SWAMI VIVEKANAND GOVT. COLLEGE GHUMARWIN

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2.6.1 Program Outcomes, Program Specific Outcomes and course outcomes for all programs offered by the institution are stated and displayed on website and communicated to teachers and students.

BSc with BOTANY

1. To developed a positive attitude among the students towards scientific knowledge, systematic study and sustainable development.
2. Provide the knowledge of Plant Diversity, its importance, threats and conservation methods.
3. Knowledge of basics of life, significance of Evolution and Ecology.
4. Co-relate the understanding of different fields of Botany and Basic Sciences.
5. Awareness and development of basic experimental skills, field observation of Plants and biological techniques used for scientific research.

PROGRAM SPECIFIC OUTCOMES

1. Knowledge of Botany and its branches makes one capable to identify different plants belonging to different groups and its uses for the benefits of mankind.
2. In the U.G. level, a basic knowledge is provided to the students for better understanding of the Plants science specific fields such as Taxonomy, Plant Anatomy, Plant Physiology, Molecular Biology, Floriculture, Biofertilizers, Biotechnology and Mushroom cultivation.
3. In fields like Plant Pathology, we get knowledge of different disease causing organisms and their control measures. In Economic Botany and Ethnobotany the students are apprised about uses and importance of different plant species.

COURSE OUTCOMES

1. Knowledge of classification of archegoniate and angiosperms with examples in Plant Diversity course.
2. Plant anatomy and Embryology gives knowledge about differences in the structural organization of different plant groups as well their embryonic development.

3. Plant Genetics helps in understanding the basic concepts of heredity and variation in the organisms. It also provides information about causes of various genetic abnormalities.
4. Biochemistry provides the knowledge about various biomolecules present among the different organisms.

Program Outcomes (UG in CHEMISTRY)

After successful completion of "Three Year Degree Program" in Chemistry, a student will be able to:

· Understand basic concepts of Chemistry.

· Demonstrate, solve and develop an understanding of major concepts in all disciplines of chemistry.

· Will gain theoretical as well as practical knowledge of handling chemicals.

· Solve the problem and also think methodically, independently and draw a logical conclusion.

· Develop a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective.

· Get exposure of theoretical knowledge about working of variety of experimental techniques.

· Understand the importance of the elements in the periodic table including their physical and chemical nature and role in the daily life.

· Learn the laboratory skills and safely to transfer and interpret knowledge entirely in the working environment.

· Understand the concept of chemistry to inter relate and interact to the other subject like mathematics, physics, biological science etc.

· Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.

· Acquainted with various opportunities related to chemistry available in the government services through public service commission particularly in the field of food safety, health inspector, pharmacist etc.

Programme Specific Outcomes

After completion of one-year syllabus students will have:

i. Enhancement in their basic knowledge of chemistry

ii. They will get to know the basics of three different branches of chemistry, viz. organic, inorganic and physical chemistry.

iii. Understanding of various topics which deal with physical, inorganic and organic chemistry.

iv. Develop the theoretical and practical knowledge through the experiments.

In Second and third year of BSC with chemistry major four specific skill enhancement program commence with following specific outcomes

CHEM 203TH Basic analytical chemistry

PSO-1 Will have the knowledge of various analytical techniques like titration, chromatography, flame photometry, Atomic absorption spectroscopy. Phenolphthalein traps analysis of bribery

PSO2- will have the idea of soil analysis, and water analysis. Water purification methods, water softening methods, water deionisation methods.

PSO-3 BOD and COD analysis, Winkler method in concern with BOD determination.

CHEM 204 TH Fuel & cosmetics chemistry

PSO-1 Will have the basic knowledge of coal gasification, LPG, LNG, CNG, Diesel fuel, petrol, bio diesel etc

PSO-2 Will have the knowledge of deodorants, cosmetics, perfumes and artificial flavours. Also aware about Food adulterants and food additives

CHEM 307

PSO-1 Will know different methods for the synthesis of various classes of drugs, designing of new drugs, and their modes of action.

PSO-2 They will learn about synthesis of various vitamins and their biological importance. This will make them aware of the nutrition's requirement for good health.

CHEM 308

PSO-1 Graduates will learn about benefits and adverse effects of pesticides, structure activity relationship in pesticides; can easily be recognized by knowing about them.

PSO-2 Synthesis uses of pesticides in organochlorines, organophosphates, carbamates, anilines and quinines.

PSO-3 Synthesis of various classes of drugs, design and development.

PSO-4 They will come to know about synthesis of some vitamins. Synthesis uses of pesticides in organochlorines, organophosphates, carbamates, anilines and quinines.

COURSE OUTCOMES

Institution offers four DSC Courses of Chemistry and that are CHEM 101TH, CHEM 102 TH CHEM 201TH, CHEM 202TH with practicals in same Courses. There is also inclusion of two DSE courses with practical courses, CHEM 301 TH and 304 in third year of BSc.

CHEM 101TH

CO1: Students will be able to know about the structure of atoms and behaviour of matter at elementary level. They will come to know about the dual nature of microscopic particles and their behaviour.

CO2: Students will come to know about the hybridization, shapes of molecules and bonding in molecules take place.

CO3: Will come to know the fundamental and basic concepts of organic chemistry including different pathways reactions follow andthe intermediates formed during the process.

CO4: Will learn the fundamentals and basic concepts of stereochemistry.

CO5: Will learn about the constituents, synthesis, structure behaviour of organic compounds viz. alkanes, alkenes and alkynes.

CO6: Have the practical knowledge of acid base titration, iodometric titration and redox titration with $KMnO_4$ and $K_2Cr_2O_7$

CO7: Have the knowledge of crystal preparation

CHEM 102TH

CO1: Students will be able to know the different states matter is composed of and them behaviour and properties

CO2: Methods for the study of reaction rates and factors affecting them.

CO3: Preparation, Chemical reaction, chemical properties and electrophilic substitution of aromatic hydrocarbon.

CO4: Preparation and chemical reaction of Alkyl halide, alcohol and phenol, aldehydes and ketones root into theunderstanding of their physical/chemical properties and their applications.

CO5: Have the Knowledge of surface tension and viscosity determination

CO6: Have the practical knowledge of organic compound analysis

CHEM 201 TH

CO1: Idea about the vapour pressure and boiling of binary mixture solution, its distillation also.

CO2: Have the knowledge of Melting of binary solid mixture, phase diagrams

CO3: Have the knowledge of Conductance, electrochemical cell, pH determination and concentration electrodes.

CO4: Have the knowledge of acids, acid derivatives, amines and diazo compounds.

CO5: Have the knowledge of Carbohydrates.

CO6: Industrial separation of de-silverisation of lead and freezing mixtures

CO7: Knows practically about glucosazone and iodoform

CO8: Have the practical knowledge of titration of glycene

CHEM202TH

CO-1 Have the knowledge of Inorganic chemicals, there use in daily life.

CO-2 Have the knowledge of spontaneous processes and laws of thermodynamics and there relation to nature.

CO3: Have the Knowledge of basic idea behind salt analysis and salt solutions

CO4: Have basic idea about pH and its calculations

CO-5 Knows about the S and p block elements in detailed way. Behaviour of Noble gases and their reactivity

CO-6: Have the practical knowledge of calorimetry, salt analysis.

CHEM 301TH

CO1: Have the Knowledge of Dyes and their types

CO2: Have the knowledge of heterocyclic compounds and their chemistry

CO3: Have the Knowledge of Naphthalene and anthracene and their chemistry

CO4: Have the knowledge of Spectroscopic use of IR , NMR and UV spectroscopy for organic compound structure elucidation.

CO5: Have the knowledge of chromatographic separation of inorganic cations

CO6: Have practical knowledge of lamberts beers Law.

CHEM 304TH

CO1: Have the basic idea of VBT and introduction to Crystal field theory for complex compounds.

CO2: Have the idea of bonding, chemical properties of Carbonyl compounds

CO3: Have the knowledge of d block elements their general properties with special focus on Compounds like Potassium permanganate and potassium dichromate, Latimer diagrams and their importance.

CO4: Have the knowledge of Lanthanides and actinides, general characteristics, their reference in context with magnetic and complex forming ability.

CO5: Isolation of uranium and lanthanides from their ores, impact of contraction phenomena imposing difficulties in their isolation.

CO6: Have the knowledge of preparation of complex compound and complexometric titration

BSc with Computer Application

Programme Outcomes

This program could provide well trained professionals for the technology and allied industries

to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects of information technology viz. software updation, programme developers, software testing and web designer. The program will help the graduates to take up responsibilities in production, testing and designing in the information technologies and contribute for the growth of industry.

On completion of the B.Sc. Physical Science (Physics, Math, Computer) students are able to:

1. Serve as the Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.
2. To Give Technical Support for the various systems.
3. Work as the Support Engineers and the Technical Writers
4. Work as Consultant and Management officers for system management.
5. Work as IT Sales and Marketing person.
6. Serve as the IT Officers in Banks and cooperative societies.
7. Work as DTP Operator in small-scale industries.
8. Serve as the Web Designers with latest web development technologies.

Programme Specific Outcomes

PSO1 Apply fundamental principles and methods of Computer Science to a wide range of applications.

PSO2. Design, correctly implement and document solutions to significant computational problems.

PSO3 Impart an understanding of the basics of our discipline.

PSO4. Prepare for continued professional development.

PSO5. Develop proficiency in the practice of computing.

Course Outcomes

After completion of these courses students should be able to:

COMP101TH (Problem Solving using computer)

CO1. Explain about the basic concepts of program development, algorithms and flowcharts.

CO2. Explain the various way to solve the problem using computer.

CO3. Discuss about the various types of computers on the basis of gen.

CO4. Explain the working of computer through block diagram.

COMP101PR (Python Lab)

CO1 Explanation of design and algorithmic solution for a given problem.

CO2. Construction of flowcharts for the computer programs.

CO3 Explain the program using Control Statements

CO4. Explain the program using Arrays and

Functions. **COMP102TH (Office Automation Tools)**

& Lab

CO1. Explain about the concepts of MS Office and Libre Office

CO2. Explain the features and working options of MS Word, PPT and Excel with practical.

After completion of these courses students should be able to:

COMP201TH (Computer System Architecture)

CO1.Explain the logic gates Boolean algebra, K-Map

CO2. Explain about the basic of data representation and basic computer arithmetic.

CO3. Explain about the basic internal organization of computer like instruction set, register and its types, logical micro operation.

CO4. Explain about the working of various I/O devices and their interface.

COMP202TH (Database Management System)

CO1. Explain the concept and importance of database.

CO2. Explain about the basic of different data models.

CO3. Explain about the basic concept of relation created in data base, relational

algebra CO4. Explain about the working of various I/O devices and their interface.

COMP201PR (Database Management System Lab)

CO1. How to use Access as DBMS and basic introduction about SQL commands.

COMP203TH (PHP Programming)

After successful completion of this course, students will be able to:

CO1. Write PHP scripts to handle HTML forms.

CO2. Analyze and solve various database tasks using the PHP language.

CO3. Analyze and solve common Web application tasks by writing PHP programs.

CO4. Write regular expressions including operators.

BPHS501: PHP Programming

After successful completion of this course, students will be able to:

CO1. Write PHP scripts to handle HTML forms.

CO2. Analyze and solve various database tasks using the PHP language.

CO3. Analyze and solve common Web application tasks by writing PHP programs.

CO4. Write regular expressions including operators.

BPHS503: Operating Systems

CO1. Explain the main components of an OS & their functions.

CO 2. Explain the process management and scheduling.

CO3. Explain the concepts and implementation Memory management policies and virtual memory.

CO4. Explain the working of an OS as a resource manager, file system manager, process manager, memory manager and I/O manager and methods used to implement the different parts of OS.

BA/BSc with Mathematics

(B.Sc. Mathematics / B.A. Mathematics)

Programme Obejctives

- Develop the ability to think critically, logically and analytically and to use mathematical reasoning in everyday life.
- Create deep interest in learning mathematics.
- Communicate mathematics effectively by written, computational and graphic means.
- Develop broad and balanced knowledge and understanding of definitions, concepts, principles and theorems.
- The program covers the full range of mathematics from Classical Calculus to modern Number Theory. Thus it provides learners sufficient knowledge and skills to enable them undertake further studies in mathematics and its allied areas on multiple disciplines.
- Pursuing a degree in mathematics introduces the students to a number of interesting and useful ideas and helps them prepare for job exams in the field of education, research, government sector, business sector and industry.

Programme Outcomes and Graduate Attributes:

Disciplinary knowledge: Capability of demonstrating comprehensive knowledge of mathematics and understanding of one or more disciplines which form a part of an undergraduate programme of study.

Communication Skills:

- Ability to communicate various concepts of mathematics effectively using examples and their geometrical visualizations.
- Ability to use mathematics as a precise language of communication in other branches of human knowledge.
- Ability to communicate long standing unsolved problems in mathematics.
- Ability to show the importance of mathematics as precursor to various scientific developments since the beginning of the civilization.
- Ability to explain the development of mathematics in the civilization context and its role as queen of all sciences.

Critical thinking and analytical reasoning:

- Ability to employ critical thinking in understanding of the mathematical concepts.
- Ability to analyze the results and apply them in various problems appearing in different branches of mathematics.

Problem Solving:

- Capability to solve problems in computer graphics using concepts of linear algebra.
- Capability to solve various models such as growth and decay models, radioactive decay model, drug assimilation, LCR circuits and population models using techniques of differential equations.
- Ability to solve linear system of equations, linear programming problems and network flow problems.
- Ability to provide new solutions using the domain knowledge of mathematics acquired during this programme.

Research-related skills:

- Capability for inquiring about appropriate questions relating to the concepts in various fields of mathematics.
- To know about the advances in various branches of mathematics.

Information/digital literacy:

- Capability to use appropriate software's to solve system of equations and differential equations.

Self-directed learning:

- Ability to work independently and do in-depth study of various notions of mathematics.

Moral and ethical awareness/reasoning:

- Ability to identify unethical behavior such as fabrication, falsification or misrepresentation of data and adopting objective, unbiased and truthful actions in all aspects.

Lifelong learning:

- Ability to think, acquire knowledge and skills through logical reasoning and to inculcate the habit of self-learning.

(Programme Specific Outcomes)

DSE (Discipline Specific Elective) :
Choices from DSE provide the students with liberty of exploring his interest within the Mathematics. They enhance the ability of learners to apply the knowledge and skills acquired during the programme to solve specific theoretical and applied problems in mathematics.

SEC (Skill Enhancement Courses) :
These courses enable the student to acquire the skill relevant to Mathematics. They familiarize the students with suitable tools of mathematical analysis to handle issue and problems in mathematics and related sciences.

Let us have a look on different courses of this programme: -

MATH101TH: Differential Calculus: -
This course will enable the students to assimilate the notions of limits, continuity, and differentiability of functions at a point. Sketch curves in Cartesian and Polar co-ordinate systems, expansion of functions using Maclurin's and Taylor's theorems, curvature, asymptotes and curve tracing.

MATH102TH: Differential Equations: -
It will enable learners to learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order. They will be introduced to partial differential equations and their solutions.

MATH201TH: Real Analysis: -
Learners will get concept of real line, completeness property, real sequences, infinite series, uniform convergence

and power series.

MATH202TH: Algebra: -
Students will learn about algebraic structures, groups, subgroups, their types; they will be also introduced to rings, sub rings, integral domains and fields.

MATH309TH: Integral Calculus: -
This SEC will lead expertise in integration, rectification and quadrature. Students will learn to handle double and triple integrals.

MATH310TH: Vector Calculus: -
It will teach students to find gradient divergence, curl, and vector integration and provides a peep into the beautiful world of Gauss, Green and Stokes theorem.

MATH303TH : Linear Algebra : -
It will enable students to read different types of matrices, correlate matrices and linear transformation, compute Eigen values, Eigen vectors, concept of vector spaces, subspaces, solution of linear equation using matrices.

MATH305TH: Complex Analysis: -
It will enable students to read arithmetic and geometrical properties of complex numbers and basic concepts of the limit, continuity and derivative of the complex valued functions of a complex variable knowledge of convergence and divergence of the sequences, series and power series and general concept of the complex integration and many important properties of analytic functions which follow from the complex integration.

MATH313TH: Probability and Statistics: -
This course will change one's sight of viewing different experiments by defining sample space, probability, providing in depth knowledge of different probability distributions and joint probability distribution functions.

MATH317TH: Transportation and Game Theory: -
No mathematics programme is complete without operations research. Operations research is that branch of mathematics which helps in optical decision making in various business situations. So, this SEC deals with solution of transportation problems, assignment problems and game theory.

B.Sc. with Physics

Programme Outcomes

Department of Physics	**After successful completion of three year degree program in physics a student should be able to;**
Programme Outcomes	PO-1. Demonstrate, solve and an understanding of major concepts in all disciplines of physics. PO-2. Solve the problem and also think methodically, independently and draw a logical conclusion.
	PO-3. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of Physics experiments. PO-4. Create an awareness of the impact of Physics on the society, and development outside the scientific community. PO-5. PO-6. To inculcate the scientific temperament in the students and outside the scientific community. PO-7. Use modern techniques, decent equipments and Phonics software's

Programme Specific Outcomes	PSO-1. Gain the knowledge of Physics through theory and practical's. PSO-2. Understand good laboratory practices and safety. PSO-3. Develop research oriented skills. PSO-4. Make aware and handle the sophisticated instruments/equipments.
Course Outcomes	
Course Outcomes	After completion of these courses students should be able to;
PHYS101TH Mechanics	**CO-1.** Draw the diagram of the problem of mechanics. **CO-2.** Understand the various forces acting in the problem. **CO-3.** Solve the problem by using various principles of physics. **CO-4.** Solve the problems of coriolis forces and pseudo forces acting in a system. **CO-5.** Understand the concepts of Relativity and to solve various problems of Relativity.
PHYS101PR Mechanics (Lab)	**CO-1.** Draw the diagram of the problem of mechanics. **CO-2.** Understand the working of sextant and its use. **CO-3.** Solve the problems of pendulum by using principles of physics. **CO-4.** Find the value of g by using pendulums. **CO-5.** Understand the working of flywheel and its use.
PHYS102TH Electricity, Magnetism and EMT	**CO-1.** Draw the diagram of the problem of Electrostatics and Magneto statics. **CO-2.** Understand the concept of electric field, Magnetic field and electric potential. **CO-3.** Solve the problem of electrostatics by using various principles of physics. **CO-4.** Solve the problems of monopole, dipole and multi poles. **CO-5.** Understand the concepts of EMT and to solve various problems of EMT. **CO-6.** Understand the Maxwell equations and concept of EM waves.
PHYS102PR Electricity, Magnetism and EMT (Lab)	**CO-1.** Draw the diagram of the problem of Electrostatics and Magneto statics. **CO-2.** Understand the working of series and parallel LCR circuit. **CO-3.** Understand the working of solenoids and to study the magnetic field produced by it.
PHYS201TH Statistical and Thermal Physics	CO-1.To understand the basic idea of probability. CO-2. To understand how to distribute n particles in different number of compartments. CO-3. To study the state of maximum probability and its deviation from most probable state CO-4. To understand the concept of phase space and elementary cells. CO-5. To distinguish between classical and quantum statistics.
	CO-6. Use of Quantum statistics for Bosons and Fermions. CO-7. Using the concept of entropy to understand heat death of the universe CO-8. Use the concept of thermodynamic probability to derive entropy. CO-9. To undestand the Maxwell's therodynamic relations and their applications.

PHYS201PR Statistical and Thermal Physics (Lab)	CO-1. Gain the knowledge of Physics through theory and practicals. CO-2. Understand good laboratory practices and safety. CO-3. Using the kwoledge of experiments, able to apply in their life.
PHYS202TH Waves and Optics	CO-1. To understand the concept of simple harmonic motion. CO-2. Able to understand the terms involved in the solution of undamped oscillator, damped oscillator and forced oscillator and their plots. CO-3. To understand the concept of quality factor. CO-4. To understand the basics of wave theory of light. CO-5. To understand the concept of interference of light and different methods to obtained the interference. CO-6. Using the concept of diffraction and polarisation, study the methods for obtaining and their applications in daily life.
PHYS202PR Waves and Optics (Lab)	CO-1. Gain the knowledge of Physics through theory and practicals. CO-2. Understand good laboratory practices and safety. CO-3. Using the kwoledge of experiments, able to apply in their life.
PHYS204SE Computational Physics	CO-1. Write algorithm and flow chart for fortran programming language. CO-2. To use of iterative, decision making and the jump statement. CO-3. Understand the concept of arrays and pointers. CO-4. Able to use the concept graphics in fortran language. CO-5. Able to write documents in letax. CO-6. Able to plot the graph in gnuplot and xmgrace.
PHYS205SE Electrical Circuits and Network Skills	CO-1. Gain the knowledge of Physics through theory and practicals. CO-2. Understand good laboratory practices and safety. CO-3. Develop research oriented skills. CO-4. Make aware and handle the sophisticated instruments/equipments. Co-5. Able to make the knowledge based projects.
PHYS503TH Solid State Physics	CO-1.To understand the basics of crystal structure that is how it is made up of , its smallest unit and how closely they packed. CO-2. Able to understand different methods of diffraction and know the principles of structures determination by diffraction. CO-3. Able to understand the solid materials and their vibrations and interactions in the lattice. CO-4. To understand the concept of phonon and specific heat at low and high temperature. CO-5. Able to distinguish conductor, semiconductors and insulator material and the periodicity in the latttice. CO-6. Know the fundamental principles of semiconductors and be able to estimate the charge carrier mobility and density CO-7. Able to understand the periodicity in Kroning Penny Model. CO-8. Able to understand the the concept of superconductivity and their applications.
PHYS503PR	CO-1. Gain the knowledge of Physics through theory and practicals. CO-2. Understand good laboratory practices and safety. CO-3. Using the knowledge of experiments, able to apply in their life.

PHYS505SE Radiation & Safety	CO-1.To understand the basic concept of atomic structure and properties of the nucleus. CO-2. To study of the interaction of nuclear radiations with matter CO-3. Able to understand the working of various radiation detectors CO-4. To know the radiation safety management CO-5. To enhance the skill based techniques. CO-6. To Make aware and handle the sophisticated instruments/equipments. Co-7. Able to make the knowledge based projects.
PHYS602TH Quantum Mechanics	CO-1. Study the basic principles of quantum mechanics. CO-2. Explain the operator formulation of quantum mechanics. CO-3. Learn the concept of wave function. CO-4 Appreciate the Schrodinger equation and their applications. CO-5. Understand the role of uncertainty in quantum physics. CO-6. Explain the spectrum of H-atom. CO-7. Understand Zeeman effect. CO-8. Able to see the effect and LS and JJ coupling on spectrum of H-atom.
PHYS602PR	CO-1. Able to solve the s-wave Schrodinger equation for the ground state and the first excited state of the hydrogen atom CO-2. Able to perform Electron spin resonance experiment and determine g-factor
PHYS607SE	CO-1. Describe sources and uses of energy. CO-2. Define renewable and non-renewable energy. CO-3. Provide examples of common types of renewable and non-renewable resources. CO-3. Understand and explain general ways to save energy at a personal, community and global level. CO-4. Understand and explain, in general terms, how passive solar heating, hydropower and wind power work. CO-5. Describe some general characteristics of solar power, hydropower and wind power. CO-6. Understand the benefits and disadvantages to using renewable resources.

BSc with Zoology

Programme Outcomes

1. Develop a positive attitude of the students towards scientific knowledge and sustainable development

2. Knowledge of animal diversity, its importance, its threats and conservation methods.

3. Knowledge of basics of existence of life, significance of evolution and ecology.

4. Relate the understanding of different fields of Zoology and basic sciences.

5. Awareness and develop basic experimental skills, observation in the field and biological techniques used for scientific research.

Program Specific Outcomes for Zoology

Knowledge of zoology and its branches makes one capable to identify different animals belonging to different groups and use it for benefit of mankind. In the graduate level, a basic foundation is constituted in the students for better understanding of the zoology specific fields such as genetics, molecular biology, animal physiology, entomology, fish and fisheries. In fields like parasitology, medical entomology and applied zoology, we get knowledge of different disease causing organisms and their control measures.

Course Outcomes

Courses		**Outcomes** After completing these course student will have the knowledge of;
B.Sc. 1st year	Animal Diversity ZOOL 101	CO.1 classification of non chordates and chordates with examples
B.Sc. 1st year	Comparative Anatomy and Developmental Biology of Vertebrates ZOOL 102	CO.2 differences in different physiological systems and embryological development in vertebrates
B.Sc. 2nd year	Physiology and Biochemistry ZOOL 201	CO.3 different human physiological system and metabolic processes; structure of biomolecules and molecular mechanisms of various metabolic processes such as respiration.
B.Sc. 2nd year	Genetics and Evolutionary Biology ZOOL 202	CO.4 understanding of basic concepts of heredity and variation in the organisms, also provides information about causes of various genetic abnormalities; different evolutionary events
B.Sc. 2nd year	Medical Diagnostics ZOOL 203	CO.5 various bio medical diagnostic techniques such as CT scan, MRI and X-rays
B.Sc. 2nd year	Apiculture ZOOL 204	CO.6 culturing of the honey bees, their social life, techniques involved in apiary and different bee diseases
B.Sc. 3rd year	Applied Zoology ZOOL 301	CO.7 usefulness of organisms and their benefits to mankind as well as disease causing organisms which spread various diseases like malaria, dengue and sleeping sickness etc
B.Sc. 3rd year	Sericulture ZOOL 303	CO.8 culturing and rearing of silk worm for the production of silk
B.Sc. 3rd year	Reproductive Biology ZOOL 302	CO.9 human reproductive systems and related mechanisms and various birth control methods
B.Sc 3rd Year	Aquarium Fish Keeping ZOOL 304	CO.10 aquatic life of fishes and their culturing, production and transportation and different fish diseases

BA with Economics

Program outcomes

After completing the graduation with economics the students will be able to:-

Po- 1 : understand the economics behaviour of the consumer and producer of the society.

Po-2 : understand the interdependence between the economics and other optional subject.

Po-3 : serve the society by being good and responsible citizen.

Po-4 : serve the society by holding the charge as an officer in the govt. services.

Po-5 : Get the employment opportunities in the different fields skilled semi-skilled.

Po-6 : Adopt and apply socio- economic value from the different courses.

Po-7 : Apply the theoretical knowledge into behavioural terms in their lives.

Po-8 : Acquire and apply the skills from the skill enforcement courses.

Program specific outcomes

After completing the graduation with economics the students have specific knowledge/skill and learning, viz.

PSO-1: To find out the optimum or best situation for the consumer and producer under different constrains.

PSO-2: The student will be able to know about the different economic activities in the Indian Economy.

PSO-3: The students can be differentiating between economic and non- economic activities.

PSO-4: The students will be able to understand the difference between the Micro and Macro economies.

PSO-5: The student will understand the process of govt. Budget and different terminologies thereof.

PSO-6: The student will able to carry out the economic survey of their village and localities.

PSO-7: The student will able to go for higher education in the field economics.

PSO-8: The advanced learners will be able to complete the graduation level competitive test of agricultural officer, Indian economic services (IES).

PSO-9: The student will able to different economic problems, their causes and probable solution.

Course outcomes

1 Principles of microeconomics-1(ECONA101)

2 Principles of microeconomics-2(ECONA102)

3 Principles of macroeconomics-1(ECONA201)

4 Principles of macroeconomics-2(ECONA202)

5 Indian Economy (ECONA301)

6 Economic History of India (ECONA302)

7 Economy of Himachal Pradesh (ECONA303)

8 Development Economics (ECONA305)

9 Economics of Rural Development (ECONA204)

10 Demography (ECONA206)

11 Public finance (ECONA310)

12 Money and Banking (ECONA311)

Co-1 To know the problems of scarcity, different theories of consumer and producer equilibrium.

Co-2 The equilibrium of firm under perfect competition, Monopoly and imperfect competition and also different theory of factor prices.

Co-3 To know and calculate national income and different related concepts. The employment determination by classical and Keynesian money and banking.

Co-4 To drive accelerator and multipliers and understand their working, inflation causes and measure to control, about IS-LM curves and balance of payment (BOP).

Co-5 To know about the different consumer concept and consumer activities of Indian Economy.

Co-6 The student will we able to understand the chronological evolution and development of different concept, and theories in economies.

Co-7 The student can understand section wise economies of Himachal Pradesh viz agriculture, industry, service and economic infrastructure of HP.

Co-8 The student will we able to distinguish among different concept of development, factors responsible for development or under development of an economy.

Co-9 The student can understand different factor of rural area, the specific economic problem and solution for these problems.

Co-10 The student can know and understand different concept of demography, theories of demography migration and role of population in economic growth.

Co-11 The student will we able to know about theories of public finance govt. budget and its components.

Co-12 The student will we able to know and understand money its function, banking system, central bank, marketing policy and financial market.

BA with English

Programme outcome

After completing BA with English, students have various avenues to pursue their career goals. Some of them can be enumerated as under:

1. To go for higher education.
2. To pursue a career in Journalism.
3. To go for B.Ed. to become a school teacher.
4. To prepare for all competitive examinations.
5. To opt for a career in Electronic and Print media.

6. To work for NGOs as a writer.
7. To act as an anchor or host in various events.

Programme Specific Outcomes:

Soft Skills

The students are not only motivated to learn facts and to score good marks in exams but also to sharpen their soft skills so that they can manage their emotional intelligence in various situations for better observance and reaction. Soft skills also make them perform well in interviews, group discussions and public speaking. They develop the sense and need of self awareness and self regulation that becomes crucial in adaptability and problem solving.

Course Specific Outcomes:

Creative Writing, Book and Media Reviews

This course helps students develop their creative faculty of mind and make them identify, analyze, interpret and describe values and themes that appear in literary and cultural texts. They become dexterous in putting ideas in socio-political contexts and to frame their arguments and narratives effectively. These skills open various career routes for students such as writing books/magazines/journal articles/film reviews etc., becoming part of NGOs and supporting them with writing skills, playing the role of an anchor in various programmes, writing narratives and dialogues for films/theatre/serials etc.

Outcomes of various courses/ Programmes:

1) ENG CE 101 English-1 Core English (Compulsory) for B.A. and B.Com. And
2) ENG CE 201 English-11 Core English (Compulsory) for B.A. and B.Com.

B.A. English (Compulsory) courses curriculum have been designed to impart basic knowledge about English language and Literature. These courses are inclusive of genres such as Poetry, Prose, and story. These courses are elementary and practical introduction to the analytical and terminological distinctions that are relevant to the study of the structure of English words and sentences. Topics include: Word structure and word-formation, lexical and phrasal categories, grammatical functions and semantic roles, coordination and subordination, clause types, tense and aspect, mood, information structure. All classes will involve practical analysis of linguistic material.

3) ENG DSC102/ENG HONS

DSC-1A English Literature-1 (Essays, Stories and Poems)

4) ENG DSC103/ENG HONS GE 102

DSC-1B English Literature-2 (Poems, Short-Stories and Essays)

5) ENG DSC 202/ENG HONS GE 203
DSC- 1C British Literature (Play and Novel)

6) ENG DSC 203/ENG HONS GE 204
DSC-1D Literary Cross Currents

Courses from 03 to 06 designed to give a student the following insights:

A. identifies and articulates the main themes in the text by discerning ideas and issues that recur throughout the text

- analyzing how plot, character, setting and atmosphere, and style synthesize to create meaning
- making connections between literary texts and their knowledge of self, the world, other texts and other readers

- exploring what texts reveal about their writers' beliefs and perspectives

B. recognizes the significance of the contexts (e.g., cultural, historical, social, economic, political) in which texts are written, in shaping the texts' main concerns

C. consider the ways in which texts explore socio -cultural practices, beliefs and values in relation to the human condition

7) ENG AEEC/SEC 204
AEEC/SEC - 1: Creative Writing, Book and Media Reviews

This course designed to give students the knowledge of literary terms and students build on connections between their literary text and other texts (e.g., poems, short stories, novels, and films)

8) ENG AEEC/SEC
205 AEEC/SEC-2
Translation Studies and Principles of Translation

By the end the student will read the following:

Definition of Translation—translating from source language to target language

Purpose of Translation—Translation as a literary, cultural, and knowledge bridge, self-other interaction &

Approaches to Translation:

1. Domestication: Readability in the target language
2. Foreignisation: Faithfulness to the source language

9) ENG AEEC/SEC 301

AEEC/SEC-3 Technical Writing

By the end the student will be able to:

Prepare Manual, Memorandum, Agenda, Minutes of a Meeting, And PowerPoint Presentation & also read the followings:

Basic Research Methodology

Project Report

a) Format
Margins
Headings
Indentation
Pagination
Type Face and Fonts
Common Abbreviations &

Data Analysis

(i) Qualitative Interpretation

(ii) Quantitative Interpretation

10) ENG AEEC/SEC 302

AEEC/SEC-4 Business Communication

Here students learn the Basic Forms of Communication like:

Communication Models and Processes: Linear, Transitional and Interactive

Effective Communication

Principles of Effective Communication

Formal and Informal Communication

Barriers and Gateways to Communication

Practices in Business Communication

- Group Discussion
- Mock Interview
- Seminars
- Individual and Group Presentations

11) ENG DSE 303 DSE –1A Soft Skills

This course highlights the importance of soft skills

Listening Skills:

Comprehending Retaining, Responding, Barriers to Listening, over, coming Barriers to Listening

Teamwork: Working Cooperatively

• Contributing to groups with ideas, suggestions, and effort

• Sense of Responsibility

• Healthy respect for different opinions, customs, and Individual preferences Emotional Intelligence:

Characteristics of Emotional Intelligence:

• Self-Awareness

• Self-Regulation

• Motivation

• Empathy

• Social and Cultural Sensitivity

12) ENG DSE 304

DSE-1B Academic Writing and Composition

The course gives the following details:

Descriptive

Analytical

Persuasive

Critical

13) ENG GE 306 GE-2 Contemporary India: Women and Empowerment

Key Concepts of the course are:

Sex and Gender, Socialization,

Discrimination - Gendered and Sexual, Stereotyping,

Feminism, Patriarchy, Femininities and Masculinities, Transgender.

BA with Geography

PROGRAMME SPECIFIC OUTCOME

On the completion of B.A. with geography students are able to:

1. Serve as a geographer
2. Work as a teacher in School College.
3. Serve as a conservator in the department of Forest and Soil
4. Work in Disaster Management authority of District, state and National level.
5. Serve as cartographer in map making division of the Government.

6. Work in NGO`s in the field of Urban Planning, Rural development and environmental management.
7. Prepare for competitive exams like IAS, HAS and many more.
8. Work in the population research centres of different level.
9. Work in the field of forest conservation.

COURSE OUTCOMES 1

PHYSICAL GEOGRAPHY (GEOGP101CC)

On the completion of the course the students are able to:

1. Understand the meaning, nature, scope and fundamentals of Physical Geography.
2. Understand the Solar system and its functioning.
3. To examine the origin of the earth scientifically.
4. Understand and recognize the rock types and their formation.
5. Evaluate and understand the concept of cycle of the erosion.
6. Understand, explain and examine the process of weathering and internal structure of the earth.
7. Understand, explain and examine the structure and composition of atmosphere and various phenomenon occur in it.
8. Understand the mechanism of hydrological cycle.
9. Understand the phenomenon of Tides and oceanic currents.

2. GENERAL CARTOGRAPHY (GEOGP102CC)

On the completion of the course the students are able to:

1. Understand the historical background, meaning, nature, and scope of Cartography.
2. Understand the map, its necessity, classifications and significance.
3. Understand the different units of measurement through making of scales practically.
4. Understand the map projection, their classification and preparation of maps with the help of these projections.
5. Construct map projection of cylindrical, conical and zenithal types.
6. Understand the statistical representation of the Data by using line graphs and bar diagrams.
7. Understand the art of construction of climograph, hythergraph and different types of maps like Dot Map Isopleth Map and Choropleth Map.

3. HUMAN GEOGRAPHY (GEOGP201CC)

On the completion of the course the students are able to:

1. Understand the nature, scope and major subfields of Human geography.
2. Understand and the origin and distribution of races of mankind in the world.
3. Understand the major cultural realms of the world.
4. Understand and examine the causes of unequal distribution and density of the population.

5. Understand the demographic transition theory.
6. Understand, examine and evaluate the types and patters of rural and urban settlements.
7. Understand the process of Urbanization in the world.

4 .ENVIRONMENTAL GEOGRAPHY (GEOGP202CC)

On the completion of the course the students are able to:

1. Understand the meaning, nature, scope and fundamentals of Environmental geography.
2. Understand the structure and functions of ecosystem.
3. Understand, examine and evaluate the man and environment relationship along with the concepts of environmental determinism and possibilism.
4. Understand , examine and evaluate Biomes
5. Understand, examine and evaluate environmental Problems.
6. Understand, examine and evaluate environmental protection Act and Environmental Policies of India.

5. REGIIONAL PLANNING AND DEVELOPMENTY (GEOGP203 SEC)

On the completion of the course the students are able to:

1. Understand the concept, need and types of regional Planning and methods of delineation of planning regions
2. Understand, examine and evaluate the regionalization in India.
3. Understand , examine and evaluate the agro ecological regions of India
4. Understand, and evaluate the Growth Pole Theory and Core Periphery model.
5. Understand, examine and evaluate the development initiative programmes in India like ITDP, IWDP, BADP and Damodar Valley Corporation (DVC).

6. REMOTE SENSING AND GPS (GEOGP204 SEC)

On the completion of the course the students are able to:

1. Understand the concept of remote sensing , types and various platforms.
2. Understand, examine the aerial photographs and geometry of the aerial photography.
3. Understand, EMR and interaction EMR with the atmosphere and earth surface and use of EMR in remote sensing
4. Understand the satellite sensors of LANDSAT and IRS.
5. Understand, examine and evaluate the visual interpretation of remote sensing images.
6. Understand the concept and use of GPS.

7. GEOGRAPHY OF INDIA (GEOGP301-1DSC)

On the completion of the course the students are able to:

1. Understand and examine the location and major physiographic divisions of India.
2. Understand, examine and evaluate the climatic factors and climate of India.
3. Understand, examine and evaluate the Soils of India.

4. Understand, examine and evaluate the population and its attributes like: distribution, density, literacy and sex ratio in India.
5. Understand, examine and evaluate the settlements types and patterns along with problems of Urbanization in India.
6. Understand, examine and evaluate the power, agricultural and industrial resources in India.

8. ECONOMIC GEOGRAPHY (GEOGP303-2DSC)

On the completion of the course the students are able to:

1. Understand, the nature and scope, approaches of economic geography.
2. Understand, examine and evaluate the fundamental theories of Economic Geography.
3. Understand, examine and evaluate the various kinds of primary activities.
4. Understand, examine and evaluate the major secondary activities along with the major industrial regions of the world
5. Understand, examine and evaluate the tertiary and quaternary activities.
6. Understand major oceanic routes and International trade of the world.

9. DISASTER MANAGEMENT (GEOGP304-1DSC)

On the completion of the course the students are able to:

1. Understand the concept of hazards, risk, vulnerability and disaster.
2. Understand, examine the causes, impacts and distribution of landslide, earthquake and cyclones.
3. Understand human induced disasters like forest fires and road accidents
4. Understand, examine and evaluate the mitigation process.
5. Understand, examine and evaluate the NDMA and Disaster management at community level
6. Understand, do`s and dont`s during the disaster.

10 GEOGRAPHIC INFORMATION SYSTEM (GEOGP301 SEC)

1. On the completion of the course the students are able to:
2. Understand, the meaning and scope of GIS along with its history.
3. Understand, examine and evaluate data structure: vector and raster.
4. Understand, examine and evaluate georeffrencing and Editing
5. Practical exercise on land use land cover mapping through GIS software.

11. FIELD TECHNIQUES AND SURVEY BASED PROJECT REPORT (GEOGP302 SEC)

On the completion of the course the students are able to:

1. Understand the role, value and importance of the field work.
2. Understand, examine and evaluate the various methods of data collection.
3. Understand, examine and evaluate the questionnaire.

4. Write a project report on the basis of field visit and data collected and analysed.
5. Work in any social research project in future.

12. SUSTAINABILITY AND DEVELOPMENT (GEOGP 306-GE)

On the completion of the course the students are able to:

1. Understand the concept of sustainable development.
2. Understand, examine and evaluate the sustainable development goals of the millennium.
3. Understand, examine and evaluate the national strategies and international experience of the development.
4. Understand the concept of inclusive development with special reference to health and education.
5. Understand development policies and programs.

Department of Physical Education

Program Outcomes

- Physical education will help the students to apply the knowledge of basic sciences which will be relevant and appropriate to education and sports sciences resulting in solution of complex sports related issues and problems.
- The curriculum provides with the ability to identify, define the requirements, formulate and analyse complex physical education and sports sciences related problems to reaching verified conclusions.
- Learn to design, implement, and evaluate process or program to meet desired needs in the field of physical education and sport sciences.
- Ability to work efficiently and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group and or a team in the interests of a common goal and work capably as a player.
- Understanding of professional, ethical, legal, social issues and responsibilities in teaching, learning and evaluation. Avoiding unethical behaviour and promoting fair play.
- Discouraging the use of drugs for performance enhancement. Promoting sports for the overall development of personality of the participants.
- Equip the students with the ability to communicate effectively among a range of audiences/ stakeholders.
- Prepare the students to analyse the local and global impact of physical activities and sports and games on individuals, organizations and society.
- Acknowledgement of the need for and an ability to engage in ongoing professional development.

Program Specific Outcomes

Physical education is not only concerned with the physical outcome that increase fromparticipation in physical activities but also the development of knowledge and attitudeconducive to lifelong learning and participation in activities. The curriculum and syllabushave been structuredby the Himachal Pradesh University in such a way that each of the course meets one or more of the outcomesrelated to the skills, knowledge, and behaviours that students acquire as they advance through the program. The Program Specific Outcomes of Physical Education are:

- To understand the importance of physical education by studying the history.
- To help the students to know more about the human body which helps for higher level of sports achievements and adopt training method.
- To know about health aspects and maintain good health and fitness for higher achievements in sports.
- Maintenance of fitness for optimal health and well-being.
- The acquisition and refinement of motor skills.

- To equip the students with the knowledge domain of body response to different types of exercises.
- Attainment of knowledge and the growth of positive attitude towards physical activity and sports.
- To understand the values and ethics of life and personality development.
- To learn about the role and responsibilities of coaches and officials in organization of games and maintaining the ethics, spirit and integrity of the games and sports.

Course Outcomes

S.No.	Course	Outcome
1	Introduction to Physical Education	· To understand the meaning of physical education. · Understand the foundation and historical background of physical education. · To know about the organization, need and significance of intramurals and extramurals. · To learn the career opportunities and avenues available in the field of Physical Education and Sports:
2	Olympic Movement of Organization of Tournaments	· To learn history of Olympics and physical education. · To know the contribution of various agencies, awards and scholarships. · To understand the basics of drawing various types of fixtures.
3	Athletics & Game (Badminton & Table Tennis)	· To learn the marking of 400m standard track. · To learn the technique of Sprinting, long Jumpand Shotput. · To know basics of badminton and table tennis.
4	Human Anatomy & Physiology	· To know the role of exercise physiology on sports performance. · To know about the function of internal human body. · To know about the Effects of exercise on different system of human body. · Able to test the Physiological Parameters. · To learn the role, construction and functions of energy in human body.
5	Sports Psychology	· Understand the importance of psychology and sports · psychology. · Understand the theories and laws of learning. · Importance of perception and motivation. · Types of anxiety, aggression and personality.

6	Sports Training	· To know the importance of scientific principles of sports training · To know about various technique for development of physical and motor fitness parameters. · To learn about the role of tactics and strategy for sports performance
7	Sports Medicine, Physiotherapy and Rehabilitation	· To understand the basics in preventing sportsinjuries and providing initial care for injured athletes. · Demonstrate the basics of sport first aid during and after game situation. · To understand the role of ergogenic aids · To learn the role of NADA and WADA in control of doping at national and international level respectively.
8	Athletics & Game (Boxing & Hockey)	· To learn the technique of, High Jump and Triple Jump. · To understand the fundamentals of boxing and hockey.
9	Recreation	· To learn the aims, objectives and importance of Recreation. · To understand the Responsibilities of a recreational manager. · To know about camping, picnic and their educative values. · To explore the recreational and adventurous avenues in Himachal Pradesh
10	Officiating & Coaching	· To know the introduction, principles and importance of officiating and coaching in games and sports. · To understand the duties of a coach and an official in pre, during and post-game situations. · To understand the qualities and qualification of an efficient coach and official. · To know the role of impartial officiating and coaching in maintaining integrity and values of sports.
11	Specialization in Volleyball/ Kabaddi/ Football	· To learn the fundamentals of major games. · To learn the rules of the games for efficient officiating. · To know the various drills for optimum skill development.

12	Specialization in Athletics	· To know the historical developmental of athletics during Ancient Olympics and Modern Olympics games. · To understand the need, importance and procedure of Warming-up and Cooling down. · To know the brief background, technique, training and important motor components ofthe track and field events. · To learn the role of AFI and IAAF in organization of various national and international tournaments.
13	Health Education & Nutrition	· To Know the role of health education in physical education · To know about the health service and personal Hygiene of Students · To understand the importance of rest, sleep and relaxation. · To know about significance of eating right nutrition. · To know about various communicable and non-communicable disease.
14	Yoga	· To understand the eight limbs of yoga. · To know the need and importance of different types of yoga. · To understand the correct procedure of doing asanas · To understand the correct procedure of doing pranayama. · To gain knowledge about kriyas. · To become familiarized with basic level asanas, pranayamaand mudras.

Enviornmental Science (AECC)

The Department of Environment Science aims to provide quality education related to environment to successfully integrate the principles, values, and practices of sustainable development. The Tbilisi Declaration (1977) also anticipated the need for environmental education by incorporating educational action with legislation, policies, measures of control, and the government's decisions. Environmental education is a critical tool for ensuring a sustainable future by acquiring knowledge, skills, attitudes, and values required to take appropriate actions for mitigating the effects of environmental degradation.

Swami Vivekanand Govt. College Ghumarwin offers a basic course on Environment Science at undergraduate level as a part of Ability Enhancement Compulsory Course (AECC) in pursuance to decision of Hon'ble Supreme Court of India for the compulsory environment education in universities and its affiliate colleges. Furthermore, the environment is a vital topic for civil services, UGC-NET JRF and other competitive examinations. The primary aim of the department is to foster environmental awareness related to climate change, environment pollution, waste management, conservation of biological diversity, disaster management and sustainable lifestyle.

The sustainable lifestyles provide ways of living, social behaviors and choices that minimize environmental degradation by judicious use of natural resources. The course outcome also unravels the complex relationship between humans and nature through eco-critical thinking that also strengthens the guidelines for every citizen of India as Fundamental Duties in "Article 51A (g) to protect and improve the natural environment and have compassion for all living creatures".

BA with "Journalism and Mass Communication"

Journalism and Mass Communication is a broad subject which includes study of Print Media, Electronic Media, Digital Media, Advertising, Public Relations and Film Studies and each medium has huge opportunities for the students to make their career not in govt. sector, private sector but also they can start their own media. Community and Alternative Media is one of such field of study which provide such opportunity to the young aspirants. After the completion of degree course in college, students can go for specific course in each field and following are some of the career options they can choose in future where teaching is one option with them.

Course Name	**Course Specific Outcome**	**Different Careers Avenues**
Principles of Communication (BJMCPAC101)	----------	----------
Introduction to Radio and TV (BJMCPAC201)	Career in Electronic Media: All India Radio and Doordarshan (Prasarbharti) Private FM & TV channels.	Director Producer Producer Radio Announcers Radio Jockey Radio Engineers Radio Program Producer, Director Program Executive Transmission Executive Radio Program Editors Floor Manager
Introduction to Advertising and Public Relations (BJMCPAC301)	Career in Public Relations Career in Advertising	APRO, DPRO, Public Information Officers, Public Relation Officers in Business Houses, Political Parties and political personnel, Celebrities and PR Agencies, Event Manager
		Marketing Manager, Sales Person, Voice Over Artist for Advertising, Copy Writer for Advertisers
New Media Communication (BJMCPAC401)	Career in New Media Industry	Professional Bloggers, Digital Content Writer, Professional Writer for Online News Portals, Web Journalist.

Introduction to Photojournalism (BJMCPAD601P)	Career in Photography	Cameraperson, Photojournalist, Freelance Photographer, Wild Life Photographer, Science and Technology Photographer, Advertising and Film Photographer, Digital Photographer.
Reporting, Editing and Feature Writing (BJMCPAS301P)	Career in Print Media i.e. Newspaper, Magazine.	Reporter, Freelancer, Editor, Columnist.
Communication Skills (BJMCPAS501P)	Career in different Counseling Agencies and Departments.	Career Counselor, for personality development counselor.
Film Appreciation Skills (BJMCPAS601)	Career in Film Industry	Script Writer Film editor Film Review Writers Screen Play Writer Film acting

Reeta Kumari

Department of Journalism.

स्वामी विवेकानन्द राजकीय महाविद्यालय घुमारवीं ज़िला बिलासपुर हिमाचल प्रदेश
हिंदी विभाग
प्रोग्राम आउट कम बी. ए. हिंदी

Hind -101 प्रयोजनमूलक हिंदी	विद्यार्थियों को सरकारी एवं अर्द्ध सरकारी, सामाजिक, व्यावसायिक आदि क्षेत्रों में होने वाले विभिन्न पत्राचार व व्याकरण की व्यावहारिक जानकारी प्राप्त हुई।
Hind -102 हिंदी साहित्य का इतिहास	विद्यार्थियों को हिंदी साहित्य के आदिकाल ,भक्तिकाल व आधुनिक काल की विभिन्न परिस्थितियों,प्रवृतियों,प्रमुख कवियों का परिचय तथा विभिन्न गधविधाओं के विकास की जानकारी प्राप्त हुई।
HInd -103 मध्यकालीन हिंदी कविता	विद्यार्थी कबीर ,तुलसीदास ,सूरदास,मीराबाई,भूषण ,बिहारी व रसखान के काव्य सौन्दर्य व वर्तमान समय में उनके साहित्य की प्रासंगिकता को समझने में सक्षम हुए। कबीर, तुलसीदास जैसे कवियों को पढ़ कर विद्यार्थी अपने समय की समस्याओं व समाज की विसंगतियों को समझने में सक्षम हुए। विद्यार्थियों में साम्प्रदायिक सदभाव को बढौतरी हुई।
HIND 201 अनिवार्य हिंदी (compulsory)	विद्यार्थी हिंदी के चारों काल से परिचित हुए तथा उस समय के प्रमुख कवि व लेखक की कविता ,कहानी व निबंध के माध्यम से बाल मनोविज्ञान ,अच्छे नागरिक की आवश्यकता ,स्त्रियों की स्थिति, साम्प्रदायिकता ,व्यवस्था व समाज में इंसानी रिश्तों के क्षरण के कारणों को समझने में सक्षम हुए।
Hind-202 हिंदी आधुनिक कविता (DSC-ID)	विद्यार्थियों को आधुनिक युग के प्रमुख कवि भारतेन्दु हरिश्चंद्र से लेकर प्रगतिवादी कवि नागार्जुन तक के जीवन परिचय ,काव्यगत प्रवृतियों तथा कविताओं के माध्यम से अभिव्यक्त आम जनमानस की मानसिकता का परिचय प्राप्त हुआ।
HInd-203 हिंदी गद्य साहित्य (DSE-IC)	विद्यार्थियों को उपन्यास,कहानी व निबंध के माध्यम से मानव जीवन व समाज में व्याप्त बिभिन्न समस्याओं व विसंगतियों का भावनात्मक स्तर पर बोध प्राप्त हुआ।
HInd-204 कार्यालयी हिंदी (SEC-1)	विद्यार्थियों के भाषा व भाषा के विविध प्रकार ,हिंदी भाषा के उदभव, विकास तथा कार्यालयी स्तर पर हिंदी के प्रयोग व कार्यालयी अनुवाद की समस्याएँ,पत्राचार व परिभाविक शब्दावली का यथोचित ज्ञान प्राप्त हुआ।
HInd 206 अनुवाद विज्ञान SEC-2	विद्यार्थियों को अनुवाद की परिभाषा ,उपयोग,विभिन्न प्रकार के अनुवाद व समस्याएँ ,अनुवाद के क्षेत्र में बिभिन्न संस्थाओं के योगदान की जानकारी प्राप्त हुई।
HInd-301 रंग आलेख एवं रंगमंच (SEC-3)	विद्यार्थियों को नाटक ,उदभव,विकास ,प्रकार ,विभन्न प्रकार के नाटक ,प्रमुख नाटककार ,रंगमंच के प्रमुख रूप ,भारतीय व पाश्चात्य नाटक के प्रमुख तत्व तथा रंगमंच के विभिन्न पहलूओं की जानकारी प्राप्त हुई।
HInd-305 लोक साहित्य (SEC-4)	विद्यार्थियों को लोक साहित्य की परिभाषा लोक साहित्य के प्रमुख रूप लोक गीत ,लोक नाटक ,लोककथा ,लोक गाथा के साथ इनके विभिन्न प्रकार व प्रसिद्ध लोकगाथाओं (हिमाचल) का ज्ञान प्राप्त हुआ।
Hind 306	विद्यार्थियों को छायावादी कवियों के बाद प्रमुख कवियों की कविताओं के

(DSE-IB) छायावादोत्तर हिंदी कविता	माध्यम से उस युग की प्रमुख प्रवृतियों व समकालीन बोध की अभिव्यक्ति का ज्ञान प्राप्त हुआ।
Hind307 G.E.-1 आधुनिक भारतीय साहित्य	विद्यार्थी रवीन्द्रनाथ की गीतांजलि ,अरविन्द के अस्तित्ववादी दर्शन ,मार्क्स के मार्क्सवादी दर्शन स्वाधीनता संग्राम व भारतीय साहित्य पर इसके प्रभाव तथा अनंतमूर्ति के संस्कार उपन्यास व विजय तेंदुलकर के " घासीराम कोतवाल" के माध्यम से जीवन के विविध पहलूओं से अवगत हुए।
Hind-308 (GE-2) सर्जनात्मक लेखन	सृजनात्मक लेखन विषय के द्वारा विद्यार्थियों को रिपोर्ताज व फीचर लेखन के विषय सामग्री,सामग्री निर्धारण,लेखन प्रविधि,उद्देश्य,साक्षात्कार व स्तम्भ लेखन,दृश्य सामग्री से सम्बंधित लेखन व पत्रकारिता के क्षेत्र का व्यावहारिक ज्ञान प्राप्त हुआ।

COURSE OUTCOME B.A.MUSIC (VOCAL & INST.)

COURSE

MUSA101-103TH ,102,104PR,201,203TH ,202,204PR, MUSIC801,803TH 802,804PR	विद्यार्थियों को इन कोर्सेज में कियात्मक एवं सैद्वान्तिक पक्ष की शिक्षा दी जाती है। इसके अंतर्गत इन्हें संगीत का प्राभिक ज्ञान जैसे अंलकार आरोह अवरोह संगीत का परिचय और संगीत के प्राचीन ग्रन्थों का ज्ञान थाट और उनसे उत्पन्न राग ,रागों की रचनाएं ,विभिन्न ताल तीन ताल , एक ताल , दादरा, कहरवा, रूपक ताल , झप ताल इत्यादि। लय, लयकारी, थाट जनक राग जैसे कल्याण भोपाली भैरव खमाज काफी रागों का सम्पूर्ण परिचय शास्त्रीय संगीतज्ञों का जीवन चरित जैसे तानसेन पंडित बी0डी0 पुलस्कर पंडित भातखंण्डे उस्ताद जाकिरहुसैन इत्यादि विभिन्न वाद्यों का प्रयोगात्मक एवं सैद्वान्तिक ज्ञान जैसे. सितार तानपूरा तबला हारमोनियम इत्यादि । घरानेदार गायकी एवं घरानों से सम्बन्धित कलाकारों का परिचय एवं उनकी संगीत में देन इत्यादि से परिचित करवाया जाता है।
SEC-MUSIC701.702.703, 704	इन कोर्सेज के अन्तर्गत संगीत के प्रयोगात्मक पक्ष को उजागर किया जाता रहा है जैसे उन्हे तानपूरा हारमोनियम सितार तबला इत्यादि को बजाना एवं उन्हे ट्यून करना सिखाया जाता है और उनके विभिन्न भागों से भी परिचित करवाया जाता है। तबले पर विभिन्न तालों के ठेके जैसे तीन ताल एक ताल कहरवा दादरा और शास्त्रीय संगीत पर आधारित फिल्मी गीतों का परिचय एवं प्रस्तुती । इसके अतिरिक्त लोक संगीत एवं सुगम संगीत की समूह में प्रस्तुति करवाई जाती है। छात्रों को विभिन्न सागीतिक सम्मेलनों एवं दूरदर्शन/आल इंडिया रेडियों इत्यादि में ले जाकर उनकी जानकारी एवं उन पर रिपोर्ट इत्यादि बनवाना और कलाकारों से रूहबरू करवाया जाता है। इसके अतिरिक्त नवीनतम प्रयोगात्मक संगीत में पॉवर प्वांइट प्रैसेन्टेसन द्वारा महान संगीतज्ञों के जीवन पर आधारित लघु फिल्म इत्यादि एवं शास्त्रीय संगीतज्ञों की प्रस्तुतियॉ दिखाकर विद्यार्थियों में शास्त्रीय संगीत के प्रति चेतना एंव रूचि को बढावा दिया जाता है।
GENERIC MUSIC 901TH 902PR	इन कोर्सेज के अन्तर्गत इन्टरफैक्लटी विद्यार्थियों को संगीत के कियात्मक एवं सैद्वान्तिक पक्ष का प्रारम्भिक ज्ञान दिया जाता है। जैसे स्वर,ताल,राग,अंलकार,आरोह,अवरोह,पकड इत्यादि एवं शास्त्रीय संगीतज्ञों के जीवन चरित्र एवं संगीत के क्षेत्र में योगदान से परिचित करवाया जाता है।

Programme Specific Outcomes	वर्तमान मे देश विदेश में युवाओं मे म्यूजिक बैंड बनाने और परफार्म करने का ट्रैड जोर पकडता जा रहा है इस प्रकार के बैडज में वोकल आर्टिस्ट गायक और इस्ट्रूमैन्टल आर्टिस्ट वाद्य यंन्त्र कलाकार दोनो का ही समन्वयन होता है। स्कूलों, कालेजो, और अन्य छोटे स्तरों पर इस प्रकार के सैंकडो हजारों बैडस आज अस्तित्व में आ चुके है । म्यूजिक इंडस्ट्री :– इस उद्योग में कई प्रकार के म्यूजिक आधरित प्रोफेशनलो की अहम भूकिा होती है, इनमें विशेष तौर पर म्यूजिक साफटवेयर प्रोगामर कम्पोजर ,म्यूजिशियन, जैसे कार्यकलापों के अलावा म्यूजिक बुकस की पब्लिशिंग, म्यजिक एलबम रिकार्डिग ,म्यूजिक डीलर,म्यूजिक स्टूडियों के विभिन्न विभागों का उल्लेख किया जा सकता है। टेलीविजन :– मयूजिक एडिटर, साउंड रिकार्डिस्ट , प्रोडक्शन , आर जे0 एवं डी. जे0 म्यूजिक लाइसेंस में ऐसे जानकार और अनुभवी लोगों की जरूत पडती है। स्टेज परफार्मेंस :– म्यूजिक शो शास्त्रीय गायन, वादन,सुगम गायन, वादन, लोक संगीत गायन,वादन एकल एवं समूह टेलीविजन म्यूजिक प्रोग्राम म्यूजिक कम्पीटीशन आर्म्ड फोर्सेज बैंडज , सिंफनी आर्केस्ट्रा,डांसबैड, नाईट क्लब कंसर्ट शो , रॉक एवंज ैज ग्रुप इत्यादि मे भी इनकी भूमिका रहती है । म्यूजिक थेरेपिस्ट :– विकलांगता के शिकार बच्चों और लोगों के अलावा मानसिक तनाव से ग्रस्त व्यक्तियों के उपचार में आजकल संगीत का अत्याधिक महत्वपूर्ण स्थान होगया है। इनके लिए हस्पताल मैन्टल टस्थ सेंटरों नर्सिग होम्स इत्यादि में रोजगार के अवसर हो सकते हैं। टीचिंग :– म्यूजिक टीचर के रूप में स्कूलों कॉलेजों और अन्य संगीत प्रशिक्षण संस्थाओं में भी करियर बनाया जा सकता है इनमें विशेषता प्राप्त टीचर का अत्यधिक महत्व होता है इन विशेषताओं में खासतौर पर म्यूजिक थ्यरी म्यूजिक हिस्ट्री एंड लिटरेचर , म्यूजिक एजुकेशन , म्यूजिकोलोजी,इलेक्ट्रानिक म्यूजिक, कम्पोजिशन अथवा म्यूजिक थेरपी की बात की जा सकती है । इन सब के अतिरिक्त फिल्म इंन्डस्ट्री चर्च म्यूजिक, म्यूजिक अरेंजिंग, म्यूजिक साफटवेयर प्रोडक्शन , म्यूजिक वर्चुअल रिएलटी साउंड एंवायरनमेंट इत्यादि जैसी भी विधाओं में भविष्य बनाया जा सकता है।

BA with Political Science

Program Outcomes

After completion of BA Program students should be able to……

1 students enable to develop academic proficiency in the subfield of understanding Political Science, Colonialism in India and constitutional Democracy, Comparative Government and politics, International Politics, Political theory, Political Thought, Political ideologies.
2 Student enable to develop and able to demonstrate skills in conducting as well as presenting research in political science.
3 Students enable to analyze political and policy problems and formulate policy options.
4 Students enable to discuss the major theories and concepts of political science and its subfields, and also deliver thoughtful and well articulated presentation of research findings.

SPECIFIC OUTCOMES

On completion of BA (POLITICAL SCIENCE) students are able to:

1. Serve as a politician.
2. Work as a teacher in colleges, schools.
3. Serve as political party member, political advisor, and well citizen of India.
4. Can admit to MA Political Science, LLB, MSW.
5. Work in NGOs.
6. Can prepare for competitive exams.

Detail of courses introduced in BA Program.
1 Introduction to Political Theory
2. Indian govt. and politics.
3. Comparative govt. and politics.
4. Introduction to International Relation.
5. Legislative support.
6. Public Opinion & Survey Research.
7. Themes in comparative political theory
8. Democratic awareness with legal literacy
9. Understanding Globalization
10. Conflict and peace building

Program outcomes:
Students enable to develop their academic proficiency. They can find out major scope in academic and non academic arena from the career point of view, the students have a scope in govt. as well as private sectors. Political organizations or govt. sectors like public administration and law. Teaching and lecturing on Political science is another work opportunity.

BA with Public Administration

Programme Outcome

The aims of undergraduate program in Public Administration are achieved by Core (Foundation) Courses Elective (Specialization) Courses and Skill Enhancement Courses (SEC). The Core Courses are essential to provide basic knowledge of a discipline and framed to promote common educational premises for the same. The specialized courses, on the other hand, allow the students to acquire knowledge in various specializations and subject combinations as per the CBCS requirements. The courses are planned in a manner that the generic or foundational courses along with courses focusing on skill with wider range of application during the first years of the undergraduate program. Specialized courses/ Skill enhancement courses prepare students to build professional competence and has been introduced in the second and final year. At present following courses have been started in the subject:-

1. PUBA 101-A: Administrative Theory -Core Course.
2. PUBA 102-A: Indian Administration -Core Course.
3. PUBA 201-A: Administrative Thinkers- Core Course.
4. PUBA 202-A: Development Administration Core Course.
5. PUBA 203-A: Computer Applications and Office Management-Skill Enhancement Course
6. PUBA 204-A: Human Resource and Logistic Management-Skill Enhancement Course
7. PUBA 501: Leadership Styles and Conflict Management-Skill Enhancement Course
8. PUBA 502: Local Governance Discipline Specific Elective Course
9. PUBA 504: Disaster Management- Generic Elective Course
10. PUBA 601: Stress and Time Management- Skill Enhancement Course
11. PUBA 603: Public Finance and Administration-Discipline Specific Elective Course
12. PUBA 604: E- governance Generic Elective Course

Program Learning Outcomes of General Public Administration

The learner who completes three years of the undergraduate program in Public Administration has been provided a Bachelor's degree i.e. BA with Public Administration. The learning outcomes that a student should be able to demonstrate on completion of a degree level program may involve academic, behavioural and social competencies.

Academic Competence

1. Disciplinary knowledge and methods including data analysis and computer literacy.
2. Basic professional skills pertaining to psychological testing, assessment and counseling.
3. Ability to use skills in specific areas related to chosen specialization (e.g. cognitive, industrial- organizational, clinical, and counseling, health, educational, social, community).
4. Ability to relate and connect concepts with personal experiences and using critical thinking.
5. Curiosity and ability to formulate psychology related problems and using appropriate concepts and methods to solve them.
6. Ability to use various e-resources and social media and negotiating with technological challenges.
7. Articulation of ideas, scientific writing and authentic reporting, effective presentation skills.
8. Dealing with conflicting theories and approaches, learning to withstand ambiguities and understanding the limitations of the discipline.

Personal and Behavioural Competence

1. Self-development, health and hygiene, self-regulation skills.
2. Developing positive attributes such as empathy, compassion, social participation, and accountability.
3. Developing cultural and historical sensibility particularly indigenous traditions, socio-cultural context and diversity.
4. Having conversational competence including communication and effective interaction with others, listening, speaking, and observational skills.
5. Appreciating and tolerating different perspectives.
6. Ability to work both independently and in group and dealing effectively with clients and stakeholders, learning the art of negotiation.

Social Competence

1. Collaboration, cooperation and realizing the power of groups and community.
2. Analyzing social problems and understanding social dynamics.
3. Gender sensitization including gender respect, respect for one’s own gender, dealing with gender confusion and gender identity issues.
4. Ethical, social and ecological responsibility including acknowledging the dignity and presence of others, awareness of social order, learning of values and social concern

reflected through activation of social participates (e.g. village surveys, visiting old age homes and spending time with elderly, orphanage community service etc.).

5. Moral and ethical awareness and reasoning involving objective and unbiased work attitude, avoiding unethical behavior such as data fabrication and plagiarism, observing code of conduct, respecting intellectual property rights and being aware of the implications and ethical concerns of research studies.
6. Commitment to health and wellbeing at different levels (e.g. individual, organization, community, society.

BA with Education

Course Outcome

After the completion of these courses students should be able to

Philosophical Foundation of Education	1. Understand the basic concept of education. 2. Understand the individual, social and vocational aims of education. 3. Understand the functions of education. 4. Understand the basic concept of Philosophy. 5. Understand the relationship of Education and philosophy. 6. Understand the contribution of different schools of philosophy (i.e. Naturalism, Idealism & Pragmatism) towards present days of Education. 7. Understand the concept of values. 8. Understand the different methods of inculcation of values.
Sociological Foundation of Education	1. Understand the basic concept of Educational Sociology and Sociology of Education. 2. Understand the sociological determinants of education. 3. Understand the meaning of Social Change and the process of Socialization. 4. Understand the factors that affects the social change. 5. Understand the role of school and teacher in bringing social change. 6. Understand the meaning of school. 7. Understand the need and function of school. 8. Understand the impact of school on community. 9. Understand the concept of culture. 10. Understand the relationship between education and culture. 11. Understand the role of education in cultural development.
Psychological Basis of Education	1. Understand the concept of psychology and Educational Psychology. 2. Understand the different methods of educational psychology. 3. Understand the application of educational psychology in teaching and learning. 4. Understand the concept of growth and development. 5. Understand the concept of individual differences. 6. Understand the concept of intelligence and IQ. 7. Understand the concept of creativity. 8. Understand the concept of learning and factors that affects learning. 9. Understand the concept of motivation.

Development of Education in India	1. Understand the concept of Vedic, Buddhist and Islamic Education. 2. Understand the development of Education in Pre-Independence Era (Macaulay's Minutes1835, Wood Dispatch 1854 & Hunter Commission 1882). 3. Understand the development of education in post Independence period

	with special reference to University Education Commission 1948-49, Secondary Education Commission 1952-53 & Kothari Commission 1964-66) 4. Understand the development of Education in Modern India.
Yoga	1. Understand the concept of Yoga. 2. Understand the contribution of Yoga in human development. 3. Understand the different types of yoga. 4. Understand the contribution of yoga towards peace and harmony.
Life Skills Education	1. Understand the concept life skills. 2. Understand the role of life skills in health promotion. 3. Understand the importance of life skills in growing mind. 4. Understand the methods and techniques of developing life skills.
Pedagogy of Education	1. Understand the concept of pedagogy. 2. Understand the different types of pedagogical approaches 3. Understand the pedagogical skills' 4. Understand the teaching methods and techniques. 5. Understand the learning resources.
ICT in Education	1. Understand the concept of ICT with its role in teaching learning process. 2. Understand the challenges in integrating ICT in school education. 3. Understand the concept of communication and also knows about the barriers of communication. 4. Understand the technologies for classroom. 5. Understand the new trends in ICT.
Educational Management	1. Understand the concept of educational management. 2. Understand the approaches of management. 3. Understand the ways of effective leadership in educational management. 4. Understand the management of teaching learning process. 5. Understand institutional planning and management.
Inclusive Education	1. Understand the concept of inclusive education with its importance and objectives. 2. Understand the children with special needs. 3. Understand the techniques and aids for the education of children with special needs 4. Understand the policies and programs of inclusion.
Education for Peace	1. Understand the fundamental of peace education' 2. Understand the role of teacher as peace builder. 3. Understand the agencies of peace education. 4. Understand the philosophical resources of peace education 5. Understand the methods and approaches of peace education
Educational Thoughts and Practices	1. Understand the educational thoughts of western philosophers i.e. pestalozzi, John Deway & Bertrand Russel Understand the basic contribution of prominent Indian philosophers to education 2. Understand the Rabindranath Tagore's ides on education. 3. Understand the contribution of Radha Khrisnan to the field of higher education. 4. Understand the contribution of Plato to the field of education

BA with Sociology

Programme Outcomes

Introduction to Sociology (SOCL-101)	After successful completion of course students will be able of demonstrate knowledge of core sociological concepts. Students will be able to think sociologically and identify relation between social structure, interact identities and inequalities.
Society in India (SOCL -102	Students will get acquainted with structure and changing nature of Indian society. It also makes them aware about various segments and unity of Indian society.
Sociological Theories(DSC-IC) (SOCL-201)	Students get acquainted with sociological thought of Pincers of sociology. It further helps students in developing a critical thinly. It will further help them to analyze and evaluate how thieves are impacted by social and historical conditions.
Techniques of social Research (SEC-1) (SOCL-203)	It will help in implementing scientific approach in students. It will further impart basic research skills students get acquainted to various techniques that can be used in social science for research.
Sociology of averment (SEC-2) (SOCL-204)	This course helps students in analyzing implications of environmental change for people communities flora and wildlife. Students will be able to examine complex relations between people nature and natural environment.
Methods of Sociological enquiry (DSC- 2C)(SOCL-202)	After completion of course students will have the understanding of role of qualitative and quantitative methods in sociology. They will be able to identify basic methodological approaches and disvalue general role of methods in building sociological knowledge.
III years Population Studies (SEC-3)	On successful completion course students will explain demographic changes in world and India. They will be able to apply demographic theories and concepts to study present and past patterns of population.
THEORY AND PRACTICE OF DEVELOPMENT(SEC-4)	Students will get acquired with conceptual meaning of development. The will learn the difference between social and economic growth and how the parameters of book are important in development .
Marriage Family kinship (DSE-IA)	Students will become familiar with concepts and theories related to marriage, family and kinship. They will further learn about the changing patterns of marriage an kinship.
Social Stratification	This will help students to know how the society is divided into various strata's based upon caste, class, gender , religion and ethnicity. They will also get acquainted with theories of social stratification.
Polity and Society in India (GE-1)	This subject will help students to understand the concept of state, nation and civil society. It will also help them to evaluate the impact of religion and caste in Indian Politics.
Economy & Society (GE-2)	This subject enables students to understand the process of social and economic inequality. It will also help them to describe how social values and economic trade- offs impact public and private properties. They will also get acquainted to socioeconomic theories which will help them in developing critical thinking.

BA with Tourism and Travel Management

Program Outcomes

Specific Outcomes: On completion of BA in Tourism &Travel Management students are able to work in and as:

Government sector

- Manager in Tourism Boards (State as well as Central)
- Government Tourist information officer
- Government run Hotels
- Tour Guides and Escorts
- Airlines
- Transportation services

Private sector

- Travel agencies
- Tour operators
- Travel consultants
- Airlines
- Airports
- Visa and travel document service firms
- Tourist information officer
- Cruise lines
- Tour Guide
- Customer service manager
- Event manager
- Tour manager
- Tourism promoter / marketer
- Work as a teacher in colleges, schools/Universities

Entrepreneurship skills

- One may start own travel agency,
- Ticketing firm
- Tour agency
- Travel consultancy
- Tourist information service

Education

- PG courses such as MA, M.Sc. Master of Tourism Studies
- Master of Tourism Administration
- MBA in Travel and Tourism management.

List of courses introduced in BA -Tourism and Travel Management

Introduction of Travel and Tourism Management

Learning Outcome: The students would be equipped with diverse historical knowledge like chronology, places, events, experiences and narratives as well as understanding the idea of Travelling and Tourism in historical context. Students would be able to find the job opportunity in the field of cultural studies & practices.

Tourism Resources of India

Learning Outcome: Helps in better understanding of Indian tourism resources and its relationship with development of tourism industry also helps in the

preparation of competitive exams from tourism stream. In long run, this course facilitates their comprehension of the tourism industry better and further policy making of the same.

Travel Agency & Tour Operation

Learning Outcome: The students gain knowledge about the operations and modus operandi of the travel agency and Tour operation business units, which are working as the intermediaries in the tourism industry and provide an understanding of the procedures of setting up a travel agency and its functions. Students would be able to find the job opportunity in the Travel agencies.

Tourism Marketing

Learning Outcome: Understand the basic knowledge of the concepts of marketing like needs, wants, demands, market and marketing. Explain the concept of market segmentation & need for market research in tourism industry. List the phases of a destination according to the life cycle theory. Apprehend the ingredients of marketing mix including its expanded versions. It also gives an insight into pricing methods - the factor influencing the pricing decision, pricing objectives and pricing policies. Students would be able to know how to market and promote the tourism products.

Tourism Organizations & Associations

Learning Outcome: To aim at providing knowledge about roles and functions of the various national and international organizations of tourism along with freedoms of air and open Sky policy. Students would be able to know the role of various organizations which are working in the field.

Transport Service in Tourism

Learning Outcome: Apprehend the concept of various Modes of transport in India, to aim at providing few case studies of Air India and other important International Airlines. Students would be able to know the significance of Transportation sector in the industry.

Researching for Hospitality & Tourism Management

Learning Outcome: Imparting knowledge about the basics of research-objectives, types, approaches, process and problems encountered in research and to develop the learning to define a research problem, facilitate understanding of sampling, data collection, construction of questionnaire and understanding of the basic tools of data analysis- Parametric & non parametric tests, interpretation of results & presentation. Students would to able apply the research in the tourism projects and plans and also help the destination in yielding much profit to the local economy.

Tourism Impacts

Learning Outcome: Understand the concepts and typology of tourism. Delineate the various impacts generated by tourism. Know the demand and supply characteristics of tourism and also explains the different motivational theories related to tourism different motivational theories related to tourism. Students would be able to know how tourism have positive and negative impacts on society, culture, and environment and how they can be minimize and how it leads sustainable growth and development.

Leadership Development Program

Learning Outcome: Will help students to become good future leaders and to derive optimal productivity from their work peers and it will equipped them with ***skills*** that will help them lead a team of employees to a more productive and profitable goal.

Writing Skills for Tourism

Learning Outcome: Understand the concepts and aspects of report writing, process, contents of a report and referencing.

पाठ्यक्रम अध्ययन प्रतिफल

विषय : संस्कृत

हिमाचल प्रदेश विश्वविद्यालय ने सत्र 2018-2019 से CBCS के अंतर्गत वार्षिक शिक्षा प्रणाली को अपनाया जिसके अधीन संस्कृत विषय में जो पाठ्यक्रम शिक्षार्थियों को निर्धारित किया गया , उसके अनुसार संस्कृत विषय को मुख्य – विषय के रूप में चयन करके बी. ए. करने के उपरांत विद्यार्थी निम्न रूप से लाभान्वित होगा –

१. बी.ए. प्रथम वर्ष में संस्कृत काव्य एवं संस्कृत गद्यकाव्य मुख्य लेख्य के रूप में निर्धारित हैं I इनके अध्ययन से संस्कृत काव्य एवं गद्यकाव्य के इतिहास के विषय में ज्ञान प्राप्त होगा I सूर्यवंश एवं चन्द्रवंश के राजाओं की विशेषताओं के अध्ययन से विद्यार्थी में सद्गुणों का संचार होगा I इसके साथ अनिवार्य संस्कृत में नीति साहित्य के अध्ययन से पंचतंत्र की कहानियों एवं नीतिशतक के माध्यम से नीति सम्बन्धी ज्ञान को अर्जित करके अपने को सभ्य एवं शिष्टाचार से सम्पन्न कर सकता हैं I योग्यता संवर्धन अनिवार्य पाठ्यक्रम (AECC) के अन्तर्गत उपनिषद् , गीता एवं पाणिनीय शिक्षा के अध्ययन के उपरांत विद्यार्थी को भारतीय संस्कृत एवं धर्म के आधार स्तम्भ उपनिषदों में वर्णित आत्मा ,परब्रह्म, सृष्टि, पुनर्जन्म आदि सिद्धांतों की जानकारी प्राप्त होगी तथा गीता के अध्ययन से आत्मा की अमरता ,निष्काम कर्मयोग ,संसार की नि:सारता तथा ईश्वर के वास्तविक स्वरूप की चर्चा से आत्म सुधार, इन्द्रिय-निग्रह,सदाचरण एवं सत्य – सम्भाषण की प्रेरणा मिलेगी I पाणिनीय शिक्षा के अध्ययन से वर्णों के संख्या एवं उच्चारण स्थान की जानकारी से भाषा व्यवहार एवं भाषा लेखन में सुधार होगा I

२. बी. ए. द्वितीय वर्ष में संस्कृत नाटक के अन्तर्गत प्रतिमानाटक के अध्ययन से विद्यार्थी अपने सांस्कृतिक इतिहास को नाटकीय कथानक के माध्यम से आत्मसात् करेगा तथा संस्कृत व्याकरण तथा व्याकरण एवं संयोजन विषयों के अध्ययन से संस्कृत भाषा पर उसकी पकड़ मजबूत होगी तथा वाक्य विन्यास में कुशलता आएगी I कौशल संवर्धन पाठ्यक्रम (SEC) एक में आयुर्वेद के मूल सिद्धांतों के अध्ययन से विद्यार्थी स्वयं

अपनी दैनिक दिनचर्या निश्चित कर सकता हैं I पथ्य-अपथ्य का सेवन ,प्रकृति का हमारी आयु में योगदान, शरीर की वात पित्त ,कफ आधारित प्रकृति ,किस ऋतु में कौन सा

आधार सुपाच्य हो सकता हैं आदि आयुर्वेद के मूल मंतव्यों से अवगत होकर अपने स्वास्थ्य का स्वयं प्रहरी बन सकता हैं I दूसरे SEC पाठ्यक्रम में संस्कृत छंद एवं गायन विषय के अध्ययन से संस्कृत ग्रंथों में विद्यामान शास्त्रीय संगीत के सुरों का ज्ञान प्राप्त हो सकेगा I

३. बी.ए. तृतीय वर्ष में मुख्य लेख्य 301 में गीता के बिभिन्न अध्यायों के अध्ययन से व्यक्तित्व विकास के ऐतिहासिक दृष्टिकोण की जानकारी विद्यार्थी को प्राप्त होगी I आत्मा का स्वरूप ,सृष्टि का आरंभ, ब्रह्मविद्या की जिज्ञासा ,समाज में यज्ञ एवं दान का महत्व तथा त्रिविध गुणों के स्वरूप के विषय में अध्ययन करके कई तरह की आध्यात्मिक जिज्ञासा शांत हो सकेगी तथा द्वितीय पत्र 302 में साहित्यिक समालोचना के अन्तर्गत काव्य के स्वरूप , प्रयोजन ,लक्षण ,वाक्य के स्वरूप एवं भेद आदि के ज्ञान से साहित्य में विद्यमान काव्य , गद्यकाव्य ,नाटक ,रूपक एवं चम्पूकाव्य आदि के लेखन से सम्बंधित समस्त जानकारी उपलब्ध हो सकेगी I कौशल संवर्धन पाठ्यक्रम SEC -03 में भारतीय रंगशाला के अध्ययन से रंगमंच से सम्बद्ध नृत्य एवं अभिनय आदि का सम्पूर्ण ज्ञान प्राप्त हो सकेगा तथा SEC -04 में भारतीय वास्तु शास्त्र विषय के अध्ययन से प्राचीन भारत में हमारे शास्त्रों के अनुसार भवन निर्माण विधि का ज्ञान विद्यार्थी प्राप्त कर सकेगा I

इस तरह संस्कृत को मुख्य विषय बनाकर बी. ए. करने वाला विद्यार्थी विनम्र,सभ्य,शिष्ट ,आत्म संयमी एवं मानवीय मूल्यों तथा उच्च संस्कारों से सम्पन्न होकर समाज को भी सही दिशा दे सकता हैं I

BA with History

Course Outcome

Course Name	Course Outcome
History of India from Earliest Times up to 300 CE	1. Students got the knowledge of Paleolithic, Mesolithic and Neolithic culture. 2. Students understand the civilization: origin, urban features, economy, society and religion of Harappan culture.

	3. Students got the knowledge of Mauryan Dynasty: Administration and Economy. 4. Students got the knowledge of Buddhism, Jainism and Magadha expansion.
History of India from 300 to 1206	1. Students understand the state and administration of the Guptas and Vakatakas. 2. Students understand the political structure, religion, economy and cultural development. 3. Students will be able to know about the Harsha's Kingdom, Buddhism and Nalandas. 4. Students able to get the knowledge of the Arabs administration.
History of India , c. 1206-1707	1. Students understand the foundation, expansion and consolidation of the Sultanate of Delhi. 2. Students learn about the regional political formation of Vijayanagara and Bahamani Kingdoms. 3. Students perceive the knowledge of Sher Shah's administration and revenue reforms. 4. Students able to understand the disintegration and decline of the Mughal Empire.
History of India , c. 1707-1950	1. Students understand the 18th century India in r/o society, economy and culture. 2. Students get the knowledge of expansion and consolidation of British power with reference to Bengal, Mysore and Maratha. 3. Students understand the socio-religious reform movement in the 19th century and after. 4. Students understand the uprising of 1857. 5. Students understand the peasant resistance to colonial rule. 6. Students understand the revolutionary movement for Indian Independence. 7. Stdents understand the Gandhian thought, techniques and movements. 8. Students understand the Indian Constitution and its features.
Historica l Tourism	1. Students able to understand tourism and heritage. 2. Students understand the built heritage in r/o of temple architecture, Stupa architecture and Indo-Persian architecture. 3. Students understand the temple architectures in Himachal Pradesh as tourist attractions: A study of Chamba, Kangra and Mandi. 4. Students understand tourism in Himachal Pradesh.
Course Name	**Course Outcome**
An Introduction to Archaeology	1. Students understand the origin and development of archaeology in India. 2. Students understand the management of archaeological evidences. 3. Students perceive the knowledge of discovering human experience through archaeology. 4. Students understand the numismatic and epigraphic sources. 5. Students understand the method of surveying and techniques of excavation.
Modern and Contemporary World History I: 1871-1919	1. Students understand the main characteristics of modern and contemporary history. 2. Students understand the emergence of Italy and Germany as unified nations. 3. Students understand the emergence of USA after the Civil War. 4. Students know about the emergence of Japan as a world power. 5. Students understand the nationalist movements in Asia.

	6. Students understand the end of the czarist regime in Russia. 7. Students understand the revolution of 1905. 8. Students understand the First World War and its aftermath.
Modern and Contemporary World History I: 1919-1992	1. Students understand the Versailles to Locarno treaties and their political consequences. 2. Students know about the league of Nations 3. Students understand the era of great depression of 1929. 4. Students know the causes of the Second World War. 5. Students understand the nationalist movements and decolonization. 6. Students understand the Chinese revolution of 1949. 7. Students know about the cold war and its ideological and political origins. 8. Students understand the impact of the cold war on Europe, Korea, Vietnam and Cuban crisis. 9. Students understand the concept of globalization. 10. Students understand the Feminist and ecological movements. 11. Students understand the question of human right.
Indian History and Culture	1. Students understand the environment; culture, tradition and practice in Historical overview. 2. Students get the knowledge of oral and codified information on medicinal plants, water & water bodies. 3. Students understand the issues of settlements and landscapes and social differentiations. 4. Students know about the social inequality and gender: status within household. 5. Students understand the employment status and distribution of resources. 6. Students understand the cultural heritage.
Introduction to Indian Art	1. Students understand the key terms in art appreciation. 2. Students get the knowledge of Indian Sculpture, Iconography: Hindu, Buddhist and Jaina. 3. Students understand the temple, Mosque and Mausoleums architecture. 4. Students know about the Rock Cut Temple of Masrur and Colonial architecture in Shimla. 5. Students understand the Indian Painting historically in r/o Mural painting Ajanta, Mughal; miniature style and Phari School of painting; Guler Kangra paintings.
Women in Indian History	1. Students understand the theory and concepts of gender and patriarchy. 2. Students understand the women's history in India. 3. Students understand the Brahmanical and non-Brahmanical patriarchy in India. 4. Students understand the women in medieval India. 5. Students understand the women and literary activities in medieval era. 6. Students understand social reforms and women in the 19th century.

Environmental Issues in India	1. Students understand the human-nature interactions. 2. Students understand the geography, ecology and cultures in Pre-Colonial India 3. Students understand the resistance to new regimes: Peasants, tribal and pastoralists. 4. Students understand the Independent India and environment.

	5. Students get the knowledge of forests, human- wildlife conflict, and threat to bio-diversty.

B.Com Course

This program could provide industries, banking sectors, insurance companies etc. Well trained professionals to meet the requirement.

- Students can independently start up their own business.
- Students can get through knowledge of finance and commerce.
- After completing graduation students can get skills regarding various aspects like marketing manager, selling manager over all administration abilities of the company.

Course Name	Course outcomes
BC 1.1 Financial Accounting	• To enable the students to learn the basic concept and practical application of accounting • To find out the technical expertise in maintaining the books of accounts. • Develop the ability to use accounting information to solve a variety of business problems. • Develop and understand the nature and purpose of financial statement in relationship.
BC 1.2 Business organisation and Management	• The course aims to provide basic knowledge to the students about the organization and management of a business enterprise
BC 1.3 Business Law	• The objective of the course is to impart basic knowledge of the important business legislation along with relevant case law

BC 1.4 Business mathematics and statistics	• To understand the different concept of sampling and collection of data. • To understand the application of metrics in business • Study the concept of regression and properties of correlation and regression. • Study the concept of diagrammatic representation and central tendency of given data. • To study the techniques and concept of different type of index
BC 2..1 Company law	• Students learn about corporate entities that are permitted to be set up. • Company incorporation and rules and procedure for running to know. • Rights and obligation of shareholders and other stakeholders including employees and creditors. • To impart students with the knowledge of fundamentals of company law and provision of companies act 2013.
BC 2.2 Income tax law & Practice	• This subject provides the brief knowledge of calculation of income tax. • In order to familiarize the different know-how and heads of income and its components. • Students can understand income tax system properly and can get the knowledge of different tax provisions.
BC 2.3 computer application in business	• Course aim to equip students with the ability to utilize various computer applications to perform business functions effectively.
BC 2.4 corporate Accounting	• Construct the financial statements of company within the frame work of Ind AS 2. Develop a process for redemption of Preference shares 3. Construct the Restructuring of capital structure in the financial statement of Joint stock company ltd. 4. Calibrate the procedure involved in Amalgamation of companies 5. Calibrate the procedure involved in Absorption of companies 6. Explain the implication of unethical accounting practices on the society.
BC 2.5 cost Accounting	• Analyzing financial information • Monitoring cost and reports • Cost sheet preparation etc learn by students in this course

BC 2.6 E-commerce	• Able to handle the electronic payment system. • Know about models of e-commerce. • After the successful completion of this subject the students should have clear knowledge in the fields of e-commerce, e-markets, e-payment system etc.
BC 3.1 (a) Human Resource Management	• The course aims to acquaint students with the techniques and principles to manage human resource of an organization.
BC 3.2 (a) corporate governance and Auditing	• The course aims to provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards and to give an overview of the principles of Corporate Governance and Corporate Social Responsibility
BC 3.3 Entrepreneurship	• To students learn the various strategies and method of mobilizing resources and use advantages offered by the govt. • Students are able to be entrepreneur. • They are learned the SWOT of Business analysis. • To develop entrepreneurship awareness among the students.
BC 3.5 (c) Management accounting	• The students understand about the concept of fund flow and cash flow statement. • To imparted knowledge on capital budgeting and decision making technique. • To provide knowledge about the preparation of various kinds of budgets.
BC 3.6 (a) International Business	• The objective of the course is to familiarize the students with the concepts, importance and dynamics of international business and India's involvement with global business. The course also seeks to provide theoretical foundations of international business to the extent these are relevant to the global business operations and developments.
BC 3.7 Personal selling and salesmanship	• To know of the recent changes in the field of marketing. • To study the basic concept of marketing. • To know the process of marketing. • To understand the effectiveness of sales organization • This course will help the students to become a good advertisers and sales executive

ECONA 313 Economy of Himachal Pradesh	• This course highlights the basic features, characteristics and developmental issues of the Himachal Pradesh economy.
ECONA 314 Indian Economy	• This course is designed to enable students to have in-depth knowledge of various problems and issues faced by Indian Economy. The course will concentrate on both the achievements and the issues of the economy.

M.Com

- Students acquire full subject matter expertise in field of commerce.
- To familiarize the students with the fundamentals of capital market and money market.
- Develop advanced theoretical and practical knowledge related to subject.

Course Name	` Course Outcomes
MC 101 management theories and Practices	The objective of this course is to impart management education to the students which will empower them the managerial skill.
MC 102 BUSINESS ENVIRONMENT(DSC)	To analyze the overall business environment and evaluate its various components in business decision making
MC 103 MANAGERIAL ECONOMICS	To make students understand business cycles and steps to bring economy to equilibrium. To help students acquire knowledge of and teach them application of economic theories in business decision making
MC 104 STATISTICAL ANALYSIS FOR DECISION MAKING	The objective of this course is to provide an in-depth understanding of basic theoretical and applied principles of statistics needed to enter the job force. Students will be able to communicate key statistical concepts to non-statisticians. Students will gain proficiency in using statistical software for data analysis.
MC 105 TAXATION LAWS AND ADMINISTRATION	To make students understand the various heads under which income can be earned in India. To make students understand the procedure for computation of income under various heads namely income from salaries, house property, business/ profession, capital gains and income from other sources.

MC 106 CORPORATE LEGAL FRAMEWORK	The objective of the course is to make students acquainted with the provisions of Corporate Legal Framework to ensure regulated and secured system of corporate enterprises in India and also to develop understanding about the procedures related with the formation of corporate enterprises, to know about the procedures about meetings and proceedings for practical application as well as understanding of the regulatory system for protection of consumers.
MC 201CORPORATE FINANCIAL ACCOUNTING	To give learners a broad view of the provisions to be followed for the preparation of final accounts of companies as per Companies Act 2013. To explain to the learners the concept of valuation of business after amalgamation and merger and its implications in various accounting procedures leading to preparation of Final Accounts of a Company as per Company Act.
MC 202 HUMAN RESOURCE MANAGEMENT	The objective of the course is to make students well conversant with the basic concept as well as with the advanced development in HR practices that organizations implement today. The course aims at provide them with the insight to think about different aspects of handling human resources in the organization.
MC 203 CORPORATE FINANCE AND POLICY	To provide knowledge about financial management of firm. To develop skill of computer & allocation, management and funding of financial resources. To enhance ability in dealing with corporate finance and policy
MC 204 MARKETING MANAGEMENT	The aim of the course is to develop the skills of dealing with the stakeholders, convincing and satisfying them and to effectively manage marketing activities by applying exposure techniques and exercises in the classroom environment
MC 205 RESEARCH METHODOLOGY AND DATA SCIENCE	Identify and discuss the role and importance of research in the Business DecisionMaking. Identify and discuss the issues and concepts salient to the research process. Identify and discuss the complex issues inherent in selecting a research problem,selecting an appropriate research design, and implementing a research project. Identify and discuss the concepts and procedures of sampling, data collection, analysis and reporting.

MC206: CORPORATE GOVERNANCE AND BUSINESS ETHICS	The purpose of this subject is to familiarize the student with the knowledge of corporate governance, business ethics and corporate social responsibility in global and Indian context to understand the practices of corporate governance in public sector undertaking and financial sector; corporate social responsibility in light of Company Act 2013; business ethics and its significance in business and application of business ethics in functional areas of business
MC–GE-I ORGANISATIONAL BEHAVIOUR AND DEVELOPMENT	The objective of the course is to enable students to develop a theoretical understanding about organisation structure and its behaviour over time. The course will also make them capable of realizing the competitiveness for firms
MC301 ADVANCED COST ACCOUNTING	This course aims to provide students with the knowledge and analytical skills necessary to use accounting cost information as a basis for formulating and evaluating corporate strategies**.**
MC 302: INTERNATIONAL FINANCIAL MANAGEMENT AND POLICY	To understand the significance of International Financial Management in the area of business education. To provide understanding about the various concepts such as cross- border investment decisions, foreign direct investment, international trade and development, balance of trade and balance of payment, regional economic integration, foreign exchange market, terms of trade and currency derivatives in the area of policy formulation and implications for India
MC303: FINANCIAL INSTITUTIONS AND MARKETS	The purpose of this course is to equip students with an understanding of the financial system, its constituents, the principles on which it operates, inter linkages, regulatory concerns, and implications for society &policy formulation
MC304 (a): MANAGEMENT CONTROL TECHNIQUES	The objective of the course is to enable students to acquire sound Knowledge of concepts, methods and techniques of management accounting and to make the students develop competence with their usage in managerial decision making and control.
MC305 (a): DIGITAL MARKETING AND E-COMMERCE	To develop an understanding of digital marketing and formulate plan and strategies related to digital marketing.

MC 306 (a): INDUSTRIAL PSYCHOLOGY	On successful completion of this course, the student will be able to understand the concept of Industrial-Organizational Psychology; apply Industrial Psychology to select, develop, and manage employees; comprehend how the theory and research are applied to work settings and create a stress-free environment at the workplace. The course will also provide the understanding of Industrial Psychology to understand the dynamics of interpersonal relation, group dynamics and behavior of employees working in the organization to attain the objective of business in most effective and efficient ways.
MC 307 COMPUTER APPLICATIONS IN BUSINESS	Computer application in business avail **to analyze the competition, researching the products and prices of their competitors**, studying them through websites. Students also will be able to understand (LAN) Local Area Networks, WAN, E-mail, internet, Multimedia and MS-office
MC401: SECURITY ANALYSIS & PORTFOLIO MANAGEMENT	To equip the students with essential tools, techniques, models and investment theory necessary for analyzing different types of securities, making sound investment decisions and optimal portfolio choice.
MC 402: ENTREPRENEURSHIP DEVELOPMENT AND PROJECT MANAGEMENT	This course aims to provide necessary inputs for entrepreneurial effort and planning to start a new venture and taking investment decisions to enable them to investigate, understand and internalize the process of setting up a business and project planning.
MC403: STRATEGIC MANAGEMENT AND BUSINESS POLICY	The objective of the course is to develop the knowledge about strategy making process and business policy that is informed, integrative and responsive to rapid changes in organization environment and also about tasks implementing in a global market.
MC404 MKT (a): CONSUMER BEHAVIOUR	To provide an in-depth understanding of the consumer buying processes and their determinants as relevant for marketing decision making.
MC404MKT (C): RURAL MARKETING	The objective of this course is to explore the students to the agriculture and rural marketing environment so that they can understand
MC –GE-II: INDIAN ETHOS, LIFE SKILLS AND BUSINESS	To develop the insight about Indian Ethos, Values, Spirituality, Yoga of wisdom, Yoga of Works, Meditation and Devotion in the backdrop of Srimad Bhagvad Gita. The techniques of inner engineering will help in improving inner capacity and making the working environment full with energy, love, respect, power

MC 405 Project report and viva voce	Preparation of project report on one topic that related to subject they learn and understand above
MC 406 comprehensive viva voce	Based on courses studied during all four semesters

Department of Vocational Studies (B.Voc.)

Program Outcomes:

- To make it stress free for the students to find work as if this course binds theories with skill.
- To provide and insight into the subject as well as provide vocational skill set. This course fills the gap between theoretical learning and skill required by the industry.
- To produce the skilled man power for Organized Retail and Hospitality & tourism industry.
- B.Voc. course equips the students with the skill and knowledge of a specific field i.e. Retail Management and Hospitality and tourism management.
- To familiarize the students with future industrial demands and emulate their skill up to that extent.
- To provide them industrial experience through OJT after completion of every job role for one, two and four months as per the job role.
- To give them hands to enhance their decision making through practical applications**.**
- To make them viable with entrepreneurial skill with all challenges in present and possible changing trends in future businesses.
- To make students able to extend their practical potential in industries or to go for self employment.
- This course keeps pace with the dynamic global market and prepares students for the same.

The department offers two courses viz. B.Voc.(Reatail Management) and B.Voc.(Hospitality & Tourism)

B.Voc. (Retail Management)

Program Specific Outcomes:

- To provide broader aspects of future retail sector through theories and relevant industrial training on a yearly basis till successful completion of course.
- To cater the future retail sector skill demand and to ensure that capable supply of manpower, retail management lays down basic and required job roles which help the students to draw a clear picture of their future career planning.
- Retail Management emphasizes on customer needs and wants, which is successfully done through customer relationship and behavior, for which one starts one's journey with basic sales associate role.
- Team leader is the one who anchors all for a common goal. Retail management adds this peculiarity in students through theories and OJT.
- Department Manager Job role places a ladder for higher learning, decision making and to get solution for problems independently.
- Store manager role finally equips students with multifaceted skills. It focuses on communication with stakeholders, higher management and worthy customer. This role specially emphasizes on emerging issues of futures retail sector and methods to meet them proficiently, a major focus is put on complex store problems and to seek a resolve to those.
- In every job role a specific period of On Job Training (OJT) is associated for a period of two to three months that varies with job role. OJT helps to raise the standard of skills to emulate students with industrial requirement.

Course Outcomes

Sr. No.	Title of course	General/ Skill component	Course code	Job role	Course Outcomes
1	Business communication &personality development	General component	RA111 / RA114	Sales associate	To enhance effective communication and develop overall personality to meet the industrial requirements.
2	Fundamentals in accounting and technology		RA112 / RA113		To make students understand the basic concept of accounting and information technology in line with industrial need.
3	Introduction to retail store operations ,health safety and security	Skill component	RA121 / RA125		To provide knowledge about retail environment in India. To make them familiar with different formats of retail. To make students capable enough to deal with different consumer buying behavior. To expertise students for entire selling process. To make them aware with different sections of retail out let.
4	Consumer buying behavior		RA122		
5	Consumer service and customer relationship management		RA123		
	OJT(On Job Training)				**One Month practical training in relevant industry.**
6	Store display and Visual Merchandising		RA221	Team leader	To enable the student to perform all activities pertaining to store display and visual merchandising processes. To make students perfect in sales management and customer handling. To make them understand how tolead, handle and motivate the team and how to deal with interpersonal relationships within team.
7	Sales management & customer experience management		RA224		
8	Organization and team dynamics		RA223		
	OJT(On Job Training)				**One Month practical training in relevant industry.**

9	Communicative English	General component	RA311	Department manager	To raise the communicative level of the students and make them proficient in English. To instill in the students the ethic to run an enterprise in harmony with nature without natural hazards. To demonstrate an understanding of key terms, theories/concepts and practices with in the field of HRM.
10	Store operations and supply chain		RA312		
11	Environment science		RA411		
12	Human Resource Management		RA412		

13	Retail store operation and profit management	Skill component	RA321		To make them understand the roles and responsibilities of department manager. To instill such qualities in the students so that they become viable to achieve profit maximization. To make students able to resolve complex managerial problems and interpersonal conflicts with it team.
14	Customer exercise management	Skill component	RA322		
15	Understanding Leadership		RA324		
16	Team and organizational dynamics		RA325		
	OJT(On Job Training)				**Three Months practical training in relevant industry.**
17	Marketing management	General component	RA511	Store manager	To understand the concepts of marketing management. To make them ready to work in retail environment with proper ethics and corporate responsibility.
18	Business statistics		RA512		
19	Ethics and corporate social responsibility		RA611		
20	Retail environment		RA612		
21	Process compliance and safety and security	Skill component	RA553/ 556		To equip them with all the skills pertaining to retail store manager. To make them aware with the health, safety, security rules at work place. To make them capable enough to run retail store at individual responsibility and accountability.
22	Retail store operations and sales		RA552 / 555		

23	People, process and profitability management		RA658 / 654		To train them how to communicate with higher management, stake holder, suppliers and worthy customer.
	OJT(On Job Training)				**Three Months practical training in relevant industry.**

B.Voc. (Hospitality & Tourism)

Program Specific Outcomes:

- The students get knowledge to manage and evaluate functional system in lodging operations.
- The knowledge to manage the professional preparation and service of quality food.
- After the completion of different job roles students become able to get job in respect of their job roles like Front office Associate, Front office Executive, Guest relation Manager and Deputy Manager in Hospitality industry.
- More emphasis is given to the students hand on skills and On Job Training (OJT) according to their different job roles
- Students will demonstrate the ability to develop, examine and explore perspectives or alternatives to problems in hospitality operations.
- Students will demonstrate the effective communication skills and technology to successfully communicate.
- Students equip with awareness, understanding and skills necessary to live and work in a diverse world.
- Practice professional, ethics, provide leadership, and demonstrate personal and global responsibility and work effectively as team member.

Course Outcomes:

Sr. No.	Level	Job Roles	Year	Specific Outcomes
01	4 & 5	Front Office Associate & front office Executive	1st Year	**Specific Outcomes of Front office Associate/ Front Office Executive:-:** on the completion of front office associate/ front office Executive job role, student should be able to: 1. Demonstrate the basic skill of front office in hotel industry. 2. Maintain guest Records and get details of guests for registration 3. Record guest details for check- in procedure and allot room to the guest. 4. Know about the importance of quality standards. 5. Handle check out of guest. 6. Handle the guest queries. 7. Perform cashiering activities , communicate with customer and colleagues 8. Maintain health, hygiene and safety at work place. 9. Maintain standard of etiquette and hospitable conduct. 10. Learn about various modes of payments. 11. Know about night audit. 12. Solving credit problems while payment. 13. Know about the settlement of final bill. 14. Understand the importance of body language. 15. Understand tourism oriented services. 16. On job training enhance student's skills to get more opportunity of employment. 17. Learn the concepts and skills necessary to achieve guest satisfaction.
02		On Job Training for 01 Month in 4th & 5th each level		On job training to students in each level for 01 month in the Hospitality Industry which provide them Practical Knowledge.

03	06	Guest Relation Manager	2nd Year	**Specific Outcomes Guest Relation Manager:-** On the completion of Guest Relation Manager job role, student should be able to: 1. Understand the concept of Front office operations. 2. Understand the segments of Hospitality Industry. 3. Learn about the overview of Hotel Industry. 4. Understand Guest Arrival Procedure and

				learn about registration process. 5. Know the rules and regulation of the hotel for the guests. 6. Understand how to handle customer complaint and learn how to resolve the complaints. 7. Understand the importance of customer satisfaction. 8. Know about the software usage for the reservation. 9. Understand how to follow personal hygiene practices 10. Learn about the SOP and about IPR and copyright clauses.
04		On Job Training for 04 Months		On job training to students for 04 months in the Hospitality Industry which provide them Practical Knowledge.

05	07	Deputy Manager	3rd Year	**Specific Outcomes of Deputy Manager: - On** the completion of Deputy Manager job role, student should be able to: 1. Communicate effectively with all departments. 2. Maintain Liaison between various departments of hotel. 3. Help accounts department with budget creation. 4. Arrange and distributes and assignments and schedules. 5. Assist in the hiring process for the department. 6. Plays a vital role throughout the guest cycle. 7. Monitor the security systems. 8. Strategic planning for routine work of the property. 9. Guest Management. 10. Plays an important role in marketing activities and revenue management of the property.
06		On Job Training for 04 Months		On job training to students for 04 months in the Hospitality Industry which provide them Practical Knowledge.

Hospitality and Tourism also includes the General Components as per below details:

Sr. No.	Level	Semester	Year	General Subject	General Subject Outcomes
01	04	1st	1st Year	Learning a foreign or English	Will understand the grammatical importance of language and helps to understand the use of language in resume writing, applications preparing formats.
				Introduction to tourism Aviation, Hospitality Industry	After studying the course students will understand the basic concepts of tourism and hospitality industry and terminologies that are being used in the tourism industry.
02	05	2nd		Tourism Product	The students will understand the basic characteristics and types of tourism products and helps to understand the tourism resources and attractions and basic factors while making tourism packages and products.
				Communicative English for tourism and Hospitality	Students will able to understand the importance of communication in Hospitality and Tourism. Learn importance of various forms and formal communication in organizations in tourism and travel.
03	06	3rd	2nd Year	Basic of Tourism research	Students will understand the importance of research in the field of tourism and understand the research process and data collection methods and project report submission.
				Basic of Tourism Management	Students will understand the basic concepts and processes of management and learn managerial skills, competencies and roles and responsibilities of managers.
				Travel Agency Management operations	Will understand the working of travel agency in tourism operations and learn about the various TA's Profile of like MMT, Yatra.com, Goibibo etc.
				Environment Science	Will able to recognize the physical, chemical and biological components in the Hospitality industry.

Bachelor of Business Administration (BBA)

Program Specific Outcomes (PSOs)

- Specialization Knowledge: Acquire in-depth knowledge in a chosen area of specialization (e.g., Marketing, Finance, Human Resource Management, etc.) and apply it in real-world scenarios.
- Entrepreneurial Skills: Develop entrepreneurial skills and mindset to identify business opportunities and create viable business plans.
- Research Skills: Conduct research and apply quantitative and qualitative methods to gather and analyze data relevant to business issues.
- Strategic Thinking: Formulate and implement strategic plans that align with organizational goals and objectives.
- Customer Focus: Understand customer needs and preferences and develop strategies to enhance customer satisfaction and loyalty.
- Determine the various PEST (Political, Economic, and Social Technological) factors influence on changes of business environment. Understand the micro and macro marketing environment.
- Understand the international trade procedure and documentation.

Course Outcomes

FINANCIAL ACCOUNTING

- Describe the useful information to student's business activities in future.
- Write down the point to know the financial position of the business students.
- Describe the discovers & prevents errors and frauds in business students.
- Write down the point to know the Assets & liabilities of the business firms for business students.
- To find out the correct cost of production in business students.

FUNDAMENTALS OF MANAGEMENT & ORGANIZATION BEHAVIOUR

Course outcomes of the course:

- Classify the Management by objectives helps for the better management of resources and activities of an organization.
- Describe the Effective plans co-ordinate the organizational work and eliminate unproductive effort.
- Classify the division of work leads to efficient performance of duties.
- Write down the point to help Training gives an employee confidence in handling the job assigned to him.
- To find out good control system should be easily installed and economically maintained.
- Identify to ensure successful implementation of the decision making through follow

up procedures.

- Identify the study of Human Behaviour in organization
- Describe the personality and its determinate of personality.
- Write down the decision marketing and its classified into individual, group division making.
- Identify the communication and its classification, barriers to effective communication.
- Describe the leadership and its quality of lenders, behavious of lender, classification of lender.
- Identify the conflict and its type of conflict
- Classify the stress and managing stress
- Identify the organization change and steps in managing change.
- Write down the organisational development and its objectives.

BUSINESS STATISTICS

- Describe the measures to nay statistic analysis and methods.
- Clarify the significance of diagrams and graphs.
- Identify the objectives and types of Average.
- Describe the Mean. Median, Mode.
- Write down the methods of depression, Quartzite deviation.
- Identify uses of distortion.
- Classify the methods of studying Correlation Analysis .
- Describe the type of Correlation Rank, Correlation, Co-efficient Correlation.
- Describe the construction of Index numbers.
- Classify the measurement of trends.

MARKETING MANAGEMENT

- Describe the Communicate effectively in a variety of organizational settings.
- Describe the complex qualitative and quantitative data to support strategic and operational decisions.
- Write down the point to comprehensive strategic and tactical plans for an organization.
- Classify the Work independently and collaboratively in inter and/or multi-disciplinary and diverse environments.
- Write down the point to Use creative, critical and reflective thinking to address organizational opportunities and challenges.
- Describe the Demonstrate ethical and socially responsible behaviour.
- Write down the point to integrate appropriate technologies in developing solutions to business opportunities and challenges.

BUSINESS RESEARCH

- Describe the applications of Marketing Research.
- Identify the position of Marketing Research in India.
- Write down the Scientific methods in Marketing Research.
- Classify the methods of research design such as descriptive Research and experimental research.
- Describe the methods of collection of data .
- Describe the methods of interview and observation.

- Classify the types of sampling.
- Write down the measurements of scaling techniques.
- Describe the techniques and limitation of motivation research.
- Identify the various applications of consumer research.

MANAGEMENT ACCOUNTING

- Describe the concept of management accounting and its advantage & disadvantage.
- Write down distinguish between financial accounting and management accounting.
- Classify the ratios and its merits.
- Classify the preparation of fun flow statement.
- Write down merits & demerits of fun flow statement.
- Describe the preparation of cash flow statement and its merits & demerits.
- Identity the concept of marginal costing and cost volume analysis.
- Describe the application of marginal costing.
- Identity standard costing and its steps.
- Classify the different types of variance.

FINANCIAL MANAGEMENT

- Describe the concept of financial management and its function
- Identity the principles of capital structure
- Identity the source of finance
- Describe the working capital management and its techniques of forecasting in working capital.
- Describe the concept of cost of capital and its classifications
- Identity the determination of cost of capital
- Write down the characteristics of budgetary control
- Identity the preparation of production, sales, cash budget, flexible budget
- Describe the different factors affecting in capital investment proposal
- Classify the capital budgeting appraisal methods.

Dept of BCA /PGDCA

Programme SpecificOutcomes (PSO) of the Programs

(B.C.A. & PGDCA)

- BCA & PGDCA will impart practical skills to the students to work in the IT sector as system analysts, software testers, junior programmers, web developers, system administrators, software developers, etc.
- It will provide them with decision-making, problem-solving, innovation, and communication skills in day-to-day business activities. It will also provide the ability to work independently as well as in groups.
- It will provide skilled manpower to the professional, industrial, and service sectors to meet global demands and provide intellectual leadership to the community.
- It will further help the students to effectively communicate their understanding and analysis of the content areas during class discussions or in the form of written reports and also be able to provide constructive feedback.
- After the course's completion, the students' capability to make effective decisions will be enhanced both at personal and professional levels.
- The students acquire a depth and rigorous knowledge on the software development process and the milestones to be met. They will be prepared to pursue higher education, research,

and recruitment.

Course Outcome:

It includes the complete syllabus designed by HPU Shimla for BCA/PGDCA.

· **https://hpuniv.ac.in/upload/syllabus/596af9ceda572BCACBCSSyllabus20161730.pdf**

· **https://www.hpuniv.ac.in/upload/syllabus/596b18aa119efpgdca.pdf**

Programme Outcomes :

(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline.

(b) An ability to analyse a problem and identify and define the computing requirements appropriate to its solution.

(c) An ability to design, implement, and evaluate a computer-based system, process, components, or program to meet desired needs.

(d) An understanding of professional, ethical, legal, security, and social issues and responsibilities.

(e) An ability to analyse the local and global impact of computing on individuals, organizations, and society.

(f) An ability to use current techniques, skills, and tools necessary for computing practice.

(g) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.

(h) An ability to apply design and development principles in the construction of software systems of varying complexity.

MSc with Mathematics

PROGRAMME OUTCOMES (PO):

PO1: Critical Thinking: To develop critical thinking and prepare them to carry out scientific investigation objectively. Critically evaluate practices and theories by following mathematical approaches.

PO2: Knowledge Skill: To develop skills among the students to formulate hypothesis, modeling, solutions and validate, and draw conclusions.

PO3: Communication Skills: To inculcate the communication skills to express mathematical ideas.

PO4: Social Responsibility: To enlightened the students to serve the society by helping them by using mathematical knowledge in their life.

PO5: Analytical Reasoning: To equip the students for demonstration of quantitative and analytical reasoning skills.

PO6: Lifelong Learning: To inculcate the habit of self-learning through self-directed learning and through peer discussion and adapting to the changing academic environment and demands.

PO7: Leadership Qualities: To develop the team spirit and leadership quality to work effectively as an individual and as a leader in diverse situations.

PO8: Research Skills: Prepare students for pursuing research in various fields of mathematics and

research-oriented career.

PO9: Ethics: The students are educated to follow the moral and ethical values in their behavior and professional life.

PROGRAMME SPECIFIC OUTCOMES (PSO): At the end of the program, the students will be able to

PSO1: Apply the knowledge of mathematical concepts and mathematical tools and techniques in interdisciplinary fields to solve the real-world problems.

PSO2: Enrich the abstract mathematical concepts and explore the possibility for further investigations.

PSO3: Modeling the real-world problems mathematically and use the inferences for improvement of quality of life

PSO4: Identify challenging problems in mathematics and work on them.

PSO5: Pursue research in pure/applied mathematics.

PSO6: Work hard to acquire mathematical knowledge and skills suitable to professional activities and follow highest standards of ethical values.

PSO7: Qualify national level tests like NET/GATE etc.

PSO8: Effectively communicate and explore ideas of mathematics for propagation of knowledge and popularization of mathematics in the society.

M.Sc.(Mathematics)

First Semester

Course Code	M-101(5 Credits)
Name of the Course	**Real Analysis**

Course Learning Outcomes : On completion of the Course, students will be able to

CO1 Develop the understanding of Reimann Stieltjes integrals so as to relate Riemann-integral and Reimann Stieltjes integral. Also understand the partial integration theorem to evaluate R-S integrals of functions.

CO2 Understand the knowledge about term by term integration and term by term differentiation for evaluating uniform convergence of series of real valued functions.

CO3 Have the knowledge of methods to examine uniform convergence of sequences and series of real valued functions such as Cauchy criteria, Weiestrass M-test, Abel and Dirichlet's test for uniform convergence with idea about the uniform convergence of sequence and series of functions.

CO4 Understand the relation between uniform convergence and continuity, uniform continuity and differentiation and integration of sequences of real valued functions.

CO5 Have the knowledge of the concepts of complete metric space, perfect set and connected set.

CO6 Understand the Stone-Weierstrass theorem to examine the uniform convergence of polynomials in real variables.

CO7 Have the idea about rectifiable curves to evaluate lengths.

Course Code	M-102(5 Credits)
Name of the Course	**Advanced Algebra**

Course Learning Outcomes: On completion of the course, students shall be able to

CO1 Develop the understanding about the importance of group actions on sets.

CO2 Describe the normal series, solvable groups, nilpotent groups and their applications to characterize some classes of groups.

CO3 Have the broad idea about direct sum and direct product of groups.

CO4 Have the knowledge about finitely generated Abelian groups which are decomposable as a finite direct sum of cyclic groups which enables the students to find the number of non isomorphic Abelian groups of given order.

CO5 Understand the Sylow Theorems and their applications: in particular, the existence of a simple group of a given order.

CO6 Provide the comprehensive understanding of ring theory and some special classes of rings such as Quotient rings, Euclidean rings, ring of Gaussian integers and Polynomial rings over the Rational fields and Commutative rings.

CO7 Have knowledge of the concept of Modules, free modules, completely reducible modules and Quotient modules.

Course Code	M-103(5 Credits)
Name of the Course	**Ordinary Differential Equations**

Course Learning Outcomes: On completion of the above course, the students will be able to

CO1 Assure the existence and uniqueness of the solution of an initial value problem in order to save the time and energy.

CO2 Handle the Sturm-Liouville Boundary Value Problems and to construct the orthonormal functions which can be used to expand any function as infinite series of these functions.

CO3 Investigate the nonlinear differential equations and the corresponding nonlinear autonomous systems and their critical points which are helpful in predicting the nature of the solution of the nonlinear differential equations.

CO4 Understand the various theoretical concepts of homogeneous and non-homogeneous ordinary differential equations e.g. linear dependence and linear independence of the solutions, Wronskian,

the separation and comparison theorems etc.

CO5 Understand the concept and applications of Eigen value problems

Course Code	M-104(5 Credits)
Name of the Course	**Operations Research**

Course Outcomes: After the completion of the course, students are able to

CO1 Understand the history and applications and uses of OR techniques in decision making.

CO2 Understand the convex set theory to find the optimal Basic feasible solution of LPP. Modelled the real-world problems as linear programming problems (LPP) and solve them by different OR techniques and tools

CO3 Solve the LPP graphically, and use of Simplex Method, Big-M Method, Dual Simplex method. Learn Duality Theory and solution of LPP by duality theory.

CO4 Formulate the Integer Programming, Assignment and Transportation problems models and their solutions by different methods or algorithms.

CO5 Understand the basic concepts and derive results related to Queuing systems, Queuing problem, the Poisson process and its properties.

CO6 Understand the importance of the Revised Simplex Method and learn the basic concepts of the method to solve the Linear Programming Problem.

CO7 Learn and use the various Operations Research models in solving various decision analysis problems modeled form the real-world domain using different algorithms, OR tools and techniques.

Course Code	M-105(5 Credits)
Name of the Course	**Fluid Dynamics**

Course Learning Outcomes: When the course is completed, the student will be able to

CO1 Define types of fluids, Lagrangian and Eulerian method of describing fluid motion. Motion of the fluid element: Translation, rotation and deformation Stream lines path lines and streak lines, Material derivative, Acceleration Components of fluid particle in Cartesian.

CO2 Tell about Cylindrical and Spherical polar coordinates (without proof). Vorticity vector, Vortex Lines, rotational and irrotational motion. Velocity, Potential boundary surface, Boundary condition. Irrotational Motion in two-dimensional.

CO3 Describe Stream function, Physical significance of stream function, Complex velocity potential, Sources, sinks, doublets, and their images in two dimensional.

CO4 Understand about Continuum hypothesis, Newton's Law of Viscosity, Some Cartesian Tensor Notations, Thermal Conductivity, Generalized Heat conduction.

CO5 Derive and analyse Equation of State, Equation of Continuity, Navier – Stokes (NS) Equations, Equation of Energy. Vorticity and Circulation (Kelvin's Circulation Theorem).

CO6 Know about Dynamical Similarity (Reynold's Law), Inspection Analysis- Dimensional Analysis, Buckingham – π - Theorem, and its Applications π –products and coefficients, Non dimensional parameters and their physical importance.

CO7 Derive Exact Solutions of the N S Equations, Steady Motion between parallel plates (a) Velocity distribution, (b) Temperature Distribution, Plane Couette flow, plane Poiseuille flow, generalized plane Couette flow. Flow in a circular pipe (Hagen-Poiseuille flow (a) velocity distribution (b) Temperature distribution and theory of very slow motion: Flow past a sphere (Stokes' and Oseen' flow).

M.Sc.(Mathematics)

Second Semester

Course Code	M-201(5 Credits)
Name of the Course	**Measure Theory and Integration**

Course Learning Outcomes: On completion of the Course, students shall be able to

CO1 Have the understanding about the importance of outer measure on measure of sets, real-valued functions, positive and negative parts of a function, Characteristic function of a set, limit superior and inferior of sequence of measurable functions.

CO2 Provide the comprehensive understanding of three principles of Littlewood, Egoroff, Lusin and Frechet theorems.

CO3 Define the Lebesgue integral of a bounded function over a set and to prove the linearity, additivity, monotonicity and triangle inequality properties under a variety of defining property of the functions.

CO4 Understand Fatou's lemma, Monotone convergence theorem, Lebesgue dominated

convergence theorem and its generalization and Riesz theorem on convergence in measure.

CO5 Understand Vitali Lemma and its application in particular, the Lebesgue theorem; existence of functions of Bounded Variation and Jorden Decomposition theorem, Jensen's inequality.

CO6 Have knowledge of differentiation, existence of partial derivatives and continuously differential functions of vector valued function of several variables.
CO7 Understand the implicit function theorem and their applications; in particular, existences of a unique solution of implicit equations near the mentioned point.

Course Code	M-202(5 Credits)
Name of the Course	**Field Theory**

Course Learning Outcomes: On completion of the course, students shall be able to

CO1 Develop the understanding about the reducible and irreducible polynomials and their roots.

CO2 Identify the relations of one field to another (known as the concept of field extension).

CO3 Have the knowledge of field extensions, Algebraic extensions, Normal extensions, algebraically closed fields and Splitting fields.

CO4 Have a broad idea of some special types of fields such as Prime fields, finite fields, roots of unity and cyclotomic polynomials. In particular, the representation of elements of finite fields.

CO5 Understand the Galois Theory which creates a bridge to move from a field to a group, and make some remarkable observations using group theory.

CO6 Have knowledge of separable extensions, automorphism group and fixed fields fundamental theorems of Galois Theory and algebra.

Course Code	M-203(5 Credits)
Name of the Course	**Partial Differential Equations**

Course Learning Outcomes: After the completion of the course, students will be able to

CO1 Understand the Basic concepts related to partial Differential equations of first order and

various methods to solve these equations.

CO2 Understand the classification of second order partial differential equations, their canonical forms and concept of adjoint operators.

CO3 Derivation of Laplace equation/Poisson equation/ heat equation/wave equations from basic concepts and their basic properties.

CO4 Solve the Laplace equation (elliptic equation), Heat equation (Parabolic equation) and Wave equation (hyperbolic equation) by variable separable method and solve some boundary value problems by some standard methods.

CO5 Derive the Laplace, heat and Wave equations in various coordinate systems and solve them. Learn the use of theory and solutions/tools in solving the dynamical problems arising in engineering and physical sciences.

Course Code	M-204(5 Credits)
Name of the Course	**Linear Algebra and Matrix Analysis**

Course Learning Outcomes: On completion of this course the students shall be able to

CO1 Have the basic idea of operators on finite dimensional vector spaces and the basic properties of Normal operators in the context of spectral theory.

CO2 Characterize the diagonalizable matrices and have the basic properties of these matrices.

CO3 Have the basic concept of matrix norms, their examples and the unitarily invariant norm.

CO4 Characterize the positive definite matrices and have the basic properties of Positive definite matrices.

CO5 Have the working knowledge of inequalities involving positive definite matrices.

Course Code	M-205(5 Credits)
Name of the Course	**Mathematical Statistics**

Course Learning Outcomes: After the successful completion of this course, it is indented that a student will be able to:

CO1 Use the basic probability rules, including additive and multiplicative law by using the concept of probability set function, random variable, the probability density function, distribution function and use these concept for calculating probabilities and drive the marginal/conditional distribution and their respective mean, variance and standard deviation.

CO2 Use discrete and continuous probabilities distributions and identify the characteristics of different discrete and continuous distributions.

CO3 Define binomial, trinomial, multinomial and normal distribution and solve theoretical problems by using these distributions. Also use of property of normal distribution curve in calculating the probability of standard normal variate.

CO4 Learn t, F, limiting distributions etc and learn basic properties as well as the concept of central limit theorem on limiting distributions and its applications.

Third Semester

Course Code	M-301(5 Credits)
Name of the Course	**Complex Analysis**

Course Learning Outcomes: On completion of this course the students shall be able to

CO1 Have the idea of arithmetical and geometrical properties of complex numbers and linear fractional transformations.

CO2 Have the basic concepts of the limit, continuity and derivative of the complex valued functions of a complex variable.

CO3 Have the knowledge of convergence and divergence of the sequences, series and power series.

CO4 Have the general concept of the complex integration and many important properties of analytic functions which follow from the complex integration. CO5 View that the calculus of residues provide a very efficient tool for the evaluation of definite integrals.

Course Code	M-302(5 Credits)
Name of the Course	**Classical Mechanics**

Course Learning Outcomes: After the successful completion of this course, it is expected that

a student will be able to

CO1 State and derive the conservation principle involving momentum, angular momentum and energy as well as understand that they follow the fundamental equation of motion.

CO2 Learn about the generalized coordinates, Lagrangian, Hamiltonian and Hamilton-Jacobi's formulation of Classical mechanics and develop their understanding about equivalence of these formulation with the Newton's Law of motion.

CO3 Derive and use the Lagrange's, Hamilton's and Hamilton-Jacobi's equation of motion for finding the solution of a dynamical problem.

CO4 Derive the Hamilton's principle and the principle of least action by applying the concept of variational calculus.

Course Code	M-303(5 Credits)
Name of the Course	**Topology**

Course Learning Outcomes: On completion of the course, students shall be able to

CO1 Develop the understanding about the partial ordered relations and lattices.

CO2 Understand some elementary concepts in metric spaces and topological spaces such as open bases, open subbases, weak topology and the function algebras.

CO3 Identify the open sets, closed sets, convergence and continuity in metric/topological spaces. **CO4** Have a broad idea of compactness and various separation axioms in a topological space using some remarkable theorems such as Tychonoff's theorem, the Urysohn imbedding theorem, Ascoli's theorem, Urysohn's lemma and Tietze's theorem.

CO5 Understand connectedness in topological spaces, connected components, locally connected spaces and totally disconnected spaces. CO6 Have a knowledge of The Weierstrass approximation theorem used to approximate a real valued continuous function by a real polynomial.

Course Code	M-304(5 Credits)
Name of the Course	**Magneto Fluid Dynamics**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Derive the Fundamental equations, Maxwell's electromagnetic field equation and Magnetic induction equation.

CO2 Acquire knowledge about Magnetic Reynold's number. Alfven's Theorem and its consequences. Magnetic energy equation. Mechanical equations and effects. Magneto hydrostatic, Force Free magnetic fluids.

CO3 Understand about Steady States, Pressure balanced magneto hydrostatic configurations. Toroidal magnetic field. Steady laminar motion. General solution of a vector wave equation.

CO4 Know about Magneto hydrodynamic, Waves Alfven waves, Magneto hydrodynamic waves in compressible fluid. Reflection and refraction of Alfven waves. Dissipative effects.

CO5 Understand the Linear Pinch. Method of small Oscillations. Energy principle.

CO6 Drive and analyse Virial Theorem. Marginal stability – Bénard problem with a magnetic field.

CO7 Understand about turbulence, spectral analysis. Homogeneity and Isotropy. Kolmogorff's principle. Hydro magnetic turbulence. Inhibition of turbulence by a magnetic field.

Course Code	M-304(B)5 Credits)
Name of the Course	**Cryptography**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Understand the concept of Integer Arithmetic, Modular Arithmetic, Matrices and Linear Congruence.

CO2 Investigate the theory and Mathematics of Traditional Symmetric-Key Ciphers.

CO3 Acquire knowledge of Modern Symmetric-Key Ciphers.

CO4 Assimilate the concept of Data Encryption Standard (DES) and Advanced Encryption Standard (AES).

CO5 Attain mastery in use of Modern Block Ciphers and use of Stream Ciphers.

CO6 Study in detail the concept of RSA Cryptosystem, Rabin Cryptosystem, ElGamal

Cryptosystem and Elliptic Curve Cryptosystem.

CO7 Understand the Mathematics of Asymmetric-Key Cryptography.

Course Code	M-305(A)5 Credits)
Name of the Course	**Analytical Number Theory**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Understand the divisibility theory in the Integers, the Fundamental Theorem of Arithmetic, the Sieve of Eratosthenes and the Goldbach Conjecture.
CO2 Study the theory of congruences and basic properties of congruences.
CO3 Analyse Fermat's Theorem, Fermat's Factorization Method, the Little Theorem and the Wilson's Theorem.
CO4 Acquire knowledge of the Theoretic Functions: The function τ and σ, the Mobius inversion formula, the Greatest Integer Function and its Application to the Calendar.
CO5 Attain mastery to solve problems using Euler's Phi Function, Euler's Theorem, some properties of Phi Function and their applications to Cryptography.
CO6 Understand the primitive roots, the Quadratic Reciprocity Law and Theory of Indices.
CO7 Study in detail the Quadratic Congruences with composite moduli.

Course Code	M-305(B)5 Credits)
Name of the Course	**Wavelet Theory**

Course Learning Outcomes: After the completion of the course, students would be able to

CO1 Understand the concept of Discrete Fourier Transform.
CO2 Compute Discrete Fourier Transform rapidly via the Fast Fourier Transform.
CO3 Learn the basics of wavelets in finite dimensions and construct wavelets by iteration.
CO4 Learn the basics of wavelets in infinite dimensions and construction of wavelets in first stage.

Fourth Semester

Course Code	M-401 (5 Credits)
Name of the Course	**Functional Analysis**

Course Learning Outcomes: On completion of the course, students shall be able to

CO1 Develop the understanding about the Normed linear spaces and Banach spaces.
CO2 Have the knowledge of continuous linear transformations between normed linear spaces and the concept of dual spaces, double dual and reflexive spaces.
CO3 Have a broad idea of some important results such as The Hahn-Banach theorem, the open mapping theorem, the closed graph theorem and the Uniform Boundedness theorem.
CO4 Understand Hilbert spaces, its conjugate space, adjoint of an operator, self-adjoint, normal and unitary operators and projections.
CO5 Describe the spectral theory in normed spaces, spectral properties of Bounded linear operators, Banach algebra and its properties.
CO6 Apply the knowledge of Complex Analysis in Spectral theory.

Course Code	M-402 (5 Credits)
Name of the Course	**Integral Equations and Calculus of Variations**

Course Learning Outcomes: Students would be able to

CO1 Understand the methods to reduce Initial value problems associated with linear differential equations to various integral equations.
CO2 Categorize and solve different integral equations using various techniques.
CO3 Solve the singular integral equations and derivation of Hilbert-Schmidt theorem.
CO4 Know the variational problems, extremum of a functional and necessary condition for the extremum of a functional.

Course Code	M-403 (5 Credits)
Name of the Course	**Advanced Discrete Mathematics**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Understand the Boolean Algebras Logic, Propositional Equivalences, Predicates and Quantifiers and study in detail the Partial Ordered Set, Lattices, Distributive and Complemented Lattices.
CO2 Analyse the Boolean Lattices and Boolean Algebras, Boolean Functions and Boolean Expressions and apply Boolean Algebra to switching theory.
CO3 Acquire knowledge of the Pigeonhole Principle and A Theorem of Ramsey.

CO4 Assimilate the concept of Permutations and Combinations, the Binomial Theorem, the Multinomial Theorem and the Newton's Binomial Theorem.
CO5 Gain knowledge of the Inclusion-Exclusion Principle and Applications.
CO6 Study in detail the Recurrence Relations, Recurrences and Generating Functions and Exponential Generating Functions.
CO7 Understand the Introduction to Graph Theory.

Course Code	M-404(A) (5 Credits)
Name of the Course	**Differential Geometry**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Understand the basic concepts and results related to curves in spaces, tangents, principal normal, curvature , binormal and torsion.
CO2 Derive the Serret- Frenet formulae and its applications in solving various problems.
CO3 Acquire knowledge of locus of center of curvature, spherical curvature , locus of center of spherical curvature and derive the results related to them.
CO4 Identify the curves determined by intrinsic equations, Helices, Involutes and evolutes.
CO5 Understand tangent plane, normal plane, directions on a surface, curvatures, asymptotic lines and then apply their important theorems and results to study various properties of surfaces.
CO6 Derive, analyze and utilize Gauss characteristic equations.
CO7 Comprehend Geodesics, its all related terms and attain mastery over its properties and theorems.

Course Code	M-404(B) (5 Credits)
Name of the Course	**Coding Theory**

Course Learning Outcomes: Students would be able to

CO1 Understand Hamming distance, Nearest neighbor/minimum distance decoding, Distance of a code.
CO2 Learn the linear codes and bases of linear codes.
CO3 Have knowledge about lower bounds, sphere covering bound, Gilbert–Varshamov bound, Hamming bound and perfect codes, Binary Hamming codes.
CO4 Know about cyclic codes, generator polynomials, generator and parity-check matrices, decoding of cyclic codes.

Course Code	M-405(A) (5 Credits)

Name of the Course	**Solid Mechanics**

Course Learning Outcomes: On completion of the above course, the students will be able to

CO1 Understand the concept of the analysis of the strain, infinitesimal affine transformation, general infinitesimal deformation, finite deformation.

CO2 Understand the concept of stress analysis, equations of equilibrium, to calculate maximum normal and shear stresses acting on a body mathematically as well as graphically.

CO3 Understand the concept of generalized Hooke's law and modified Hooke's law derived by using one plane elastic symmetry, three plane symmetry and isotropy of the homogeneous media.

CO4 Examine the deformation of a beam by its own weight, by terminal couples and torsion of a circular shaft.

Course Code	M-405(B) (5 Credits)
Name of the Course	**Non Linear Programming Problems**

Course Learning Outcomes: On successful completion of this course, the student will be able to

CO1 Apply Kuhn Tucker condition and graphical solution method to solve the Non-linear Programming Problem.

CO2 Identify and formulate Dynamic Programming Problem and its applications in solving various optimization problems.

CO3 Introduce students to practical application of operations research in big mining projects.

CO4 Identify the Quadratic and Separable Programming Problems.

CO5 Have a broad idea of Wolfe's method and Beale's method and implications of these methods.

Course Code	M-406 (5 Credits)
Name of the Course	**Project**

All the Regular students are required to undertake a Project M-406 of 5 credits allotted by the Mentor/Teacher at the end of 3rd Semester and shall require to submit it by the end of 4th Semester before the commencement of End Semester Examinations. Projects shall be on the topics related to the course contents learnt by the student during his M.Sc. Degree. The Project will be evaluated as per the guidelines given in the scheme of Examination.

M.Sc. Chemistry

SEM -I	CHEM 101	Inorganic Chemistry Theory -1
SEM -I	CHEM 102	Organic Chemistry Theory -1
SEM -I	CHEM 103	Physical Chemistry Theory -1
SEM -I	CHEM 104	Mathematics for Chemists
SEM -I	CHEM 105	Applications of computer in Chemistry
SEM -I	CHEM 106	Inorganic Chemistry Practical -1
SEM -I	CHEM 107	Organic Chemistry Practical -1
SEM -I	CHEM 108	Physical Chemistry Practical -1
SEM -II	CHEM 201	Inorganic Chemistry Theory -2
SEM -II	CHEM 202	Organic Chemistry Theory -2
SEM -II	CHEM 203	Physical Chemistry Theory -2
SEM -II	CHEM 204	Chemistry of Life Science
SEM -II	CHEM 205	Environmental Chemistry
SEM -II	CHEM 206	Inorganic Chemistry Practical -2
SEM -II	CHEM 207	Organic Chemistry Practical -2
SEM -II	CHEM 208	Physical Chemistry Practical -2
SEM -III	CHEM 301	Inorganic Chemistry Theory -3
SEM -III	CHEM 302	Organic Chemistry Theory -3

SEM -III	CHEM 303	Physical Chemistry Theory -3
SEM -III	CHEM 305	Organic Chemistry Special Theory -1
SEM -III	CHEM 307	Inorganic Chemistry Practical -3
SEM -III	CHEM 308	Organic Chemistry Practical -3
SEM -III	CHEM 309	Physical Chemistry Practical -3
SEM -IV	CHEM 405	Organic Chemistry Special Theory -2 (Organic Synthesis)
SEM -IV	CHEM 406	Organic Chemistry Special Theory -3 (Natural products)
SEM -IV	CHEM 407	Organic Chemistry Special Theory -4 (Medicinal Chemistry)
SEM -IV	CHEM 408	Organic Chemistry Special Theory -5 (Polymer Chemistry)
SEM -IV	CHEM 414	Organic Chemistry Special Practical-1
SEM -IV	CHEM 416	Two Seminar*

Following are the outcomes of the MSC Chemistry Course wise as specified specifically in Syllabus by HPU Shimla

CHEM 101

Course Outcomes (CO):

CO 1: Apply the concepts of symmetry operation, character tables, group representation to describe the geometries andchemical bonding of molecules

CO2: Explain the chemistry and mechanisms of transition metal fluorides in the presence of non-aqueous solvents.

CO 3: Classify the various kind of metal clusters with reference the metal boranes and carboranes

CO 4: Understand and describe the role of some organic reagents in inorganic chemistry.

CO 5: Know the basic concepts associated with supramolecular chemistry and their applications.

CHEM 102

CO1: Know about the supramolecular chemistry and bonding to explain its various applications.

CO2: Apply the basic concepts of stereochemistry and various types of stereoisomers of organic molecules to understandthe effect of conformation on reactivity of organic molecules.

CO3: Compare the Kinetic and Thermodynamic requirements of the reactions to establish mechanism of organic reaction.

CO4: Analyse the mechanistic details of different types of aliphatic nucleophilic substitution reactions.

CO5: Apply the mechanistic details of different types of aliphatic electrophilic substitution and free radicalreactions.

CHEM 103

CO1: Explain principles of various spectroscopic techniques

CO2:Interpret and analyse spectra of the molecules using rules of various spectroscopic techniques

CO3: Solve problems by choosing suitable spectroscopic methods and interpreting corresponding data

CO4: Understand the mechanisms and kinetics of complex and fast reactions

CO5: Explain the function and purpose of a catalyst and mechanisms involved in catalysis.

CHEM 104

CO1:Apply basic knowledge of Differential calculus for the use of chemists.

CO2:Apply the general methods of integration for their application to solve chemistry problems.

CO3: Apply basic knowledge of differential equations used in chemistry.

CO4: Apply basic knowledge of Matrices and Determinants to solve chemistry problems.

CO5: Apply basic knowledge of Vectors to evaluate physical parameters related to chemistry

CHEM 105

CO1: Develop basic knowledge of computers.

CO2: Develop basic knowledge of computer hardware.

CO3: Develop basic knowledge of computer software.

CO4: Explain the functions in FORTRAN for data analysis in chemistry.

CO5: Use of functions in FORTRAN for chemistry applications.

CHEM 106

CO 1: Know the various types of titrimetric methods of analysis and their applications.

CO 2: Demonstrate the iodatometric, bromatometriccerimetric and acid base and complexometric titrations in laboratory.

CO3: Perform experimentation and evaluate the results.

CO 4: Develop the ability to compile interpreted information in the form of lab record and to face viva-voce

CHEM 107

CO1: Describe and demonstrate the basic principle and techniques of purifications.
CO2: Know the concept of stepwise synthesis of the organic compounds.
CO3: Develop the skill of performing experiments and analysing data to evaluate results.
CO4: Develop the ability to compile interpreted information in the form of lab record.
CO5: Learn to face the viva-voce examinations.

CHEM 108

CO1: Understand the safe handling of chemicals, environmental issues, and safety measures to be followed during the labs

CO2: Use various methods in determining the refractive index of various solvents and mixtures

CO3: Determine surface tension and viscosity of various solvents and mixtures by using different experimental methods

CO4: Analyse the mechanisms and kinetics of various reactions by using different experimental methods

CHEM 201

CO 1: Explain the crystal field theory and apply the concept of molecular orbital theory to explain stability ofcoordination complexes.

CO 2: Apply the basic principles of the atomic spectroscopy to identify the energy levels of the atoms, tocalculate the number of microstates.

CO 3: Understand the splitting of spectroscopic terms in coordination compounds under applied magnetic field.

CO 4: Interpret the correlation diagrams in octahedral and tetrahedral transition metal complexes.

CO 5: Analyse the magnetic properties of co-ordination compound by applying the basic concepts of magneto-chemistry.

CHEM 202

CO1: Apply the concept of aromatic electrophilic and nucleophilic substitution reactions to explain their applications.

CO2: Explain the synthesis and applications of some reagents used in organic synthesis.
CO3: Know about some common organic reactions and to explain their mechanisms.
CO4: Understand the mechanistic implications of Elimination Reactions
CO5: Analyse the concept of molecular orbital symmetry to apply in pericyclic reactions.

CHEM 203

CO1: Explain principles of laws of thermodynamics and other phenomenon of Chemical Thermodynamics.
CO2: Use of laws of Chemical Thermodynamics to derive other thermodynamic properties.
CO3: Solve problems by choosing suitable thermodynamic derivations and relations.
CO4: Understand the basic laws of non-equilibrium thermodynamics and various electro-kinetic phenomenon.

CO5: Know about the colloidal state of the matter and various electrical properties of colloids.

CHEM 204

CO1: Understand the cell structure, functions and different metabolic processes involved in cells.

CO2: Explain the structure and biological functions of carbohydrates and proteins.

CO3: Know the role of various biological membranes.

CO4: Understand the structure of DNA and RNA and their role in cell replication.
CO5: Explain the structure and bonding of nucleic acids and can explain different enzymatic and chemical processesinvolved.

CHEM 205

CO1: Analyse composition of atmosphere, hydrosphere and lithosphere and pollution involved and waste water treatment methods.

CO2: Understand the fundamentals of environmental analysis.

CO3: Identify different types of analytical methods and to apply them to analyse air and water pollution.

CO4: Analyse composition of atmosphere, hydrosphere, lithosphere and pollution involved and waste water treatment methods.

CO5: To understand the need of green chemistry and its principles

CHEM 206

CO 1: Demonstrate the application of chemical method in commercial analysis of industrial

products as quality controlmeasure.

CO 2: To understand the various measures to control environmental pollution by some green synthesis experiments asalternative to conventional methods

CO 3: To perform experimentation and evaluate the results.

CO 4: Develop the ability to compile interpreted information in the form of lab record and to face viva-voce

CHEM 207

CO1: Describe and demonstrate the basic principle and techniques of separation of binary organic mixture.

CO2: Analyse qualitatively the presence of extra elements and functional groups in the binary organic mixture along withunderstanding of chemical reaction involved.

CO3: Understand and develop the capabilities of preparing derivatives of different organic

CO4: Understand significance of melting point mixed melting point, boiling point in identification of organic compounds.

CO5: Develop the ability to compile interpreted information in the form of lab record and to face the viva-voce.

CHEM 208

CO1: Understand the safe handling of chemicals and safety measures to be followed in the labs.

CO2: Use various methods in determining partition coefficient of iodine between two immiscible liquids

CO3: Determine heat of neutralisation and heat of solution for different acid and base combinations

CO4: Verify the Freundlich Adsorption Isotherm for I2, and acetic acid on charcoal

CO5: Prepare the colloidal solution arsenic sulphide

CO6: Construct phase diagrams for liquids and solids

CHEM 301

CO 1: Explain the various aspects of and properties of metal-pi complexes of transition metals.

CO 2: Describe basic concept of analytical Chemistry and apply the same to data analysis.

CO 3: Understand and explain the basic principle of photoelectron spectroscopy.

CO 4: Explain the spectral and magnetic properties of lanthanide and Actinide compound.

CO 5: Apply the basic concepts of nuclear chemistry to explain, nuclear reactions and radioactive techniques.

CHEM 302

CO1: Apply the basic concepts of Ultraviolet and Visible Spectroscopy and its applications.
CO2: Understand the basic principle of IR spectroscopy and its applications.
CO3: Understand the basic principle of NMR spectroscopy and to apply its role for the structure elucidation.

CO4: Apply the concept of mass spectrometry for the determination of structure of organic compounds based on fragmentation.

CO5: Understand the basic principles of photochemistry and various photochemical reactions.

CHEM 303

CO1: Explain various terms and concepts used in statistical thermodynamics
CO2: Use of concepts of statistical thermodynamics to derive various expressions and equations
CO3: Solve problems by using suitable statistical thermodynamic relations and equations
CO4: Understand the basics of quantum chemistry and their use in solving various problems
CO5: Know about the various photophysical processes and their kinetics

CHEM 305

CO1: Know about carbohydrates and methods of structure and ring size determination.
CO2: Understanding about general methods of peptide synthesis, sequence determination and protein synthesis.

CO3: Explain the structure of enzymes, properties of enzymes, mechanism and theories of enzyme action.

CO4: Understand the structure, biological function and method of structure determinations of vitamins.
CO5: Understand the mechanistic implications of the reactions catalysed by the coenzymes.

CHEM 307

CO1: Know about carbohydrates and methods of structure and ring size determination.
CO2: Understanding about general methods of peptide synthesis, sequence determination and protein synthesis.

CO3:Explain the structure of enzymes, properties of enzymes, mechanism and theories of enzyme action.

CO4: Understand the structure, biological function and method of structure determinations of vitamins.
CO5: Understand the mechanistic implications of the reactions catalysed by the coenzymes.

CHEM 308

CO 1: Apply the basic concepts of quantitative analysis to analyse the functional groups in organic compounds.

CO 2: Understand the concept of stepwise synthesis of a product and their purification.
CO 3: Perform experimentation and evaluate the results.

CO 4: Develop the ability to compile interpreted information in the form of lab record.
CO 5: Know about how to face viva-voce.

CHEM 309

CO1: Understand the safe handling of chemicals and safety measures to be followed during the laboratory

CO2: Determine heat of solution and heat of transfer for various electrolytes
CO3: Determine cell constant and limiting molar conductance of simple electrolytes in water
CO4:Compare the relative strength of acids in the given mixtures conductometrically
CO5: Determine the solubility of sparingly soluble salt by conductometric titrations.
CO5: Verify Beer-Lambert‘s law for different aqueous solutions

CHEM 405

CO1: Explain the mechanistic implications of some common reagents used in organic synthesis and their applications.

CO2: Understand the concept of oxidation reactions and their applications.
CO3: Understand the concept of reduction reactions and their applications.
CO4: Mechanistic implications of rearrangement reactions and their applications
CO5: Apply the concepts of disconnection approach for the synthesis of organic molecules.

CHEM 406

CO1: Understand the concept of natural product isolation and structural elucidation terpenoids.
CO2: Apply the general methods of structure elucidation to analyse alkaloids.
CO3: Analyse the structure elucidation methods and biosynthesis of steroids.
CO4: Describe the general methods of structure determination of carotenoids
CO5: Understanding about the general methods of structure determination of some plant pigments.

CHEM 407

CO1: Demonstrate understanding of the basic principles of drug design and drug action.
CO2: Apply the knowledge of pharmacokinetics and pharmacodynamics in drug design.
CO3: Understand the SAR and mode of action of antibiotics.
CO4: Know the neurotransmitters SAR and their mode of action.
CO5: Analyse the SAR and mode of action of some antineoplastic, cardiovascular, antihistaminic, antifertility and diuretics agents.

CHEM 408

CO1: Apply the basic concepts of polymerization reactions in polymer synthesis.
CO2: Understand the various techniques of polymer synthesis and characterization.
CO3: Explain the stereoisomerism and its effect on polymer structures and physical properties
CO4: Understand the importance of polymer as carriers, reagents and polymeric substrates in polymer applications.

CO5: Compare the applications of various natural and synthetic polymers.

CHEM 414

CO1: Apply the knowledge of basis procedure of isolation for the isolation of active component from natural sources.

CO2: Understand the concept of multistep synthesis under different reaction conditions.
CO3: Develop the ability to compile interpreted information in the form of lab record.
CO4: Able to interpret the structure of synthesized organic compound by applying the spectroscopic techniques.

CO5: Know about how to defend viva-voce.

PROGRAM OUTCOME

Department of Chemistry offers M.Sc. program in single specializations (Organic Chemistry)

the curricula of both UG and PG levels are being communicated by University to which college is affiliated and only we have applied the courses which has been revised recently by HPU Shimla.

M.Sc. intake is 34, the outgoing student are eligible to pursue research through M.Phil. and Ph.D. programme all over the Indian universities and remaining are absorbed in B.Ed. programs. Some do join private sector undertakings. Some students prepare for NET, SET and are eligible I teaching in higher institutes(College/university)

PO1: Creative Thinking: Students will be able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems in chemistry. The skills of observations and drawing logical inferences from the scientific experiments will also be developed.

PO2: Interdisciplinary Approach: Students will realize how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments. Also the knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence which inspires in evolving

new scientific theories and inventions.

PO3: Personality Development: Students will imbibe ethical, moral and social values in personal and social life leading to highly cultured and civilized personality. They will also realize that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.

PO4 Skills in research and industrial field: Students will build a scientific temper and will be able to learn the necessary skills to succeed in research or industrial field. In addition they will acquire the skills in handling scientific instruments, planning and performing in laboratory experiments.

PO5 Communication Skills: Students will develop various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.

PO6 Environmental monitoring: Students will be able to understand the environmental issues Global warming, Climate change, Acid rain, Ozone depletion and will create awareness in society.

PROGRAM SPECIFIC OUTCOMES

Right from beginning of M.Sc. programme, the students are specialized in Organic Chemistry for which special papers have been designed and duly approved from academic council of HPU Shimla. The contents of these courses are available in books including e-books mentioned against each course.

PSO-1 Students will understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life. They will also be able to acquire knowledge about the fundamentals and applications of chemical and scientific theories.

PSO-2 Students will find that every branch of science and technology is related to Chemistry. They will develop scientific outlook not only with respect to science subjects but also in all aspects related to life.

PSO-3 Students will become familiar with the different branches of chemistry like analytical, organic, inorganic, physical, environmental, polymer and biochemistry. They will also learn to apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories and in industries.

PSO-4 The student will acquire knowledge of Chemical Thermodynamics, Kinetics, Electrochemistry, Atomic Structure, Organic Chemistry, Spectroscopy and Skill in Industrial Chemistry.

PSO-5 Viewing chemistry as a tool the developing mind and critical attitude and the faculty of logical reasoning that is prepared to serve in diverse fields.

PSO-6 Students will gain a thorough Knowledge in the subject to be able to work in projects

at different research as well as academic institutions.

M.Sc. PHYSICS

PROGRAMME OUTCOMES

Department of Physics	**After successful completion of three year degree program in physics a student should be able to;**
Programme Outcomes	PO-1. Apply the skill and knowledge in the design and development of electronic circuits to fulfill the needs of small scale electronic industry. PO-2. Demonstrate, solve and an understanding of major concepts in all disciplines of physics.
	PO-3. Solve the problem and also think methodically, independently and draw a logical conclusion. PO-4. Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of Physics experiments. PO-5. Create an awareness of the impact of Physics on the society, and development outside the scientific community. PO-6. To inculcate the scientific temperament in the students and outside the scientific community. PO-7. Use modern techniques, decent equipments and Phonics software's PO-8. Become professionally trained in the area of electronics, material science, lasers and nonlinear circuits.
Programme Specific Outcomes	PSO-1. Introduce advanced techniques and ideas required in developing area of Physics. PSO-2. Enhance students ability to develop mathematical models for physical systems. PSO-3 Gain the knowledge of Physics through theory and practicals. PSO-4. Understand and apply principles of physics for understanding the scientific phenomenon in classical and quantum physics. PSO-5. Understand and apply statistical methods for describing the quantum and classical a particles phenomenon in various physical systems. PSO-6. Understand good laboratory practices and safety. PSO-7. Develop research oriented skills. PSO-8. Make aware and handle the sophisticated instruments/equipments.
Course Outcomes	**After completion of these courses students should be able to;**
M. Sc Physics 1st Semester	

PHYMS-101 Mathematical Physics	CO-1. Determine the residues of a complex function and use the residue theorem to compute certain types of integrals. CO-2. Have a good grasp of the basic elements of complex anaysis, including the important integral theorems. CO-3. Develop ability to solve ordinary second order differential equations important in the physical sciences; solve physically relevant partial differential equations using standard methods like separation of variables, series expansion (Fourier-type series) and integral transforms. CO-4. Learn how to expand a function in a Fourier series, and under what conditions such an expansion is valid. To create awareness regarding the connection between this and integral transforms (Fourier and Laplace) and be able to use the latter to solve mathematical problems relevant to the physical sciences. CO-5. Understand the concept of vector spaces and its relation to matrices. Students are able to learn the connection of matrices to that of physics e.g. qauntum mechanics. CO-6. Understand the concept of Green functions and their relevance in various problems of quantum mechanics and material science. CO-7. Learn how to use the concepts of group theory in crystallography and high energy physics
PHYMS-102 Classical Mechanics	CO-1. Gain the knowledge of motion in central force field CO-2. Classify elastic and inelastic scattering CO-3. Know the difference between Laboratory and centre of mass system CO-4. Understands Lagrangian and Hamiltonian formulation CO-5. Solve the problems using Lagrangian and Hamiltonian formulation CO-6. Get knowledge of canonical trans formation and Poission's
	bracket. CO-7. Undestand the kinematics and dynamics of rigid body in detail and ideas regarding Euler's equations of motion
PHYMS-103 Electronics-I	CO-1. Understant the basic theorems of electronics like Norton's theorem ,Thevenin's theorem etc. CO-2. Understand the electronic circuits and analises of the circuits by using these theorems. CO-4. To understand the concepts of Digital electronics and working of A/D and D/A converters. CO-5. Understand the working of microprocessors . CO-6. Understand the basic differential amplifier and its DC &AC analysis. CO-7. Able to understand OP-AMP. CO-8. Able to understand the use of OP-AMP as integtater differentiator etc.
PHYMS-104 Computational Methods in Physics	CO-1. To account for how numerical methods can be developed CO-2. To apply the practical experiences on physical problems CO-3. To account for various scientific problems and how different methods can be used to solve these problems. CO-4.To account for the role of computer models and simulations play to study of physical systems.

PHYMS-105 Laboratory	CO-1. Acquire hands on experience of handling and building electronics circuits. CO-2. Be familiar with the various components such as resistors, capacitor, inductor, IC chips and how to use these components in circuits. CO-3. Be able to understand the construction, working principles and V-I characteristics of various devices such as PN junction diodes, UJT, TRIAC etc. CO-4. Handle oscilloscope for visualisation of various input and output signals. CO-5. Apply basics knowledge of computational Physics in solving various physical problems.
M. Sc Physics 2nd Semester	
PHYMS-201 Quantum Mechanics- 1	CO-1. To familiar with the main aspects of the historical development of quantum mechanics and be able to discuss and interpret experiments that reveal the wave properties of matter, as well as how this motivates replacing classical mechanics with a quantum mechanics. CO-2. To understand the central concepts and principles in quantum mechanics, such as the Schrödinger equation, the wave function and its statistical interpretation, the uncertainty principle, stationary and non-stationary states, time evolution of solutions, as well as the relation between quantum mechanics and linear algebra. This includes an understanding of elementary concepts in statistics, such as expectation values and variance. CO-3. To develop the ability to solve the Schrödinger equation on your own for simple systems in one to three dimensions analytically. Students are able to use these solutions to calculate their time evolution, associated probabilities, expectation values, and uncertainties, as well as give concise physical interpretations and reasoning underlying the mathematical results. CO-4. To master the concepts of angular momentum and spin, as well as the rules for quantisation and addition of these. To account for the phenomena involved in the Zeeman effect and spin-orbit coupling, what is meant by identical particles and quantum statistics, and are able to perform calculations on systems of identical particles, for example to determine the
	symmetry properties of the wave function and total spin.
PHYMS-202 Condensed Matter Physics	CO-1.To understand the basics of crystal structure that is how it is made up of , its smallest unit and how closely they packed. CO-2. Able to understand different methods of diffraction and know the principles of structures determination by diffraction. CO-3. Able to understand the solid materials and their vibrations and interactions in the lattice. CO-4. To understand the concept of phonon and specific heat at low and high temperature. CO-5. Able to distinguish conductor, semiconductors and insulator material and the periodicity in the latttice. CO-6. Know the fundamental principles of semiconductors and be able to estimate the charge carrier mobility and density CO-7. Able to understand the periodicity in Kroning Penny Model. CO-8. Able to understand the the concept of superconductivity and their applications.

PHYMS-203 Statistical Physics	CO-1. Identify and describe the statistical nature of concepts and laws in thermodynamics, in particular: entropy, temperature, chemical potential, Free energies, partition functions. CO-2. Use the statistical physics methods, such as Boltzmann distribution, Gibbs distribution, Fermi-Dirac and Bose-Einstein distributions to solve problems in some physical systems. CO-3. Apply the concepts and principles of black-body radiation to analyze radiation phenomena in thermodynamic systems. CO-4. Make connections between applications of general statistical theory in various branches of physics.
PHYMS-204 Electrodynamics	CO-1. Apply Maxwell's equations to a variety of problems involving time dependent phenomena. CO-2. Solve problems involving the propagation and scattering of electromagnetic waves in a variety of media. CO-3. Demonstrate an understanding of the characteristics of electromagnetic radiation. CO-4. Have a good understanding of Special Relativity, especially as applied to electrodynamics.
PHYMS-205 Laboratory	CO-1. Capable of using components of digital electronics for various applications. ' CO-2. Able to design and perform scientific experiments as well as accurately record and analyze the results of experiments. CO-3. Use various numerical methods in describing/solving physics problems. CO-4. Learn use of graphical methods in data analysis and solving physics problems. CO-5. Measure conductivity, resistivity solids.
M. Sc Physics 3rd Semester	
PHYMS-301 Quantum Mechanics- II	CO-1. To develop the ability to understand concepts and to perform calculations of scattering of particles. CO-2.To explain the relativistic quantum mechanical equations, namely, Klein-Gordon equation and Dirac equation CO-3. To describe second quantization and related concepts. CO-4. To explain the formalism of relativistic quantum field theory.
PHYMS-302 Material Science	CO-1.To understand the basics of crystal structure that is how it is made up of , its smallest unit and how closely they packed.
	CO-2. Understand the concept of magnetism in materials CO-3. Able to understand the concepts of NMR,ESR etc. CO-4. To understand the concept of phase diagrams,and phase transitions CO-5. Understand the working of tunneling microscope ,scaning tunneling microscope etc. CO-6. To understand the concept of spin -lattice and lattice -lattice interactions. CO-7. Understand the Diamagnetism, Paramagnetism ferromagnetism and antiferromagnetism quantum mechanically.

PHYMS-303 Nuclear Physics	CO-1.Understand the structure of nuclei, and simple nuclear models such as the liquid drop model and the shell model. CO-2. Learn techniques in scattering theory which are relevant in nuclear physics – partial waves, Born approximation and compound nucleus formation; CO-3. Understand the main types of nuclear decays, and with models for calculating these and the associated selection rules; CO-4. Learn the key features of nuclear fission and fusion and their applications;
PHYMS-304 High Energy Physics	CO-1. Understand the concept of Mandelstam variables and their use in scattering problems. CO-2 Recognise and name the six flavours of lepton and the six flavours of quark. CO-3. Understand that all leptons and quarks have corresponding antiparticles CO-4. Appreciate that quarks and antiquarks combine to form baryos, antibaryons and mesons. CO-5. Write balanced strong interactions understanding the role of gluons. CO-6. Write balanced weak interactions, understanding the role of W and Z bosons
PHYMS-305 Laboratory	CO-1. Measure magnetic properties and magnetic behavior of magnetic materials. CO-2. Describe the lattice dynamics of simple lattice structures in terms of dispersion relations. CO-3. Design and carry out scientific experiments as well as accurately record and analyze the results of experiments. CO-4. Solve physical problem, enabling development of critical thinking and analytical reasoning. CO-5. Explore application of computational physics in frontier areas of pure and applied research in physics and allied fields.
M. Sc Physics 4th Semester	
PHYMS-401 Electronics-II	CO-1. To understant the basic theorems of electronics like Norton's theorem ,Thevenin's theorem etc. CO-2. Understand the electronic circuits and analises of the circuits by using these theorems. CO-4. To understand the concepts of Digital electronics and working of A/D and D/A converters. CO-5. Understand the working of Electronic filters . CO-6. Understand the basic differential amplifier and its DC &AC analysis. CO-7. Able to understand OP-AMP. CO-8. Able to understand the use of OP-AMP as integtater differentiator etc.

PHYMS-402 (b) Nuclear & Particle Astrophysics	CO-1. A historical perspective of the development of Astronomy CO-2. Conceptual understanding of basic principles involved

PHYMS-403 (a) Nano Physics	CO-1. Demonstrate the understanding of length scales concepts, nanostructures and nanotechnology. CO-2. Identify the principles of processing, manufacturing and characterization of nanomaterials and nanostructures. CO-3. Apply the electronic microscopy, scanning probe microscopy and nanoindentation techniques to characterize the nanomaterials and nanostructures. CO-4. Evaluate and analyze the mechanical properties of bulk nanostructured metals and alloys, nanocomposites and carbon nanotubes.
PHYMS-403 (b) Mesoscopic Physics	CO-1. Compare new the new concepts of nano-electronics with the present-day technique, and understand their fundamental limits. CO-2. Use simple models to calculate the basic energy and length scales for mesoscopic phenomena which are physically relevant. CO-3. Identify various basic device concepts in a variety of physics systems.
PHYMS-404 (c) Opto – Electronics	CO-1. Know various physical processes of optoelectronic transitions, and be able to employ basic relations between material optical properties and devices in optoelectronics. CO-2. Define the principles of functioning of most important optoelectronic devices. CO-3. Explain and implement the equations, which determine main characteristics of optoelectronic devices and optical fibers. CO-4. Analyze operational modes of photonic devices, in order to select suitable type for given applications. CO-5. Understand the interconnections between device design, mode of operation and characteristics, and the overall efficiency of optoelectronic devices and signal transmission.
PHYMS-405 Project Work	CO-1. Introduce student to the basics and methodology of research in physics, which is done via theory, computation and experiments either all together or separately by one of these approaches. CO-2. It is intended to give research exposure to students at M.Sc. level itself

M.Sc. BOTANY

Programme Outcome in Respect of M.Sc. First & Second Semester:

1. This will help in understanding the diversity of Phycology & Mycology as well as their importance to the man and environment.

2. It is an opportunity to learn about the diversity of micro-organism as well as how they affects plants and animals life, both positively & negatively.

3. Indepth knowledge of Bryophytes & Pteridophytes would help the students in understanding the complexity of plant body, their role in succession as well as their significance to the human beings.

4. The existence of all animals depends upon the plants in the form of food, fodder, fuel, fibers, fertilizers & medicines. In fact plant breeding is the technique to have plants of best quality for our needs.

5. It is the platform to learn about Biostatistics & Computer with particular reference to the biological world.

6. Having the knowledge of cytology and bio-molecules is the need of hour, all this is being imparted to the students.

7. Here is a chance to have an idea about the diversity of spermatophytes and their economic & ethnobotanical significance.

Course Outcome:

1. This will motivate students for research.

2. It will help in conservation of natural resources for the generations to come.

3. Plants are the free of cost source of oxygen to the aerobic organisms. Therefore it will motivate students and general public to plant, protect & preserve trees for our own existence.

4. A lot of self employment opportunities are available in this field.

M.A POLITICAL SCIENCE

1. Enable to develop their academic proficiency.
2. Enable to find out major scope in academic and non academic arena
3. Students can get placement in teaching profession, civil services, NGOs and Research centers.
4. Students have scope in govt. as well as private sector
5. Students are able to inculcate democratic values like Cooperation, Coordination, Law and Justice in their behavioral approach.

MA English (CBCS)

Programme Outcomes:

MA English Programme proposes to offer an overview of disparate literatures that have been produced spatio-temporally in various languages and genres. The purpose is to facilitate a detailed study of the established classics and acknowledged masterpieces across the world, commencing from the fourteenth century, when English as a language was acknowledged and appreciated at par with Latin and French. The programme targets to develop an understanding of the theoretical and critical perspectives covered under different genres of literature so as to impart knowledge of the historical background of English literature with its continuing influence in the subsequent eras. The students are trained to develop analytical and critical propositions to strengthen the requisite acuity in the field of research.

The programme intends to develop comprehensive insights into the cultural nuances and experiential livings of numerous societies across the globe. The programme comprises literature and a significant component of linguistics to groom and nurture the students into competent assets, employable in multiple avenues that a specialization in English opens up in the professional world. The course attempts to inculcate the principles of "gender sensitivity," "social responsibility," "community service" and "national pride," which are the underlining tenets of this programme.

Programme Specific Outcomes:

MA English Programme specifically aspires to inculcate the following in the students:

- Acquaintance with the writers and theorists of different ages across the world along with their concerns, ideas and perspectives.
- Application of the knowledge of language and literature in different spheres of life.
- A critical acumen to analyse and evaluate the scholarly works of English literature.
- Interpersonal skills and ethical values for the holistic development of the students.
- Expertise in writing and oratory skills in a variety of formats, such as articles, essays, critical reviews of literary texts, debates, declamations, panel discussions and seminar presentations.

Semester - I

Course - I **History of English Literature from Chaucer to 1800**

Course Code **DSC MENG 101 (Compulsory)** **Maximum Marks: 100**

Objectives of the Course:

History and literature have a two-way relationship, each influencing the other in multifarious ways, for the events of the past assist in the making of literature. History and literature are essential studies of humankind because they interpret human experiences to an extent that one gathers literary sensitivity which is highly influential in overall blossoming of vibrant minds. Knowing the historical background of a text, the students are well equipped to decipher the intentions of the author in writing the text. Through this course the students are introduced to the historical background of England from the age of Chaucer till the eighteenth century to underline the cultural effects of literature produced in different time periods. This is significant for the students to understand that human life governs the production of literature and how literature motivates and inspires people to excel in life. The course intends to apprise students about the different phases of English literature and prepare them to analytical skills based on the historical periods supported by the facts. This paper acquaints students with the evolution and growth of literature with respect

to the temperament of the time and age. They gather an understanding of how the socio-cultural environment determines and evokes interest in various forms of literature.

Course Outcomes:

Upon completion of the course, students will be able to read and analyze literary texts with enhanced skills and insights by understanding the relevant cultural and historical contexts. The students will be able to identify connections among the literary texts across genres and historical periods. Also, they will be competent enough to develop an appreciation and understanding of the aesthetic and historical development of British literature till the eighteenth century and will be able to relate how the socio-politico-cultural-historical conditions of any given age play a vital role in the production of literature.

Course - II Poetry from Chaucer to Pope
Course Code DSC MENG 102
(Compulsory)

Chaucer: "The Prologue," "The Nun's Priest's Tale" Donne: "The Sun-Rising," "The Extasie,"
"The Canonization,"' "The Anniversary,"
"The Flea," "A Valediction: Forbidding Mourning" Milton: *Paradise Lost*: Book I and "Lycidas," "'L' Allegro" Pope: *The Rape of the Lock*, *An Epistle to Dr. Arbuthnot*

Objectives of the Course:

The course is designed to appreciate poetry as an important literary genre so as to understand its multifarious elements like diction, form, tone, imagery, symbolism, etc. The course aims to make students understand the different features and functions of poetry along with the relevance of poetic traditions from Chaucer to Pope. It familiarizes students with the aesthetic, cultural, socio-politico- geographical and historical dimensions of English poetry. It strives to enhance the critical thinking by means of theoretical understanding of the prescribed poems.

Course Outcomes:

The students will gain knowledge about the different phases of poetry from Chaucer to Pope along with different poetical forms like Sonnets, Ballads, Epics, Mock Heroic poems, etc. They will be able to distinguish among rhythm, meter and other musical aspects of poetry. The course familiarizes various technical aspects of poetry with special reference to Neo Classical Poetry which adheres to the Classical rules of poetry writing which gives students an understanding of the norms and nuances of poetry. The students will be able to understand the growth of English poetry as a genre from the historical and cultural perspectives from the beginning to the eighteenth century.

Course - III Shakespeare and his Contemporaries Course Code DSC MENG 103
(Compulsory)

Marlowe: *Doctor Faustus*
Shakespeare: *Tempest*
Shakespeare: *Twelfth Night* Ben Jonson: *Volpone*

Objectives of the Course:

The course manifests how writers creatively use language to explore the inner psyche of characters by universalizing the general human nature across varied cultures by examining the

selected plays by Shakespeare and his contemporaries. The course intends to motivate students to explore the prescribed works in the light of the social, political, and philosophic contexts of Renaissance drama. The aim of the course is also to identify the ways in which reading and analyzing plays and theatrical performances can contribute to the students' perception of economic, social, political and gender problems.

Course Outcomes:

The students will be able to demonstrate working knowledge of a range of ideas as found in the texts of Shakespeare and his contemporaries. It will also enable the students to make an analysis by understanding the historical context and characteristics of the drama. The students will also acquire appropriate terminology and concepts to discuss the plot, characterization, themes and linguistic devices used in various plays.

Course - IV **Nineteenth Century Fiction Course Code DSC MENG 104 (Compulsory)**

Emily Bronte: *Wuthering Heights* Charles Dickens: *Hard Times* George Eliot: *The Mill on the Floss*
Thomas Hardy: *Tess of the D'Urbervilles*

Objectives of the Course:

The course aims to provide an understanding of the development of the novel in the nineteenth century. It attempts to make the students gain both an understanding of nineteenth century novel forms and trends, and an appreciation of the art and skill of the period novel. The novels scrutinize nineteenth century society in totality, with all its follies and righteousness.

Course Outcomes:

The students will acquire the knowledge necessary to comprehend the novels of the period and will be equipped with the terminology necessary to discuss the thematic as well as technical aspects of the novel. The students will gain knowledge of the major writers of the age and understand how the novelists of the period contributed in different ways to the development of the novel form.

Semester - II

Course - V	**History of English Literature: Nineteenth and Twentieth Centuries**
Course Code	**DSC MENG 201**

(Compulsory) Objectives of the Course:

The course spans the historical era of enormous range and significance: From the French Revolution in 1789 to the mid-twentieth century; from Romanticism to Modernism and after. It intends to acquaint students with the influence of some of the important historical events and cultural movements in the literature of the nineteenth and twentieth centuries. It aims to provide significant knowledge about the post-war cultural and intellectual developments. The course covers vast literary-historical panorama, and traces discernible, essential and vital continuity between the writers and texts spread over a span of more than two centuries. The emphasis of this course is on studying the significant historical, social and literary movements, and the impact of

these on the writers and emergence of new genres chronologically.

Course Outcomes:

Upon completion of the course, students will be able to read and analyze literary texts with increased skill and insights; their integrated understanding of literature being a product of relevant cultural and historical contexts and perspectives would be enhanced. The students will be able to identify connections among the literary texts across genres, historical periods, and/or cultural contexts. They will be able to develop an appreciation and understanding of the historical and aesthetic development of British literature and culture of the nineteenth and twentieth centuries. They will be competent enough to discuss the vast range of themes and issues of the particular age, for instance, the impact of the French and American revolutions; the industrial revolution; expanded education; religious and scientific developments; shifting definitions of gender, etc.

Course - VI Romantic and Victorian Poetry Course Code DSC MENG 202 (Compulsory)

Blake:	*Songs of Innocence and Songs of Experience*
Wordsworth:	"Tintern Abbey," "Ode: Intimations of Immortality"
Coleridge:	"The Rime of the Ancient Mariner," "Kubla Khan" Keats: "Ode on a Grecian Urn," "Ode to a Nightingale," "Ode on Melancholy," "To Autumn"
Tennyson:	"The Lady of Shalott," "Ulysses," "The Lotos-Eaters"
Browning:	"Evelyn Hope," "The Last Ride Together," "My Last Duchess," "Rabbi Ben Ezra"

Objectives of the Course:

The course focalizes on significant poets from the Romantic and Victorian periods and situates their work within the cultural, socio-eco-politico-scientific and aesthetic concerns of the period. The course is designed to pay close attention to both formal and contextual dimensions of the prescribed poems. It intends to familiarize the students with different styles and forms of poetry to scrutinize the complexities of interaction between literary and cultural formations in the works of major Romantic poets and Victorian poets including Wordsworth, Coleridge, Keats, Tennyson, Browning and Arnold.

Course Outcomes:

On completion of the course, the students will be able to critically analyze Romantic and Victorian poetry and its various elements such as diction, tone form, genre, imagery, figures of speech, theme, etc. It will not only hone their creative skills and critical abilities but will also enrich their vocabulary and writing skills. The students will be able to explore their power of imagination and demonstrate their ability to reflect critically in the advanced study of poetry as a genre.

Course - VII Modern Fiction
Course Code DSC MENG 203 (Compulsory)

Virginia Woolf:	*Mrs. Dalloway*
James Joyce:	*A Portrait of the Artist as a Young Man*
D.H. Lawrence:	*Sons and Lovers*
Joseph Conrad:	*Heart of Darkness*
E.M. Forster:	*A Passage to India*

Objectives of the Course:

The course introduces students to the pleasure of reading by cultivating life-long appreciation of the unique literary imagination of people and places through fiction. It intends to develop an appreciation of modern fiction, including the formal conventions of literary works and broaden life experiences through imagination, empathy and engagement with diverse narratives and perspectives. It aspires to enable students to interpret fiction from various historical, philosophical and cultural contexts by studying a wide selection of canonical texts of modern fiction so as to understand the reciprocal relationship between literature and culture, and ascertain that literature effects culture and that culture effects literature in turn too. It will enhance their critical thinking skills through self-reflexivity, as well as through reflection on cultures - foreign and familiar.

Course Outcomes:

The students will be able to trace the broad developments in the Modern novel during the twentieth century, and to identify important concerns of modern novelists and appreciate representative works of modern fiction by examining the impact of diverse themes of modern fiction. The students will be equipped to apply universal human values expressed in novels from around the world to formulate a comparative perspective of cross-cultural, socio-eco-politico experiences. They will be adept to use literary analysis terminology by exploring literary elements used in the novels which will make them conversant with terminology and practices of literature and literary criticism with newly acquired knowledge.

Course - VIII **Growth and Structure of English**
Language Course Code **DSC MENG 204 (Compulsory)**

I History of Language
A.C. Baugh - *A History of English Language* (Chapters 3 to 9)

II Structure of Language
(a) Phonemes: Consonants, Vowels, Stress and Intonation
(b) Morphemes: Roots and Affixes, Derivational and Inflectional Morphemes, Allomorphs

Objectives of the Course:

This course is a chronological study of the growth of English language from the Old English period till the mid twentieth century by focusing on the emergence, evolution and progress of English language. This course will showcase the growth of English language from fifth century onwards which will unfold the gradual development of English through the periods of Old English, Middle English and Modern English. The course traces the impact of historical invasions such as Norman Conquest and Renaissance on the growth of English language. It will explore technical aspects of language and linguistics by studying the core components of linguistics like phonology, morphology, syntax, etc. which will make students overcome the barriers of speech sound, word accent, intonation, etc., faced especially by non-native learners of the English language.

Course Outcomes:

The students will be able to demonstrate a thorough understanding of diachronic changes in English language from Old English to present day. They will be familiar with the process of change and variation in language, and the role of language in reflecting and constructing social identities. They will develop the linguistic skills required for the close analysis of individual words in the texts. They will be able to decipher the complexity of language as a communication system shaped by biological, cultural, cognitive and social factors.

Course - Generic Elective I **Advanced Academic Writing**
Course Code **GE-MENG 205 (Compulsory Interdisciplinary)**

Unit - I Introduction to Academic Writing Writing as a Medium of Communication Fundamentals of Academic Writing
Types of Academic Writing

Unit - II Mechanics of Academic Writing
Pre-Writing, Writing and Revision
Rules and Conventions of Academic Writing (Style and Language)
Critical Thinking (Analysis, Synthesis, Interpretation and Evaluation)

Unit - III Dimensions of Academic Writing
Summarising, Paraphrasing, Paragraph Writing
Précis-Writing, Abstract Writing, Writing a Review
Presentations, Report Writing and Writing a Research Paper

Unit - IV Research Methodology and Conventions Kinds of Research (Qualitative and Quantitative) Review (Literature and Peer Review)
Ethics in Research and Plagiarism, MLA (9th Edition) (Mendeley, Zotero)
Using Online Resources (Academic Search Engines, Open Access Databases), Metaliteracy

Course Description

Writing is an important element of communication and is vital for students and research scholars of all disciplines. Written communication necessitates clarity of expression, precise language, and an effective style. The Advanced Academic Writing course is designed for graduate and research students to hone their academic and professional writing skills in English. It is tailored to develop successful written communication and research skills by introducing students to the mechanics, dimensions and conventions of academic writing. The primary focus of the course is to build proficiency and confidence in the students by enhancing their critical thinking abilities via the processes of analysis, synthesis, interpretation and evaluation. The course encompasses methods and techniques that can be applied to different types of academic writing including summarising, paragraph writing, abstract writing, report writing, research writing and making presentations. It intends to introduce the students to research methodology, ethics in research, using online resources and accessing online educational databases for effective research. The course thus aims to enhance and strengthen the reading, critical reasoning, research and writing skills and abilities of students.

Course Objectives

To provide students with an opportunity to improve their:

- Reading skills
- Writing skills
- Critical reasoning skills
- Research skills

To introduce the various stages of the writing process.
To familiarize students with the features and stylistic conventions of academic writing.

Course Outcomes

By the end of the course, students will be able to:

- Understand the importance of academic writing
- Employ different types of academic writing
- Write summaries, paraphrases and paragraphs
- Make compositions with correct grammatical forms
- Use correct tools for citing resources
- Understand the ethics of research
- Demonstrate ability to write for an academic audience

Semester – III

Course - IX **Literary Criticism**
Course Code **DSC MENG 301 (Compulsory)**

Aristotle:	*The Poetics*
Bharat Muni:	*Natyashastra* (Chapter
-6) Dryden:	*Essay of Dramatic Poesy*
Coleridge:	*Biographia Literaria* (Chapters 13-18)
Arnold:	"The Function of Criticism in the Present
Time," Eliot:	"Tradition and Individual Talent" and "The Frontiers of Criticism"

Objectives of the Course:

Literary criticism, as a term, applies to any debate about literature, i.e., the practice of studying, evaluating and interpreting works of literature. The course offers an overview of important literary critics and theories, and focuses on the texts that have laid the foundation of western as well as Indian critical literary thought. It endeavours to expose students to categories and traditions of literary theories based on different historical periods while deliberating on contributions of each writer to the development of literary criticism. It aims to provide an incisive understanding of the function and relevance of different literary methods practiced through an intense study of the prescribed literary texts.

Course Outcomes:

The students will become aware about the perceptions of different critics regarding varied literary concepts like tragedy, poetics, criticism, etc., and will be able to critically respond to different writers and their works. The students will develop the ability to discern the contours of literature through the numerous opinions of critics on the concerned subject matter.

Course - X **Modern British and American**
Poetry Course Code **DSC MENG 302 (Compulsory)**

W.B. Yeats:	"The Second Coming," "Sailing to Byzantium," "A Prayer for My Daughter," "Among School Children," "Leda and the Swan"

T.S. Eliot: *The Waste Land*
W.H. Auden: "The Unknown Citizen," "In Memory of W.B. Yeats," "The Shield of Achilles," "September 1, 1939"
Walt Whitman: "Song of Myself" (1, 5, 33), "Out of the Cradle
Endlessly Rocking," "A Passage to India"
Robert Frost: "Birches," "Design," "Mending Wall," "After Apple Picking," "The Road not Taken," "Home Burial"
William Carlos Williams: Poems in Modern Poets One (Published by Faber and Faber)
"January Morning," "Tract," "By the Road to Contagious Hospital," "A Unison," "The Last Words of My English Grandmother," "The Waken an Old Lady," "The Widow's Lament in Springtime," "To a Poor Old Woman," "The Yachts," "These"

Objectives of the Course:

British and American poetry of the nineteenth and twentieth centuries has witnessed the crucial development in the arenas of style, form, content and presentation. This course will acquaint students with the modern poets of British and American poetry. It intends to apprise the students about the language of making and remaking along with the presence of artistic appropriation and cultural emancipation in the prescribed poets. It will also familiarize the students with different movements and traits in Britain and America which shaped literature, especially poetry.

Course Outcomes:

The students will be able to develop strategies for identifying formal and thematic features of poetry in general and especially of the prescribed ones in particular. They will be able to appreciate two dissimilar cultures as poetry of two nations is studied in detail.

Course - XI Modern British Drama
Course Code DSC MENG 303 (Compulsory)

G.B. Shaw: *Arms and the Man*
Oscar Wilde: *An Ideal Husband*
T.S. Eliot: *Murder in the Cathedral*
John Arden: *Sergeant Musgrave's Dance*

Objectives of the Course:

The course is based on drama and its socio-cultural implications representing various realistic concerns of the modern society. It aims to introduce students to modern theatre movements and to make them familiar with the themes and techniques of modern drama, and also to expose them to the various technicalities and concerns of the playwrights**.**

Course Outcomes:

Realism is the significant quality of Modern English Drama which prepares students to deal with real life problems, presented in the prescribed plays. The students will develop an understanding of sub-genres of drama – romantic comedy, poetic play and realistic drama through a detailed study of the technicalities of drama as a genre.

Course XII-i **World Fiction**
Course Code **DSE I-MENG 304 (Elective)**

Dostoevsky: *Crime and Punishment* Ernest Hemingway: *The Old Man and the Sea* Margaret Atwood: *Surfacing*
Chinua Achebe: *Things Fall Apart*
V.S. Naipaul: *A House for Mr. Biswas*

Objectives of the Course:

World literature speaks to people of more than one nationality. It facilitates insights into human nature which transcend nationalities and borders. The course will serve as a window to various novelists and their works across cultures and continents. It intends to offer insights into the great works of literature to explore the tensions, conflicts and issues of mankind in general, and presented in the texts in particular.

Course Outcomes:

The students will be able to contextualize the major themes in world fiction and their applicability in the contemporary society. They will develop understanding about moral dilemmas, separation, honour, struggles, defeat, change, belonging, etc. – the human concerns that cross nationalities and borders and unite mankind. They will also acquire life skills to handle their issues positively.

Course-XII-ii **African Literature**
Course Code **DSE I-MENG 305 (Elective)**

Chinua Achebe: *A Man of the People* Ngugi wa Thiong'o: *A Grain of Wheat* Nadin Gordimer: *My Son's Story*
Bessie Head: *The Collector of Treasures* (Short Stories) Wole Soyinka: *A Dance of the Forests*

Objectives of the Course:

The course introduces students to a variety of literary texts from Africa. By covering a wide range of genres and diverse geographical regions, the purpose is to acquire a general understanding of the key issues in African literature. It aims to demonstrate how creative writings help create an understanding of the socio-cultural and eco-political issues that define life and existence on the African continent. It intends to make students understand Africa from the perspectives of African ethos.

Course Outcomes:

The students will develop critical learning that moves away from dominant Eurocentric and Western perspectives. They will be able to place a text in its socio-historical context and demonstrate an understanding of different contents, forms and contexts of African literature. They will understand African literary responses to colonialism, apartheid, negritude and slavery.

Course-XII-iii **Australian Literature**
Course Code **DSE I-MENG 306 (Elective)**

Patrick White: *The Solid Mandala*
David Malouf: *Remembering Babylon* David Williamson: *The Removalists*
Jack Davis: *No Sugar*

Objectives of the Course:

The course aims to familiarize the students with the diversity within the Australian literature. It offers an insight into history through literature and stylistics of Australian fiction and drama. It also intends to cultivate students' ability to negotiate literary representations of diverse cultures within a nation.

Course Outcomes:

With the study of distinct flavours of Australian literature, the students will be able to advance in literary response to the key issues in Australian literature and comprehend its historical background. They will also be able to participate in the debates on the issues such as Aboriginal culture, history, ethnicity, and identity. Also, they will gain knowledge on concepts of dualism, magic realism, new age theatre and postcolonial theatre.

Course-XII-iv **Canadian Literature Course Code** **DSE I-MENG 307 (Elective)**

Robertson Davis: *Fifth Business*
Sharon Pollock: *The Komagata Maru Incident*
M.G. Vassanji: *The Book of Secrets*
Lee Maracle: *Sundogs*

Objectives of the Course:

The course intends to create awareness about diversity in Canadian literature with its conflicting priorities as this is the literature of multicultural country, written in languages including Canadian English, Canadian French and Indigenous ones. The students will study native, immigrant and settler writers to understand the complexity of Canada and the Canadian literary canon.

Course Outcomes:

The students will acquire familiarity with the Canadian literature with an ability to identify and underline critical issues that figure in Canadian literature. They will be able to discuss and interpret it vis-a-vis other writings of the world and to respond to terms like displacement, religion, identity and morality.

Semester - IV

Course – XIII **Contemporary Literary Theory Course Code** **DSC I-MENG 401 (Compulsory)**

1. Agyeya
    a. "Memory and Country"
2. Ferdinand de Saussure
    a. "The Object of Study"
    b. "Nature of the Linguistic Sign"

3. Jacques Derrida
    a. "Structure, Sign and Play in the Discourse of the Human Sciences"
4. Terry Eagleton
    a. "Capitalism, Modernism and Postmodernism"
5. Roland Barthes
    a. "The Death of the Author"
6. Elaine Showalter
    a. "Feminist Criticism in the Wilderness"
    [Lodge, David, ed. *Modern Criticism and Theory: A Reader*: London: New York: Longman, 1988. For Essays: 1-5]
7. J. Hillis Miller
    a. "Culture Studies and Reading"
    [Wolfreys, Julian. *Literary Theories: A Reader and Guide*. Edinburgh: Edinburgh University Press, 1997.]
8. Homi K. Bhabha
    a. "Dissemination: Time, Narrative and the Margins of Modern Nation"
    [Ashcroft, Bill, Gareth Griffiths and Helen Tiffin, eds. *The Post-Colonial Studies Reader.* London and New York: Routledge, 1995.]

Objectives of the Course:

Perspectives and Points-of-View are the keywords in contemporary academia and professional lives, and the grand route to this widening of perspective is through a comprehensive understanding of different organized methods to evaluate and analyze a text. The course aims to develop this aspect of critical faculty of the students by acquainting them with various theories that provide a guided and specialized microscopic view in the context of a text. Herein the focus is on important literary critics, ideas and different schools of literary theory. To meet the purpose, the course prescribes different movements and literary concepts such as nation, structuralism, post-structuralism, feminism, deconstruction, postcolonialism and cultural studies.

Course Outcomes:

The students will be equipped to explore and understand numerous aspects through which literary theory is applied to texts and extended to day-to-day life. They will be able to read and analyze literary texts through multiple perspectives and lenses in the light of literary theories prescribed in the course. It will enable them to read, write and apply theories, and formulate the relationship between the author and the work.

Course - XIV Indian Writing in English Course Code DSC I-MENG 402 (Compulsory)

Raja Rao: *Kanthapura*
R.K. Narayan: *The Vendor of Sweets*
Anita Desai: *Clear Light of Day*
A.K. Ramanujan: "The Snakes," "Obituary," "The Striders"
Keki N. Daruwala: "Ruminations," "The Fighting Eagles," "The Mistress," "Boat-ride Along the Ganga"
Nissim Ezekiel: "Poet, Lover, Birdwatcher," "Enterprise, "The Visitor"

Objectives of the Course:

Indian Literature has a rich heritage comprising texts in all genres, from Epics and Novels to Criticism and Theory. The course aims to acquaint the students with the nuances of Indian literature, in all its facets and dimensions. It is designed to familiarize the students with the emergence and growth of Indian writing in English in the backdrop of colonial experience, concerning different issues related to caste, class, gender and politics. The course offers a platform to rationally analyze the social, political and cultural issues reflected in the works of Indian English writers

Course Outcomes:

Upon completion of the course, the students will be able to appreciate the artistic and innovative nuances of the English language used by the Indian English writers in addition to various issues taken up by them to sensitize Indian masses. Also, they will be able to learn by reading the poetry pieces of modern Indian English poets, about the upcoming issues encountered by the Indian society in recent times.

Course XIV-i **Modern European Drama**
Course Code **DSE II-MENG 403**
(Elective)

Bertolt Brecht: *Mother Courage and Her Children*
Henrik Ibsen: *Ghosts*
Anton Chekhov: *The Cherry Orchard*
Samuel Beckett*:* *Waiting for Godot*

Objectives of the Course:

A very significant line of modern critical thinking owes its genesis to Europe, and its ideologies are best manifest in literary representations. The European drama is an outcome of different sea changing events of twentieth century and it reflects the ethos of European masses. The course aims to introduce the students to the key European dramatic texts that have shaped Modern dramatic writing from seminal playwrights such as Brecht, Ibsen, Chekhov and Beckett.

Course Outcomes:

Upon completion of the course, the students will be able to understand the important theatrical concepts and practices. Also, they will be able to dwell on the philosophical angst of human beings as encountered and represented by the modern European dramatists.

Course XIV-ii **American Drama**
Course Code **DSE II-MENG 404 (Elective)**

Eugene O'Neill: *Desire under the Elms* Arthur Miller: *Death of a Salesman* Tennessee Williams: *The Glass Menagerie*
Edward Albee: *Who's Afraid of Virginia Woolf?*

Objectives of the Course:

The course aspires to acquaint the students to the "Big Four" of American Drama. This acquaintance shall go a long way in the students' understanding of the American stage in

particular, and American life in general, as it was in the twentieth century with its connect to the Great American Dream. As these value systems have garnered a global presence in contemporaneity, an insight into its foundation is targeted through this course.

Course Outcomes:

This course will equip the students to approach American drama with the perspective of history, art and different emerging ideas and trends after second world war. The students will be able to fathom deeply the American culture and the changes in the American drama due to great depression, second world war, material expansion, American dream, and alienation in personal life due to cut-throat competition.

Course - XVI Indian Writing in Translation Course Code DSE III-MENG 405 (Elective)

Kalidas:	*Abhijnanshakuntalam* (English translation by M. R. Kale. Pub. Motilal Banarasidas)
Premchand:	"Intent of Literature"
Bhisham Sahni:	*Tamas*
U. R. Ananthamurthy:	*Samskara*
Mahasweta Devi:	*Rudali* (English translation by Anujam Katyal. Pub. Seagull)
Shiv K. Kumar:	*Luna* (English translation by Ish Kumar)

Objectives of the Course:

India, unlike the European construct of a nation, has always been a heterogeneous nation - ethnically, culturally and linguistically. The literature in India has been composed in varied languages, each representing, apart from the universal characteristics, the culture specific nuances of the "region" it represents. The course strives to acquaint the students to Indian literature composed in languages other than English, through their English translation. It intends to foreground the basic tenets of translation to the students. The course offers translation and contextualization of the texts from different socio-cultural climes prevalent in the different parts of India.

Course Outcomes:

The students will become adept at comparative analysis of the different regional texts prescribed in the course. It will enable them to understand the regional nuances and cultural contexts of multifaceted Indian ethos via different texts and themes, and also the way of expression manifest in different languages.

Course XVI -i Literature and Gender Course Code DSE III-MENG 406 (Elective)

Virginia Woolf:	*A Room of One's Own*
Caryl Churchill:	*Cloud Nine*
Toni Morrison:	*Beloved*
Binodini Dasi:	*An Autobiography* (Translated into English by Rimli Bhattacharya)

Manobai Bandhopadhyay and Jhimli Mukherjee Panday: *A Gift of Goddess*

Lakshmi: A Candid Biography of the First Transgender Principal

Objectives of the Course:

The course aims to sensitize the students with the social construction of gender. The prescribed literary texts offer insights into selected literary texts and cultural conditions from the standpoint of gender theory – masculinity, femininity and transgender. The course aspires to broaden the horizon towards the socio-politico-cultural dilemmas of contemporary living.

Course Outcomes:

Upon completion of the course, the students will be able to visualize and understand the concepts of gender beyond the discourse of masculine and feminine gender. The students will be able to analyze and critique socio-cultural construction of gender and the multiple issues addressed herein.

Course – XVI-ii **Native Writing**
Course Code **DSE III-MENG 407 (Elective)**

Maria Campbell:
Half-Breed Drew Hayden Taylor:

Someday Kim Scott: *Benang*
Sally Morgan: *My Place*

Objectives of the Course:

The course aims to acquaint and make students appreciate the historical, social, cultural, political and racial diversity in Native literature. It offers a platform to the marginalized voices from the developed countries. It aspires to sensitize the students towards a plethora of cultures and traditions, some unlike the ones they have known thus far.

Course Outcomes:

Upon completion of the course, the students will be able to understand and appreciate the role of history, culture and traditions in the development of Native writing. They will be able to recognize and critique different stereotypes and taboos created and sustained to suppress the native people, and how the native people resisted by vociferously articulating themselves.

Course - Elective II **Contemporary Short Fiction**
Course Code **GE-MENG 408 (Compulsory Interdisciplinary)**

Unit - I

1. Baburao, Bagul. "*Jevha Mi Jaat Chorli Hoti"* (*"When I Hid My Caste."*) Originally written in 1963 (English Translation by Jerry Pinto released in 2018). Publishers**:** Speaking Tigers.
2. Krishna Sobti. "*Sikka Badal Gaya.*" Translated from the Original Hindi by Jaidev. 1997-12-31. Vol. 3 No. 2 (1997): *Summerhill*.
3. Haruki Murakami: "Kino." *Men Without Women,* 2015. Translated by Philip Gabriel and Ted Gossen from Japanese.
4. Etgar Keret: "What, of this Goldfish, Would You Wish?" *Suddenly, A Knock on the Door*

Unit II

(Miriam Shlesinger, Nathan Englander and Sondra Silverston Translators) 2012.

1. Ruskin Bond "Snake Trouble."
2. Shashi, Deshpande: "The Dark Holds No Terror." 2000.
3. Jaiwanti, Dimri. "Dim Wit." *Inner Eye and Other Stories*.

Unit - III

1. Intan Paramaditha: "Vampire" *Apple and Knife* (2019).
2. Tim Winton: "The Turning." *The Turning.* 2004.
3. Lesley Nneka Arimah: "What it Means When a Man Falls from The Sky." United Kingdom. April 2017.

Unit -IV

1. Alice Munro: "Dear Life." *Dear Life.* 2012.
2. Chimamanda Ngozi Adichie: "Zikora" (39 pages). African American, 2021. Standalone Story.

Description of the Course

This course is designed to study critical concepts and the diversity of experience reflected in modern and contemporary short stories. It introduces students to close readings of short stories representing a variety of time periods and nationalities and aims to motivate students for indulging in reading, discussion, and written analysis in order to develop skills in literary analysis, interpretation and familiarity with the conventions of the genre. Short stories play a significant role in exposing societal realities crisply and engagingly and an integral part of this course is to study how our society finds its essence and values through this genre. It includes writings from Indian, African American, American, Australian, Israeli, Japanese, British, Indonesian, South Asian, and other artistic, literary and cultural traditions. It is a representative list of modern writings (mostly post-World War II) which reflect on the complexities of life, powerfully as well as with an immense sense of humour. There is a wealth of short stories from across the world often capturing the oral, the episodic, and the momentary truths of vernacular lives. The course is designed to give a glimpse of the multicultural and the multilingual reality we live in, which exist distinctly but are interconnected and overlapping at multiple levels. The course intends to affirm and reaffirm humans urge to tell and hear stories.

Objectives of the Course:

One of the chief components of this course is to look at short fiction as a specific category in literature with its own unique characteristics. The course proposes an in-depth analysis of twelve stories to study the form while delving into various themes contextualized in time, locale and history as well as the biographical and psychic trajectory of the author. The stories are selected keeping in mind the need to broaden the perspective of the readers. For this purpose, each story belongs to a different subgenre and represents different modes of writing. As the writers belong to different countries, hence the present collection almost serves as a window to the literature of various countries. The selected stories represent a few specific subgenres, such as feminist writing, lyrical writing, partition narrative, magic realism, folklores, myth and legend, cli-fi writings, writings in translation, among several other forms of writings.

Course Outcomes

- The students will be able to formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
- The students will be competent enough to compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and/or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one short story writer.
- The students will be enabled to identify a range of key terms that are essential to an introductory level understanding of literature, particularly the short story.
- The students will be able to explain the ways in which the short story provides a literary experience which is both similar to and different from that of the novel.
- By the end of the course the students will have gained direct acquaintance with some representative 20th and 21st century writers. The course will also equip the students with techniques of textual analysis, and the strategies required in using literary texts to comprehend broader cultural, social and political issues.

General Course Requirements and Recommendations

- Students will read twelve short stories that come from a variety of nationalities, cultures or perspectives, and represent various stages and notable achievements in the historical development of the genre.
- Students will regularly engage in thoughtful discussions of the assigned readings.
- Students will study (through assigned readings and/or classroom or online discussion) the cultural contexts from which the literature emerges.
- Students will study concepts that are essential to an understanding of the short story as a genre.