriculture

**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 Indian Journals. Written 5 books on mushroom cultivation.
- Guided more than 70 post graduate students





## 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 Strategy
- 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 ORGANISATION
- 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 Indian Journals. Written 5 books on mushroom cultivation.
- Guided more than 70 post graduate students





## DR. ARUP KUMAR MITRA

Assistant Professor,  
St. Xavier's College, Kolkata

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 9 weeks (6<sup>th</sup> Aug, 2018 to 5<sup>th</sup> Oct, 2018)

**EXAM DATE** : Tentatively Dec, 2018

**NO OF CREDITS** : 4

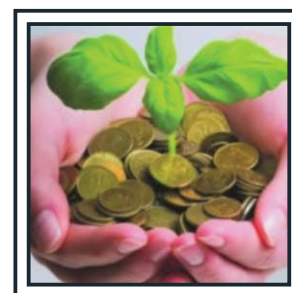
**PRE-REQUISITES** : 10+2 with Science background

### 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.





**DR. KASTURI SARKAR**  
Assistant Professor  
St. Xavier's College Kolkata

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

**COURSE DURATION** : 9 weeks (6<sup>th</sup> Aug, 2018 to 5<sup>th</sup> Oct, 2018)  
**EXAM DATE** : Tentatively Dec, 2018  
**NO OF CREDITS** : 4

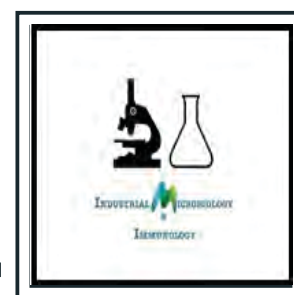
**PRE-REQUISITES** : 10+2 with Science background

### 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-I

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.





**DR. MAHASWETA MITRA GHOSH**

Assistant Professor,  
St. Xavier's College Kolkata.

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 12 weeks (6<sup>th</sup> Aug, 2018 to 26<sup>th</sup> 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

**Week 2**

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 - I

**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.



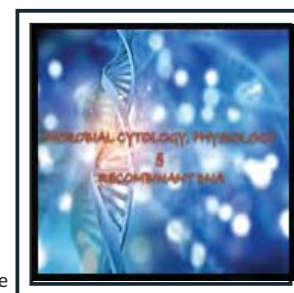
**DR. ANINDITA BANERJEE**Assistant Professor,  
St. Xavier's College Kolkata.**TYPE OF COURSE** : UG**INTENDED AUDIENCE** : UG**COURSE DURATION** : 12 weeks (6<sup>th</sup> Aug, 2018 to 26<sup>th</sup> Oct, 2018)**EXAM DATE** : Tentatively Dec, 2018**NO OF CREDITS** : 4**PRE-REQUISITES** : 10+2 with 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.

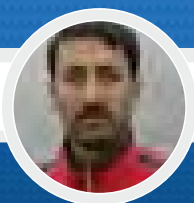
Module 35: Selection and screening of recombinant colonies.

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.





**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, Bauhin and Tournefort to plant systematics  
Contribution of Linnaeus to plant 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.





**DR. HAREL THOMAS**

Professor, Department of Applied Geology  
 Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.)

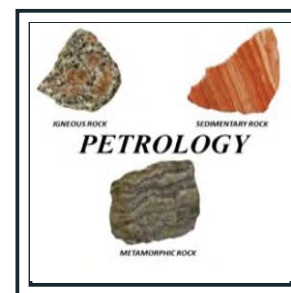
**TYPE OF COURSE** : Science Undergraduate (UG)  
**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 17 weeks (30<sup>th</sup> July & 2<sup>nd</sup> 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 definitely 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 definitely 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, Formation of crust and mantle, formation of core -01. Along with daily quiz and assignments along with weeeekly 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 weeeekly 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 weeeekly test.

**Week 05:** Crystallization of unicomponent and bicomponent (mix-crystals); igneous rocks and Intrusive igneous rocks. . Along with daily quiz and assignments along with weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly 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 weeeekly test.

**Week 16:** Thermal metamorphism of pelitic rocks; Thermal metamorphism of calcareous rocks and Different types of Metamorphic reactions. Along with daily quiz and assignments along with weeeekly 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 weeeekly 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.



**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 4-Text 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.





## (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 discuss 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.




**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 (6<sup>th</sup> Aug & 18<sup>th</sup> 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.

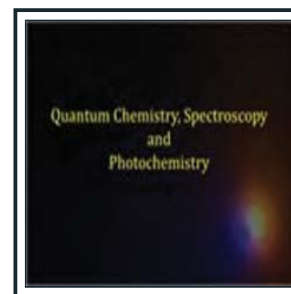
The advantage of the course may be taken by those students also who are pursuing Master's degree in Chemistry and intend to brush up their basics.

**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,  $\Theta$  and  $\Phi$  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 from Pearson 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.



**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 Maharaja Sayajirao  
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 (FeCl<sub>3</sub>-H<sub>2</sub>O 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

**Week 06:** - i) Basic of electrochemistry, ii) Understanding electrode potential and measurement of cell potential, iii) Thermodynamics of a reversible cell and calculation of thermodynamic 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, Haworth and Conformational structures, Mutarotation.

**Week 15:** - i) Monosaccharides, Glycosides and Ring 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 institution 'Bhartiya Vidya Bhavan's School, Vadodara.
- Lecturer in Chemistry at The MS 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  $\beta$ -lactam and sydnone ring on biological active compounds.

**Dr. Amar Ballabh**

- Assistant Professor, Department of Chemistry, The Maharaja Sayajirao University of Baroda.
- Teaching Experience -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.





## 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 content

**NO OF CREDITS** : 4

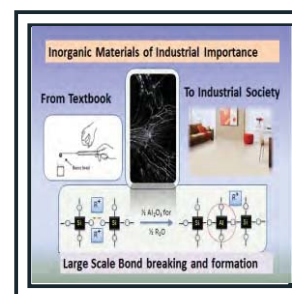
**PRE-REQUISITES** : Student must have 10+2 passed with science stream. Students must have basic understanding of Inorganic chemistry of 10+2 level.

### 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, Surface Coatings, 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 – Nitrogenous, Fertilizers – Phosphatic and Challenges

#### Week -7

Fertilizers-1  
Fertilizers-2  
Fertilizers-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.





**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 world 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, Archaeobacteria, 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, Chlamydomonas: Morphology and life cycle, Volvox: Morphology and life cycle, Oedogonium: Morphology and life cycle, Coleochaete: Morphology and life cycle, General characteristics of Charophyta, 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.



**PROF. BASHIR AHMAD GANAI**

Professor (Biochemistry), Centre of Research for Development,  
University of Kashmir, Srinagar, J&K

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 12 weeks (30/07/2018 to 20/10/2018)

**EXAM DATE** : 31/10/2018

**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:

- Nucleic acids convey 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 and M.Sc Biochemistry, Clinical Biochemistry, Biotechnology, M.Sc Zoology, M.Sc Bio resource, M.Sc Botany and M.Sc Microbiology 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 Material 5. Chemistry of DNA Synthesis 6. Chromatin Structure: Euchromatin heterochromatin- constitutive and facultative heterochromatin, 7. Regulation of Chromatin Structure, 8. Organisation of DNA- Prokaryotes, Viruses, Eukaryotes 9. 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

## Contents

Sr. No.	Course	Page
1.	Trends and Dynamics of World Population	147
2.	Population, Environment and Development	148
3.	Concepts and Theories of Population	149
4.	Research Methods In Population Studies	150
5.	Fundamentals of Anthropology	151
6.	Introduction to Physical Anthropology	152
7.	Social and Cultural Anthropology	153
8.	Sociology of Tribal society	154
9.	Fundamentals of Rural Sociology and Educational Psychology	155
10.	Principles of Sociology	156
11.	Human Rights and Humanitarian Law	157
12.	Human Rights in India	158
13.	Making of Modern Europe: Revolutions, Economy and empire (1780-1939)	159
14.	Making of Modern Europe: Revolutions, Nationalism and Wars	160
15.	Classical Political Philosophy	161
16.	Criminal Law & Criminology	162
17.	Educational Psychology	163
18.	Counseling in Social Work	164
19.	Disaster Management	165
20.	Gerontological Social Work	166
21.	Indian Administration	167
22.	Introduction to public Administration	168
23.	Social Case Work	169
24.	Social Welfare Administration	170
25.	Social Work Research	171



**DR. ANUPAMA**

Professor, Department of Economics,  
Punjabi University, Patiala.

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG

**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.



**DR. ANUPAMA**

Professor, Department of Economics,  
Punjabi University, Patiala.

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG

**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.







## DR. GURINDER KAUR

Professor, Department of Geography,  
Punjabi University, Patiala.

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG

**PRE-REQUISITES** : 10+2

**COURSE DURATION** : 6 weeks (07/09/2018 & 22/10/2018)

**EXAM DATE** : 06-11-2018 (Tentative)

**NO OF CREDITS** : 2

### OBJECTIVE OF COURSE

- To acquaint the students with the different 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 through 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

Mortality 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.



**DR. GURINDER KAUR**

Professor, Department of Geography,  
Punjabi University, Patiala.

**TYPE OF COURSE** : Certificate

**INTENDED AUDIENCE** : UG

**PRE-REQUISITES** : 10+2

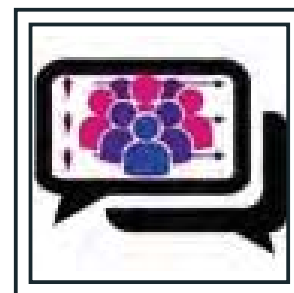
**COURSE DURATION** : 6 weeks (07/09/2018 & 22/10/2018)

**EXAM DATE** : 16/11/2018 (Tentative)

**NO OF CREDITS** : 2

**OBJECTIVE OF COURSE**

- To discuss the basic statistics for demographic analysis
- To acquaint the students with all the essential 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 through 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.





## PROF. S. JIBONKUMAR SINGH

Professor, Department of Anthropology,  
Manipur University

**TYPE OF COURSE** : Certificate **COURSE DURATION** : 12 weeks (02/07/2018 to 22/09/2018)  
**INTENDED AUDIENCE** : UG/PG/Diploma/Certificate/School **EXAM DATE** : 13/12/2018  
 and also Minimum 10 + 2 any stream **NO OF CREDITS** : 4  
 with sufficiently good academic record.

**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

### 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.

#### 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.



**PROF. S. JIBONKUMAR SINGH**

Professor, Department of Anthropology, Manipur University

**TYPE OF COURSE** : Certificate Course**COURSE DURATION** : 14 weeks (24/09/2018 to 27/12/2018)**INTENDED AUDIENCE** : UG/PG/Diploma/Certificate/School**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 bevirstris*), 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 Complement; 4. Cell Division: Mitotic and Meiosis; 5. Simple Single Factor inheritance in Man; 6. Multiple allelism and polygenic inheritance

**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.

**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





## 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  
**COURSE DURATION** : 12 weeks (02/07/2018 to 22/09/2018)  
**INTENDED AUDIENCE** : UG/PG/Diploma/Certificate/School  
**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.





## 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

- A passionate 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.





## DR. HOMEN THANGJAM

Dept. of Political Science & Human Rights, Indira Gandhi National Tribal University  
Regional Campus Manipur University

**TYPE OF COURSE** : Certificate Course  
**COURSE DURATION** : 12 weeks (24/09/2018 to 21/12/2018)  
**INTENDED AUDIENCE** : UG/PG/Diploma/Certificate/School  
**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

#### Week01:

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.





**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

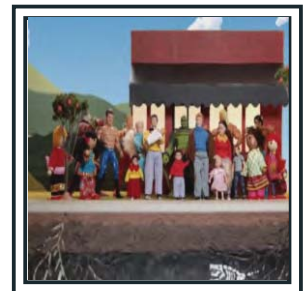
**PRE-REQUISITES** : ·Should have completed higher secondary. Should possess a basic thirst to know the functioning of society, have interest in gaining knowledge of social life.

**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 civilization, 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.





**DR. N. PRAMOD SINGH**

Associate Professor, L.M.S Law College, Imphal Manipur

<b>TYPE OF COURSE</b>	: Certificate Course	<b>COURSE DURATION</b>	: 12 weeks (24/09/2018 to 13/12/2018)
<b>INTENDED AUDIENCE</b>	: UG/PG/Diploma/Certificate/School	<b>EXAM DATE</b>	: 8/03/2019 (Tentative)
		<b>NO OF CREDITS</b>	: 4
<b>PRE-REQUISITES</b>	: 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.





## DR. N. PRAMOD SINGH

Associate Professor, L.M.S Law College, Imphal Manipur

**TYPE OF COURSE** : Certificate Course  
**COURSE DURATION** : 12 weeks (02/07/2018 to 22/09/2018)  
**INTENDED AUDIENCE** : UG/PG/Diploma/Certificate/School  
**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

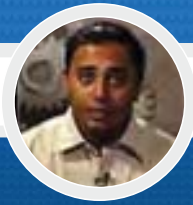
#### Week 12:

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.





**DR. KINGSHUK CHATTERJEE**  
Associate Professor, Department of History,  
University of Calcutta

**TYPE OF COURSE** : UG  
**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 6 weeks (6<sup>th</sup> Aug to 14<sup>th</sup> Sep, 2018)  
**EXAM DATE** : Tentatively Dec, 2018  
**NO OF CREDITS** : 3

**PRE-REQUISITES** : XII<sup>th</sup> 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 be 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 | 13. Theories of imperialism and The Age of Empire                |
| 2. Industrial Revolution: Great Britain's leadership                     | 14. Scramble for colonies and Clash of Empires                   |
| 3. Industrial Revolution: Great Britain                                  | 15. The Alliance System: Triple Alliance and Triple Entente      |
| 4. Industrial Revolution: France   | 16. Outline of Russian History: 19th Century                     |
| 5. Industrial Revolution: Germany  | 17. Russian Revolution: Growth of Revolutionary Movement         |
| 6. Industrial Revolution: Germany II                                     | 18. Russian Revolution: Making of the Russian Revolution of 1917 |
| 7. Industrial Revolution: Russia   | 19. The October Revolution and The Civil War of 1818-20          |
| 8. Industrial Revolution: Russia II                                      | 20. World Economic Depression                                    |
| 9. Bismarckian diplomacy and the system of alliance                      | 21. Rise of Fascism  |
| 10. Changes under Wilhelm II   | 22. Fascism in Italy   |
| 11. The Eastern Question: the problem and background                     | 23. The Rise of Nazism in Germany                                |
| 12. Emergence of Balkan Nationalism: 1851-1878 and 1878-1914             |  |

**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.





**SUBHAS RANJAN CHAKRABORTY**

Former Professor, Department of History, Presidency College, Kolkata

**TYPE OF COURSE** : UG

**INTENDED AUDIENCE** : UG

**COURSE DURATION** : 7 weeks (6<sup>th</sup> Aug to 21<sup>st</sup> Sep, 2018)

**EXAM DATE** : Tentatively Dec, 2018

**NO OF CREDITS** : 3

**PRE-REQUISITES** : XII<sup>th</sup> 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                | 15. Liberalism and democracy in Britain                 |
| 2. Coming of the French Revolution                         | 16. Socialism in Europe                                 |
| 3. The Constitution of 1791                                | 17. France 1848-1871: Second Republic and Second Empire |
| 4. Rise and Fall of the Jacobin Republic                   | 18. France (1848-1871): The Second Empire               |
| 5. Revolution and Gender, Revolutionary Culture            | 19. The Unification of Italy                            |
| 6. The Directory and Coup d'etat Of 18th Brumaire          | 20. Making of a Unified Italy                           |
| 7. Napoleon as ruler: Internal Reorganization              | 21. Establishment of the Second Reich in Germany        |
| 8. Napoleon and Europe: 'Revolution on Horseback'          | 22. Germany: Road to Unification                        |
| 9. Napoleon: The Road to Decline                           | 23. World War I - The Origins                           |
| 10. Europe after Napoleon: Forces of continuity and change | 24. The End of World War I and the Peace of Versailles  |
| 11. Conservatism at Work: Metternich System 1815-1848      | 25. Post War European Order and its Problems            |
| 12. Restoration and Revolution in France: 1815 – 1848      | 26. Hitler, Nazism and The second World War             |
| 13. 1848: The Year of Revolutions                          | 27. The Slide to War: 1930s                             |
| 14. Revolution of 1848: Germany                            | 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.





**PROFESSOR NOOR AHMAD BABA**  
Dean Social Science - Central University of Kashmir

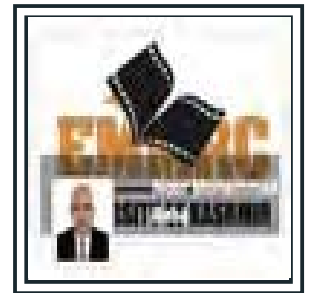
**TYPE OF COURSE** : UG  
**INTENDED AUDIENCE** : UG

**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 &amp; 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 aspects of 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. Cattell'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 pursued 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.





### 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)

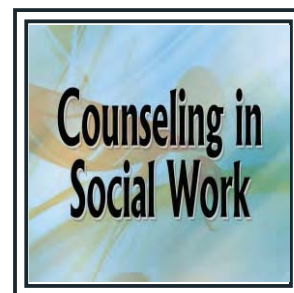
**EXAM DATE** : 13th Sep 2018 (Tentative)

**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.







### 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 (1<sup>st</sup> Oct & 31<sup>st</sup> Dec 2018)

**EXAM DATE** : 30<sup>th</sup> 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 Disasters in 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 (1<sup>st</sup> Oct to 28<sup>th</sup> Dec 2018)

**EXAM DATE** : 30<sup>th</sup> Dec 2018 (Tentative)

**NO OF CREDITS** : 4

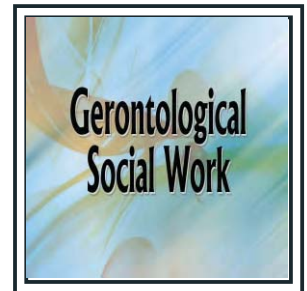
**PRE-REQUISITES** : Intermediate , +2

**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** Gerontology 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 (1<sup>st</sup> Aug to 6<sup>th</sup> Nov 2018)

**EXAM DATE** : 12<sup>th</sup> 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.



**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 (2<sup>nd</sup> July to 8<sup>th</sup> Sep, 2018)

**EXAM DATE** : 17<sup>th</sup> September 2018 (Tentative)

**NO OF CREDITS** : 4

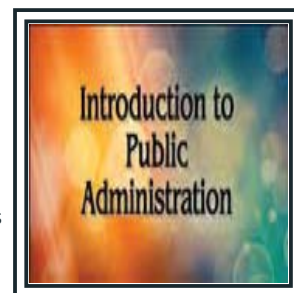
**PRE-REQUISITES** : Intermediate / Any Equivalent Examination

**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.





### 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 (2<sup>nd</sup> July to 28<sup>th</sup> Sep 2018)

**EXAM DATE** : 13<sup>th</sup> 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.



**DR. D.K.LAL DAS**

Research Consultant , Osmania University

**TYPE OF COURSE** : UG**INTENDED AUDIENCE** : UG**COURSE DURATION** : 12 weeks (1<sup>st</sup> Oct to 28<sup>th</sup> Dec 2018)**EXAM DATE** : 30<sup>th</sup> 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.



**DR. D.K.LAL DAS**

Research Consultant , Osmania University

**TYPE OF COURSE** : UG**INTENDED AUDIENCE** : UG**COURSE DURATION** : 12 weeks (2<sup>nd</sup> July 2018 to 28<sup>th</sup> Sep 2018)**EXAM DATE** : 13<sup>th</sup> 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.





स्वयं पढ़ें,  
आगे बढ़ें!



Ministry of Human Resource Development  
Government of India

July 2018

विद्यया ऽ नृत्वमश्नुते

