

**Consortium for Educational Communication**  
**IUAC Campus, Aruna Asaf Ali Marg, New Delhi 110067**  
**List- B: Information of MOOC available on SWAYAM**

S.No	Courses Title uploaded on the SWAYAM	PI/CC Name and Institution	Host University /Institute	No of Modules completed in 4 Quadrants	Start date	End date	Course Objective
1	Macroeconomic Theory	Dr. P P Prajapati	University of Gujrat	28	24th july 2017	9th October 2017	The students will gain overall knowledge of: <ul style="list-style-type: none"> <li>• Aggregate demand and supply</li> <li>• Economic growth</li> <li>• Inflation and Unemployment.</li> <li>• Exchange rates and trade balance.</li> </ul>
2	Microeconomic Theory	Dr. P P Prajapati	University of Gujrat	22	26th july 2017	11th October 2017	The students will gain overall knowledge of: <ul style="list-style-type: none"> <li>• How demand and supply analysis determine the prices and quantities of goods and services.</li> <li>• How consumers make consumption decisions.</li> <li>• How markets for factor inputs, such as labor and raw materials operate.</li> <li>• How markets generate efficient outcomes and why they fail and thus require government intervention.</li> </ul>
3	Cyber Security/Information Security - Cryptography	Dr Rakesh K. Bawa	Punjabi University, Patiala	40	7th August 2017	31st October 2017	a) Provide the basic understanding of Cryptography and its historical development. b) Give in-depth understanding of types of cryptography. c) Familiarise the learner with the protection of sensitive information by using different encryption methods. d) Enable the learner in understanding the application of cryptography in network and information security applications.

4	Cyber Security/Information Security - Cyber Law	Dr Vishal Goyal	Punjabi University, Patiala	31	7th August 2017	3rd October 2017	<ul style="list-style-type: none"> <li>a) Enable the learner to critically understand what Cyber law is!</li> <li>b) Make the learner conversant with the social, economical and intellectual property issues emerging from Cyberspace.</li> <li>c) Give learners an in-depth knowledge of IT Acts and other legal frameworks.</li> <li>d) Develop abilities for dealing with the Cyber crimes.</li> <li>e) Familiarise the learner with the relationship between commerce and cyberspace.</li> </ul>
5	Cyber Security/Information Security - Information Security	Dr Vishal Goyal	Punjabi University, Patiala	40	7th August 2017	3rd October 2017	<ul style="list-style-type: none"> <li>a) Acquaint the learner with the concept of Information and Cyber security.</li> <li>b) Provide the learner with the understanding of current trends in Information Security.</li> <li>c) Give in-depth knowledge to the learners about the vulnerabilities, threats and risks and their management.</li> <li>d) Enable him to develop core competencies in the field of network and computer security.</li> </ul>

6	Principles of Ecology	Miss. Flora Shah	University of Gujrat	30	25th july 2017	23th October 2017	<p>The structure of the present core course on Principles of Ecology has been specially designed with the perspective of achieving following key objectives:</p> <ul style="list-style-type: none"> <li>• To provide a brief outline of Historical background, Scope, Precipitation Patterns, Types of Soil, Vegetation as the essential aspects of Principles of Ecology to the students.</li> <li>• To provide comprehensive understanding of key concepts of Population Ecology comprising of Population Characteristics, Growth and Regulation along with detailed explanation of Biotic Interactions.</li> <li>• To impart knowledge regarding Community Ecology through proper explanation of Biotic Community Characteristics, Ecological Succession, Biomes and Climax Community Theories to the students.</li> <li>• To develop understanding in the students regarding concepts of Ecosystem Organization, Ecological Pyramids, Productivity, Ecological Efficiencies, Food Chains, Food Web, Energy Flow in Ecosystem, Biogeochemical Cycles, Aquatic Ecosystems, Terrestrial Ecosystem and Human Modified Ecosystem as essential components of the Ecosystem Ecology.</li> <li>• To provide glimpse of Applied Ecology by imparting adequate information about Wildlife Conservation and Management as well as Principles of Adaptations in Organisms.</li> </ul>
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7	Art and science of teaching english language	Dr. Mridula.K	University of Calicut	36	3rd October 2017	5th Dec 2017	<p>The major objectives of the course are to prepare better English teachers by integrating content and technology so as to equip them to face the challenges of present day classrooms.</p> <p>The course will enable the student teacher to</p> <ol style="list-style-type: none"> <li>1. Understand the nature of language as a dynamic entity</li> <li>2. Understand why English language learning is important in school education</li> <li>3. Develop an insight into the language learners and the learning process</li> <li>4. Familiarize themselves with the relevant approaches and methods in English language teaching</li> <li>5. Perceive learning as a generative process</li> <li>6. Experiment with various learning strategies considering the demands of the context and the needs of each individual learner</li> <li>7. Blend technology, pedagogy and content to realise the learning objectives</li> <li>8. Develop awareness on modern assessment strategies and design assessment techniques relevant to language learning</li> <li>9. Identify and practice micro skills in teaching language</li> <li>10. Effectively introduce different genres of literature and to develop the sense of aesthetic appreciation in learners</li> <li>11. Explore avenues available for own professional development</li> </ol>
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8	Curriculum & pedagogy of teaching physical science	Dr. V. P. JOSHITH	University of Calicut	36	7th August 2017	3rd October 2017	<p>The major objective of the course is to prepare better science teachers by integrating content and technology so as to equip them to face the challenges of present day classrooms.</p> <p>Learning Outcomes</p> <p>The course will enable the student teachers to</p> <ol style="list-style-type: none"> <li>1. Acquaint with the meaning and nature of physical science</li> <li>2. Comprehend why science is important in school education</li> <li>3. Familiarize the various methods and strategies of teaching science</li> <li>4. Develop science process skills for lifelong professional competency</li> <li>5. Perceive child as a creative learner and device learning goals individually for our children</li> <li>6. Design specific instructional strategies for learners accounting their individuality</li> <li>7. Explore different ways of creating learning situations considering needs of the learner and the context</li> <li>8. Integrate the knowledge in science to devise appropriate assessment techniques</li> <li>9. Understand the importance of learning as a generative process</li> <li>10. Integrate technology, pedagogy and content for the realization of objectives</li> <li>11. Examine the different pedagogical issues in the context of learner and society and to suggest ways for resolving it</li> <li>12. Facilitate development of scientific attitudes among learners</li> </ol>
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9	Probability and statistics	Dr.Aneesh Kumar.K	University of Calicut	32	30th July 2017	7th October 2017	<ol style="list-style-type: none"> <li>1. Familiarize with the various approaches to probability</li> <li>2. Learn the concept of random variable</li> <li>3. Understanding mathematical expectation, moments, mgf etc</li> <li>4. Study to deal with two dimensional random variables</li> <li>5. Understanding conditional distributions, conditional mean etc</li> <li>6. Study various discrete probability distributions</li> <li>7. Study various continuous probability distributions</li> <li>8. Learn to solve problems using the probability distributions studied.</li> </ol>
10	Art of c programming	Dr. Lajish V L	University of Calicut	39	7th August 2017	31st October 2017	<ul style="list-style-type: none"> <li>• To develop a strong foundation for the fundamental principles of Problem Solving using computers</li> <li>• To learn the concept of programming</li> <li>• To study C Programming language</li> <li>• To equip the students to write programs for solving simple computing problems using C language as a tool.</li> </ul>
11	Avertising and Public Relations	Dr.K. Kusuma	JMI, New Delhi	44	4th August 2017	15th Dec 2017	<ul style="list-style-type: none"> <li>☒ Students will be introduced to the concepts of Advertising and Public Relations</li> <li>☒ Students will be taught creating an adverting campaign and other relevant creative tools</li> <li>☒ Students will be given exposure to the various issues of advertising related to society</li> <li>☒ Students will be introduced to the tools and strategies of Public Relations</li> <li>☒ Students will be given exposure to the role of PR in various organisations</li> </ul>

12	Mass Communication- Introduction to Audio- Visual Media	Dr.K. Kusuma	JMI, New Delhi	32	4th August 2017	15th Dec 2017	<p>☑ The Introduction to Audio-Visual Media course will orient the students to the aesthetic requirements of effective audio visual communication.</p> <p>☑ After completing this course, students will have the ability to understand visual media from critical point of view.</p> <p>☑ Students will be introduced to the basic equipment as well as terminology of various stages of audio-visual production.</p> <p>☑ The course will equip the students to meet know the audio-visual production techniques</p>
13	Communication and Business Correspondence	Dr.Ravi.S.Ahuja	Savitribai Phule Pune University	35	8th August 2017	18th December 2017	<p>This course is designed to develop communication skills. Communication is vital for the success and growth of any individual and business organization, as it is the process of transferring meanings. Effective communication is essential to move ahead in modern business world which consists of tremendous use of IT, computer business structures, human relations management, public relations etc.</p> <p>The objective of the course is to teach necessary oral as well as written skills.</p> <p>In the era of globalization one must enhance his/her presentation skills, people skills, listening skills, body language skills, electronic communication skills, negotiation skills etc.</p>
14	Information Technology	Dr.Ravi.S.Ahuja	Savitribai Phule Pune University	33	8th August 2017	18th December 2017	<ol style="list-style-type: none"> <li>1) To understand the basics of Computer.</li> <li>2) To make students know the Networking basics, its protocols and its benefits. Thus, helping them to understand Internet and its uses.</li> <li>3) To understand the back-end Database and front-end applications like MS-Word, Ms-PowerPoint.</li> <li>4) To make the students know the working of a 'System' and make them ready to deliver high quality systems.</li> <li>5) To keep students updated about the new technology like Cloud Computing.</li> </ol>

15	INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY	Dr. Arup Kr. Mitra	University of Kolkata	30	17th July 2017	16th October 2017	<p>☐ This course will orient the students with the basics of microbiology and its associated subjects.</p> <p>☐ On successful completion of the course, the student will be able to understand the diversity of microbes and their application.</p> <p>☐ This course will enable them to apply the acquired knowledge in the fields of other biological science.</p> <p>☐ It will enable them to write a review on allied field and that may be suitable for publication.</p>
16	Origin, Biodiversity of life forms and Biomolecules	Dr. Sudeshna Shyamchowdhury	University of Kolkata	29	17th July 2017	16th October 2017	<p>☐ This course will orient the students with the basics of Biochemistry associated with their allied subjects.</p> <p>☐ On successful completion of this course, the student will be able to understand basic biochemistry related to microbiology, specially the bioenergetics, kinetics, thermodynamics and structure, functions, metabolic reactions associated with biomolecules.</p> <p>☐ This course will enable the students to apply the acquired knowledge of "Biochemistry" in the fields of other biological science and research purposes. When a research scholar starts their concerned project they must have the knowledge of simple biochemistry as pH, Buffer of the solutions in which they are supposed to perform their experiments.</p> <p>☐ It will enable the concerned students to write a review on allied field associated with applied biochemistry on microbes and that may be suitable for publication.</p>



17	Growth, Metabolism and Reproduction in Bacteria	Dr. Madhumita Maitra	University of Kolkata	27	17th July 2017	16th October 2017	<ul style="list-style-type: none"> <li>☑ the structural organization of Bacterial cell and its components.</li> <li>☑ the development of bacterial phylogeny and systematics.</li> <li>☑ the various Bacteriological techniques</li> <li>☑ Bacterial growth kinetics and nutrition along with the types of reproduction in bacteria.</li> <li>☑ the microscopic techniques and principles along with the practical demonstration of various staining techniques</li> <li>☑ the concept of viruses, their classification and morphology,</li> <li>☑ the bacteriophage and the assay methods to detect the viruses.</li> <li>☑ The different types of viral diseases and the application of virology.</li> <li>☑ This course will enable them to apply the acquired knowledge in the fields of other biological science.</li> <li>☑ It will enable them to write a review on allied field and that may be suitable for publication.</li> </ul>
18	Sanskrit Composition & Communication	Dr. Harish Chandra Tiwari	Uttarakhand Sanskrit University, Haridwar	56	29th January 2018	7th May 2018	<p>पाठ्यक्रमस्य सफलसमाप्तेरनन्तरं छात्राः लघुसिद्धान्तकौमुद्याद्यनुसारं वाक्यादिसंरचनां तत्सम्बद्धान्यविषयांश्च सम्यग् ज्ञातुं प्रयोक्तुं च समर्थाः भविष्यन्ति ।</p> <p>अयं पाठ्यक्रमः स्नातकक्षायां पठतां छात्राणां कृते तु वर्तते एव, स्नातकक्षां समुत्तीर्णानाम् अन्यप्रतियोगिपरीक्षायाः सन्नद्धतां कुर्वाणानां जिज्ञासूनां छात्राणां च कृतेऽपि उपयोगी भविष्यति ।</p>

19	Molecular Biology and Human Genetics	Prof. Bashir A. Ganai	EMMRC, Srinagar University of Kashmir	35	24th July 2017	16th October 2017	<p>The objectives of this course are to give the target students/audience an understanding of:</p> <ul style="list-style-type: none"> <li>☒ Nucleic Acids convey Genetic Information</li> <li>☒ The Structures of DNA and RNA / Genetic Material</li> <li>☒ Genome Structure, Chromatin and the Nucleosome</li> <li>☒ The Replication of DNA (Prokaryotes and Eukaryotes)</li> <li>☒ The Mutability and Repair of DNA</li> <li>☒ Mechanism of Transcription</li> <li>☒ RNA Modifications</li> <li>☒ Translation (Prokaryotes and Eukaryote)</li> <li>☒ Transcription Regulation in Prokaryotes</li> <li>☒ Transcription Regulation in Eukaryotes</li> <li>☒ Regulatory RNAs</li> <li>☒ Techniques for Genomics and Mapping strategies</li> <li>☒ Identification of Genetic Basis of Disease</li> <li>☒ Clinical Genetics</li> <li>☒ Implications of Genome Research</li> </ul>
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20	Cytogenetics	Dr. Md. Niamat Ali	EMMRC, Srinagar University of Kashmir	40	24th July 2017	16th October 2017	<p>The objectives of this course are to give the target students/audience an understanding of:</p> <ul style="list-style-type: none"> <li>• Introduction to cytogenetics: Chromosomes and heredity</li> <li>• An overview of cells</li> <li>• Cell wall, the extracellular matrix and cell interactions</li> <li>• Genetic approach to biology: Mendelian genetics and its extension</li> <li>• Genome structure, chromatin and the nucleosome</li> <li>• Cell division, cell cycle and control of cell number</li> <li>• Cellular Adaptations, cell injury, cell death and cell renewal</li> <li>• Linkage, crossing over and chromosomal mapping</li> <li>• Chromosomal Mutations</li> <li>• Sex Determination</li> <li>• Extrachromosomal inheritance</li> <li>• Structure, properties and functions of the immune cells and organs:</li> <li>• Patterns of inheritance for monogenic traits</li> <li>• Human cytogenetics techniques</li> <li>• Developmental genetics and model system</li> <li>• Tools and techniques of cell biology</li> </ul>
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21	Criminal Law and Criminology	Prof. S. M Afzal Qadri,	EMMRC, Srinagar University of Kashmir	40	24th July 2017	16th October 2017	<p>The objectives of this course are to give the target students/audience an understanding of:</p> <ul style="list-style-type: none"> <li>☑ Application of Indian Penal Code as a substantive Criminal law</li> <li>☑ Extent, application and fundamental principle of law of crimes.</li> <li>☑ To understand the offences against person, property, reputation, religion and state</li> <li>☑ Crimes against women are on increase, therefore a special emphasis is given to explain these offences</li> <li>☑ To understand subject of criminology including the Schools of criminology</li> <li>☑ To study rights of accused, prison system and rights of prisoners.</li> <li>☑ To understand and discuss juvenile delinquency, extent, causes and control</li> <li>☑ To study the menace of drug addiction, its control, white color crime, corruption, causes and control</li> </ul>
22	Advertising	Dr. Lalit Engle	DAVV, Indore	38	24th July 2017	19th October 2017	<p>The objective of this course is to develop basic understanding about Advertising by the means of topics like Fundamentals of Advertising, Advertising Campaign Planning, Organizing for Advertising, Creative Strategy and Advertisement development for different media. The course intend to inculcate a basic practice of important advertising functions in the highly competitive cotemporary market amongst the learner.</p>
23	Financial Accounting	Dr. Manish Sitlani	DAVV, Indore	34	25th July 2017	20th October 2017	<p>The basic objective behind this course is to provide a conceptual understanding of double-entry system accounting process to the target learners. This course will facilitate understanding of key concept associated with finance and accounting and will also help the learners to understand the double-entry accounting process. Simultaneously the course will also offer a hands on to the learners through structured numerical problems, there by meeting the basic objective of a clear understanding of financing and double-entry accounting.</p>

24	Computer Fundamentals	Dr. Sanjay Tanwani	DAVV, Indore	65	26th July 2017	21st October 2017	This course deals with fundamentals of computer. Which includes generations of computer, evolution and development of microprocessor, input and output devices, primary and secondary storage devices, programming languages etc. It also deals with the hardware and software aspects of the computer like operating system, application software and system software. It provides an overview of functions and working of central processing unit, motherboard and other peripherals.
25	Computer Networks	Mr. Anand More	DAVV, Indore	30	27th July 2017	22nd October 2017	At the end of the course, the students will be able to build an understanding of the fundamental concepts of computer & computer networks, advanced networking concepts, network standards & protocols, mobile phone networks and network security etc.
26	Biochemistry and Cell Biology	Dr. Anjana Jajoo	DAVV, Indore	37	28th July 2017	23rd October 2017	The objectives of this course are: i. To improve the learner's understanding about carbohydrates, lipids & vitamins. ii. To help learners in discerning the functioning of proteins nucleic acids & enzymes. iii. To increase the comprehension of learners about cell structure. iv. To enhance the knowledge of learners about cell organelles and cell division. v. To enable learners to distinguish between the various instruments and technologies used in studying the cell.
27	Environmental Biology, Genetics and Evolution	Ms. Shivani Bhagwat	DAVV, Indore	38	29th July 2017	24th October 2017	The objectives of this course are: i. To improve the learner's understanding about the ecosystem ii. To increase the comprehension of learners about air and water pollutants iii. To help learners in discerning about genetics iv. To enable learners to distinguish between various chromosomal aberrations and mutations v. To enhance the knowledge of learners about evolution

28	Morphology, Developmental Biology and Physiology of <b>Angiosperms</b>	Dr. K.N. Guruprasad	DAVV, Indore	36	30th July 2017	25th October 2017	The objectives of this course are: i. To improve the learner's understanding about the vegetative morphology of angiosperms ii. To help learners in discerning the varied floral morphology of angiosperms iii. To increase the comprehension of learners about water metabolism and photosynthesis in angiosperms iv. To enhance the knowledge of learners about respiration and nitrogen metabolism in angiosperms v. To enable learners to distinguish between the effects of various growth hormones on the growth of angiosperms
29	Morphology, developmental biology and Physiology of <b>Mammals</b>	Dr. Sultana Razia	DAVV, Indore	35	31st July 2017	26th October 2017	The objectives of this course are: i. To improve the learner's understanding about the digestive and excretory systems of mammals ii. To enhance the knowledge of learners about the respiratory and circulatory systems in mammals iii. To help learners in discerning the functioning of the muscular and nervous systems of mammals iv. To enable learners to distinguish between the functioning of various parts of the endocrine system of mammals v. To increase the comprehension of learners about embryology in mammals
30	Microbiology, Immunology and Animal cell culture	Dr. Sheetal Bhasin	DAVV, Indore	44	31st July 2017	27th October 2017	This paper includes titles related to Microbiology, Immunology and Animal Cell Culture. The student will be able to understand the:- i. Basics of microbial cell structure, classes and cultivation ii. Bacterial genetics iii. Application of microorganisms for production of useful products at industrial level iv. Basics of Immunology v. Vaccinology vi. Clinical Immunology vii. Basics of Animal Cell Culture viii. Application of Animal Cell Culture for production of health care products

31	Molecular Biology, Genetic Engineering and Plant Tissue Culture	Dr. Monica Jain	DAVV, Indore	36	31st July 2017	28th October 2017	The objectives of this course are: i. To improve the learner's understanding about DNA & RNA ii. To increase the comprehension of learners about genetic coding iii. To enable learners to distinguish between DNA isolation in bacteria, plants and animals iv. To enhance the knowledge of learners about various aspects of plant tissue culture v. To help learners in discerning about cloning in plants
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