DEPARTMENT OF EDUCATION

The department of education was started in the year 2017 with four year integrated courses B.A. B. Ed/B.Sc. B.Ed. in regular mode under semester system. The faculty of department is actively engaged in application of educational technology in teaching with aim to make the prospective teachers technology oriented to face the challenges of modern scenario.

VISION:

To prepare prospective teachers to face the new challenges of educational field in context to teaching at elementary and secondary school stage through sound knowledge base, human values and enhanced professional skills, there by being one of the centers of excellence in teacher education.

MISSION:

- To prepare dedicated, efficient and competent teachers.
- To equip student teachers with the use of advanced educational technology.
- To inculcate human values among would be teachers.
- To collaborate with stakeholders of teacher education to bring quality and excellence.
- To unfold the hidden talent of the students and enhance their competitive skills.

OBJECTIVES:

- To provide strong theoretical knowledge base along with practical skills and competencies.
- To enhance the overall personality of the prospective teachers.
- To inculcate the values among would be teachers and help them in their character building.
- To nurture the professional traits and enhance skills of student teachers within a strong interdisciplinary framework.
- To enable student teachers to use latest technological advances in the field of education and be an agent of modernization and social change.

Programme run by department:

1. B.A. B.Ed. (Programme Code: BABED)
2. B.Sc. B.Ed. (Programme Code: BSCBED)

B.A. B.Ed.

Programme Outcomes (POs) of B.A. B.Ed.

On successful completion of B.A. B.Ed. programme, the students will be able to develop following attributes, qualities and skills:

PO1	**Disciplinary Knowledge**	Four year Integrated Course B.A. B.Ed. helps students to develop knowledge and understanding of areas like Social sciences, Languages, Educational Philosophy, Educational Psychology, Educational Technology, School Management, Educational Research & Statistics, School Community Participation, Curriculum Development, life skills training.
PO2	**Communication Skills**	Students will be able to make use of global and regional language in written and oral mode for classroom interaction and in real life.
PO3	**Critical Thinking**	Students will be exposed to critical thinking by adopting different teaching strategies and by studying the relationship of education with social issues.
PO4	**Problem Solving**	Students will be able to solve various classroom problems and make use of action research in teaching learning situations.
PO5	**Analytical Reasoning**	Students will be able to develop analytical reasoning in context to classroom situations such as identifying individual differences and catering to the needs accordingly.
PO6	**Research Related Skills**	Students will be able to gain a sense of inquiry by conducting survey and using statistical techniques for its analysis. They will be able to formulate hypothesis and develop research tool.
PO7	**Team Work and Time Management**	Students will be able to work in groups and develop skill of cooperation and Time Management by applying Team Teaching, Micro Teaching and Simulated Teaching.

PO8	**Scientific Reasoning**	Students will be able to develop scientific temperament by analyzing the situation and applying logical arguments.
PO9	**Reflective Thinking**	Reflective thinking of the students will be developed with the help of teaching at different levels and phases.
PO10	**Information/Digital Literacy**	Students will be able use to technology in teaching and learning by creating ICT based lesson plans in their respective pedagogy subjects.
PO11	**Self-Directing Learning**	Self-directing learning will be developed in students with the help of sessional work, assignments and projects.
PO12	**Multicultural Competence**	Students will be able to possess knowledge values and beliefs of multiple cultures by participating in cultural activities at college and university level.
PO13	**Moral & Ethical Values**	Students will be able to demonstrate commitment towards teaching profession and adhere to norms of ethical behaviour such as avoid committing plagiarism, falsification, misinterpretation of data, unbiased actions in all aspects of work.
PO14	**Leadership Qualities**	Leadership qualities of the students will be developed by preparing group assignments, performing various group activities at college level such as organizing teacher's day function, celebration of national days etc.
PO15	**Lifelong Learning**	With the self-paced learning and self-directed learning, students will be able to acquire knowledge and skills including 'learning how to learn' that are necessary for participating in learning activities throughout life.

Qualification Descriptors

A qualification descriptor indicates the generic outcomes and attributes expected for an award of a particular type of qualification. It also describes the academic standard for a specific qualification in terms of knowledge and understanding, skill and competencies and attitudes and values that the holders of qualification are expected to attain and demonstrate. The main qualification descriptors for B.A. B.Ed. may include following:

- Procedural knowledge that creates competent professionals in the field of Education including teaching skills, research and development, critical understanding, environmental awareness.
- Comprehensive knowledge of professional literature and material including instructional aids and equipment relating to advanced learning in the field of education.
- Demonstrate skills in identifying educational needs of the students, collection of qualitative and quantitative data, their analysis and interpretation using appropriate methodologies and formulating solutions and arguments.
- Use knowledge, understanding and skills for critical assessment of a wide range of ideas and complex problems and issues relating to the education.
- Demonstrate subject related teaching skills that are relevant to job and employment in the field of education.
- Apply their knowledge in the field of teaching and learning to new and unfamiliar contexts and seek solution to real life problems.

Programme Specific Outcomes (PSOs)

PSO1	Demonstrate a thorough conceptual understanding in core area of Social sciences and Education (Philosophy, Psychology, Educational Technology, School Management, Educational Research & Statistics, School Community Participation, Curriculum Development).
PSO2	Understand and demonstrate the knowledge of enlisting objectives in behavioural terms, applying teaching strategies, organising content, and evaluating the achievement.
PSO3	Demonstrate commitment towards teaching profession and adhere to norms of ethical behaviour such as avoid committing plagiarism, falsification, misinterpretation of data, unbiased actions in all aspects of work.
PSO4	Make effective use of ICT in teaching learning process including, designing of lesson plans, accessing relevant information sources and facing the challenges of technological world.

Course Outcomes (COs) of B.A. B.Ed.

Sem.	Course Name	Course Code	Course Outcome	
Sem.-I	**Education in Emerging Indian Society**	**BAEDU101**	**CO1**	Understand and compare evolution of Education in India during Vedic, Buddhist, Medieval and British period.
			CO2	Analyse recommendations of various Education commissions since Independence
			CO3	Summarise educational provision in Indian constitution with special reference to Right to Education
			CO4	Explain the role of education for social and cultural change
			CO5	Assess the relationship of education with various economic issues such as poverty, inequality and poverty.
Sem.-I	**School Organization and Administration**	**BAEDU102**	**CO1**	Describe the Concept and Principles of school management
			CO2	Maintain Various Components of School Plant
			CO3	Prepare plans at institution level
			CO4	Maintain school records and conduct co-curricular activities
			CO 5	Develop Qualities of a good Teacher
			CO 6	Construct Time Table using its Principles
Sem.-I	**English Compulsory**	**ENG101**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Compose paragraphs of descriptive and narrative nature
			CO4	Translate from vernacular to English
			CO5	Modify sentences from active to passive and vice versa
			CO6	Use modals and determiners in sentences
Sem.-I	**Punjabi Compulsory**	**PBC101**	**CO1**	AnalyseAdhunik Punjabi Kavita (modern Punjabi poetry)
			CO2	Understand Punjabi grammar, essay writing and composition
			CO3	Summarise the given paragraph in their own words
			CO4	Compose essays in Punjabi writing

Sem.-I	**History & Culture of Punjab**	**HCP101**	**CO1**	Understand ancient Punjab and historical sources with special reference to Harappan Culture
			CO2	Explain political, social, economic and religious life of people of Rig Vedic and Later Vedic Age
			CO3	Analyse the origin and evolution of caste system
			CO4	Illustrate historical importance of the epics Ramayana and Mahabharata
			CO5	Describe impact of Alexander's Invasion
			CO6	Know about important historical places of Punjab
Sem.-I	**Economics**	**ECO101**	**CO1**	Analyze the decisions taking by firms and households due to scarcity of resources.
			CO2	Describe the theory of demand and consumer behavior.
			CO3	Explain the laws and various concepts of production and costs.
			CO4	Illustrate the functioning of each market structure.
			CO5	Understand the price and output determination of different market structure.
			CO6	Explain the various theories of rent, interest and profit.
Sem.-I	**Elective English**	**ENO101**	**CO1**	Explain general literary terms as prescribed in syllabus
			CO2	Analyse poetry and prose text of the book 'Fluency in English' and comprehend the given prose passage
			CO3	Compose personal social and official letters
			CO4	Transform one kind of sentences to another
			CO5	Modify active sentences to passive, direct to indirect and vice versa
			CO6	Apply appropriate articles, prepositions and conjunctions in sentences
Sem.-I	**History**	**HIS101**	**CO1**	Identify and define various kinds of sources and understand how various evidences are notified.
			CO2	Describe various stages of progress from Indus valley civilization to Vedic age and analyze Jain, Buddhist and Vedic faith.
			CO3	Analyze the transition from territorial states to emergence of empires.
			CO4	Describe the emergence of the Mauryan and Gupta empire in North India and also examine the administrative features of Southern states.
			CO5	Examine the nature of monarchical rule and develop a comprehensive understanding of cultural evolution during ancient period.

			CO6	Visualize where places are in relation to one another through map pointing and explain their historical importance.
Sem.-I	**Mathematics**	**MAT101**	**CO1**	Comprehend special properties of circles, parabola, ellipse and hyperbola, conjugate hyperbola, asymptote of hyperbola, rectangular hyperbola.
			CO2	Solve problems on Transformation of axes, joint equation of pair of straight lines and angle between them, joint equation of lines joining origin to the intersection of a line and a curve.
			CO3	Know about Hyperbolic functions, their differentiation .learn successive differentiation and Leibnitz's theorem.
			CO4	Determine Limits and continuity at a point or an interval. Also distinguishes between types of discontinuity at a point.
			CO5	Analyze functions and their graphs and learn to produce rigorous proofs of results that arise in the context of calculus, Geometric value theorems.
			CO6	Apply the concepts of real numbers, geometrical interpretation, and De Moivre theorem, functions of complex variables and rank of matrix.
Sem.-I	**Political Science**	**POL101**	**CO1**	Understand basic concepts like scope of political science and its relationship with other disciples (sociology, economics and history)
			CO2	Describe theories regarding state and its origin, like social contract theories, evolutionary and historical theory
			CO3	Explain different ideologies like liberal, Marxian and Gandhian views.
			CO4	Analyze the function of welfare state and various types of sovereignty.
			CO5	Illustrate theories, approaches, concepts and principles of political theory
			CO6	Understand the various traditional and modern theories of political science
Sem.-I	**Elective Punjabi**	**PBI101**	**CO1**	AnalyseAdhunik Punjabi Kavita from 1901 to 2000
			CO2	Explain the ikangi 'CheDarshan'
			CO3	Comprehend the principles of language and Punjabi language
			CO4	Describe forms of literature such as geet, gazal, ikangi,

				novel and story
			CO5	Understand the history of Punjabi literature from 1901 to 2000
Sem.-I	**School Related Practicum**	**BAEDU103**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-I	**Life Skill Training**	**BAEDU104**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-II	**Philosophical & Sociological Foundations of Education**	**BAEDU201**	**CO1**	Define the concept and types of education
			CO2	Understand the philosophy of educational thinkers of India with special reference to Guru Nanak Dev Ji, Mahatma Gandhi, Rabindra Nath Tagore and Swami Vivekananda.
			CO3	Identify relationship between philosophy and education, Sociology and education
			CO4	Compare education with training, instruction and indoctrination
			CO5	Describe the relationship of education with socio cultural change, modernization and social mobility.
Sem.-II	**Psychological Foundations of Education**	**BAEDU202**	**CO1**	Associate psychology and education
			CO2	Apply the theories of intelligence for its measurement
			CO3	Understand the causes of individual differences with special reference to aptitude, attitude and interest.
			CO4	Administer the recent trends in education of exceptional children.
Sem.-II	**English Compulsory**	**ENG201**	**CO1**	Critically analyse the poetry and prose text and comprehend the unseen passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Design personal and official letters
			CO4	Translate from vernacular to English
			CO5	Modify direct speech to indirect speech
			CO6	Use prepositions and conjunctions in sentences
Sem.-II	**Punjabi Compulsory**	**PBC201**	**CO1**	Study Punjabi story writers and their writings.
			CO2	Develop skill of writing advertisement for daily life
			CO3	Illustrate idioms in sentences
			CO4	Apply principles of grammar in language
Sem.-II	**History & Culture of Punjab**	**HCP201**	**CO1**	Describe social, economic and religious life of people during the Mauryan Empire
			CO2	Explain the impact of Buddhism and Jainism on Punjab

				with special reference to 4th Buddhist council
			CO3	Analyse the impact of Kanishka's rule on Punjab
			CO4	Illustrate salient features of Gandhara school of art and cultural and scientific developments during the rule of Guptas
			CO5	Understand developments in literature and education and depiction of Punjab in accounts of Chinese travellers Fahien and Hwen Tsang
			CO6	Know society and culture of Punjab on the eve of the Turkish Invasion
Sem.-II	**Economics**	**ECO201**	**CO1**	Explain the concept of macroeconomics and interrelation with micro economics.
			CO2	Describe the theories of consumption function and investment function.
			CO3	Distinguish between Say's law of market, classical theory of output and employment and explain Keynes objection to the classical theory.
			CO4	Understand the concept of money and banking and process of credit creation.
			CO5	Evaluate the role of fiscal and monetary policies in bringing about economic stability.
			CO6	Illustrate the concept and determination of inflation.
Sem.-II	**Elective English**	**ENO201**	**CO1**	Describe the literary terms related to Essay, Stories and Plays
			CO2	Analyse essays, short-stories and One-Act plays and solve questions related to that
			CO3	Compose paragraphs on their own
			CO4	Develop sentences using the given words as different parts of speech
			CO5	Translate sentences from vernacular to English
			CO6	Modify the given sentences after identifying errors
Sem.-II	**History**	**HIS201**	**CO1**	Describe the advent of Islam in India and examine the political and cultural expansion of Turks, Afghans and Mughals.
			CO2	Understand the social, economic and cultural developments of Medieval India.
			CO3	Explain the administration, art and architecture of Vijaynagar and Mughal rulers.
			CO4	Analyze the rise of the Marathas under the leadership of Shivaji.

			CO5	Describe the various features of Bhakti movement.
			CO6	Visualize the extent of empire under AlauddinKhilji and Aurangzeb and places of historical importance of medieval period through map pointing.
Sem.-II	**Mathematics**	**MAT201**	**CO1**	Apply Integral Calculus to find arc length of a curve, arc length of a parametric curves area under a curve, surface area, and volume of revolution, curvature, volute and involute and chord of curvature.
			CO2	Derive reduction formulae for complex integrations and hence integrate functions of much higher degree which are applicable in real life situations.
			CO3	Explain and apply Euclid's algorithm on synthetic division to find roots of polynomials.
			CO4	Implement transformation of the equations to solve roots. Also solve cubic using Cardon's method and biquadratic using Descartes method & Ferrari's method.
			CO5	Acquire knowledge about sphere, cylinders as a surface, and different kinds of cylinders such as right circular, elliptic, hyperbolic and parabolic cylinders in standard form.
			CO6	Comprehend equation of cone, ellipsoid, hyperboloid, paraboloid in standard form.
Sem.-II	**Political Science**	**POL201**	**CO1**	Explain the concept of democracy, its types and concept of development & various views relating to it, sustainable development and human rights
			CO2	Discuss the origin of the concepts such as Law, power, authority, and legitimacy
			CO3	Understand the concept of justice, distributive justice, multiculturalism and social justice.
			CO4	Analyse the meaning of organs of government and theory of separation of power
			CO5	Examine the procedure of various social institutions and government institutions
			CO6	Explore the working of political system and their structure and infra-structure and various input-output function according Almond and Powell
Sem.-II	**Elective Punjabi**	**PBI201**	**CO1**	Analyse Adhunik Punjabi Kavita from 1901 to 2000
			CO2	Describe Punjabi culture by reading novel 'Doaba'.
			CO3	Understand history of Punjabi literature (1901-2000)

			CO4	Comprehend Punjabi kaavshastar such as DhuniSampardaye and AlankarSampardaye
			CO5	Define literature along with its nature, components and functions
Sem.-II	**School Related Practicum**	**BAEDU203**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-II	**Life Skill Training**	**BAEDU204**	Students are given training for skill of decision making and skill of problem solving through activities.	
Sem.-II	**Env. & Road Safety Edu. & Violence against Women & Children**	**ENV**	**CO1**	Understand the value of environment
			CO2	Drive the knowledge of road safety provisions
			CO3	Discuss various laws regarding violence against women and children
			CO4	Develop basic knowledge about the environment and its allied problems
			CO5	Analyze the roles of organisms as part of interconnected food webs, populations, communities, and ecosystems
			CO6	Discuss about the environment and the resources to act at our own level to protect them.
Sem.-III	**Human Development**	**BAEDU301**	**CO1**	Recognize the role of education in human development
			CO2	Analyse various aspects of human development
			CO3	Differentiate various stages of human development
			CO4	Generalize different theories of human development
Sem.-III	**School Community Participation**	**BAEDU302**	**CO1**	Describe the concept of Universalization of Elementary Education and its significance
			CO2	Discuss concept of Sarva Shiksha Abiyan and its implementation
			CO3	Define the meaning and concept of Life Long Education
			CO4	Analyse techniques and causes of slow progress
			CO 5	Identify concept and implementation of vocationalization of Education
			CO 6	Assess the role of NCERT, SCERT, SIE, DIET, Village Education Committees, NGO's and Parent- Teacher Associations.
Sem.-III	**English Compulsory**	**ENG301**	**CO1**	Critically analyse the poetry and prose text of book English for Empowerment.
			CO2	Apply communication skills in a diverse society and learn at self-pace.

			CO3	Compose paragraphs from the post reading activities suggested in the prescribed text
			CO4	Design notes from paragraphs
			CO5	Reconstruct a paragraph using appropriate punctuation marks
			CO6	Transform sentences from one kind to another
Sem.-III	**Punjabi Compulsory**	**PBC301**	**CO1**	Have knowledge of Punjabi nibandh writers and develop understanding of punjabi culture by reading Punjabi nibandh (essay) thoroughly.
			CO2	Understand Punjabi language and develop letter writing skill
			CO3	Know origin and development of Punjabi language
			CO4	Define and classify bhavansh.
Sem.-III	**History & Culture of Punjab**	**HCP301**	**CO1**	Describe the Culture in Punjab during Turko-Afghan and Mughal rule
			CO2	Imbibe the teachings of Guru Nanak
			CO3	Analyse the features of Bhakti Movement and Sufism
			CO4	Understand the contribution of Guru Angad Dev, Guru Amar Das and Guru Ramdas for development of Sikhism
			CO5	Illustrate the transformation of Sikhism with special reference to martyrdom of Guru Arjun Dev, Guru Teg Bahadur and New Policy of Guru Hargobind
			CO6	Know the post Khalsa activities of Guru Gobind Singh
Sem.-III	**Economics**	**ECO301**	**CO1**	Appraise the effect of public expenditure on economy.
			CO2	Explain tax and non-tax revenue; differentiate between direct and indirect tax and shifting of taxation and effects of taxation.
			CO3	Explain the types of public debt and how debt is repaid.
			CO4	Describe the various International trade theories, terms of trade and commercial policy.
			CO5	Explain the concept of BOP and exchange rate.
			CO6	Explain the objective and working of IMF and IBRD.
Sem.-III	**Elective English**	**ENO301**	**CO1**	Critically appreciate literary texts and introduce students to the thematic concerns, genres and trends of Indian writing in English.
			CO2	Comprehend extensive knowledge of English as a language in its various textual forms and construct them to be creative, thoughtful, imaginative and effective communicators in a diverse and changing society

			CO3	Students will be able to Classify different types of dialogue writing in English.
			CO4	Provide an overview of the various phases of the evolution of Indian writing in English. To work effectively and respectfully with diverse teams, facilitate them in such a way that English learning becomes a pleasurable endeavour and they learn at self-pace
			CO5	To become acquainted with various literary aspects through the text which capacitates them to enrich their literary, research and cultural values and also make them aware of self and society.
			CO6	Encourage students to make a detailed study of a few literary terms related to Drama and make enable them to enjoy life through literature.
Sem.-III	**History**	**HIS301**	**CO1**	Describe the foundation of British Rule with special reference to Battle of Plassey and Buxar. Explain the reforms made by British Governor Generals.
			CO2	Analyze the cause and effects of Revolt of 1857.
			CO3	Understand the socio-religious movements and also the role played by Mahatma Gandhi, JotibaPhule and Dr. Ambedkar for the upliftment of depressed class.
			CO4	Analyze the Economic policy of Britishers in India and their effect.
			CO5	Explain the communal politics and various events related to National movement till 1947.
			CO6	Describe the formation of Constitution of India and developments that took place after independence till 1964.
Sem.-III	**Mathematics**	**MAT301**	**CO1**	Know about limit and continuity, Partial differentiation, implicit function, Euler's theorem on homogeneous function, Taylor's theorem, parallelogram, and law of forces, Equilibrium of three forces acting at a point, triangle law of forces, Lami's theorem, Moments, couples and friction.
			CO2	Verify Exact differential equation; define the geometrical meaning of differential equation.
			CO3	Derive orthogonal Trajectory and envelope of the differential equation.
			CO4	Develop equilibrium relationships for non-accelerating two or three dimensional rigid bodies acting on by

				external forces and moments.
			CO5	Understand and compute equilibrium of three coplanar forces acting on a rigid body and solve simultaneous differential equations.
Sem.-III	**Political Science**	**POL301**	**CO1**	Students understand the philosophy of Indian constitution.
			CO2	Examine the fundamental rights and duties of Indian citizen with the study of the significance of directive principles of states
			CO3	Critical analysis of important institutions of the Indian union The executive, president, prime minister, council of ministers, governor, chief minister, legislature, raj Sabah, lok Sabah speaker of India.
			CO4	To identify how electoral rules and procedure in India effect election outcomes
			CO5	Students are able to understand various election procedure in India and various factors which influence Indian political system.
			CO6	This paper defines the composition power and role of Indian Supreme Court and high court.
Sem.-III	**Elective Punjabi**	**PBI301**	**CO1**	Analyse the poems of Madhkaali Punjabi
			CO2	Develop interest in reading safarnaama (travelogue)
			CO3	Comprehend history of Punjabi literature from 1701 to 1900.
			CO4	Understand Indian KaavShastar
			CO5	Apply the knowledge of various types of languages (Taksali Bhasha, Viaktibhasha, register, pigeon, carole)
Sem.-III	**School Related Practicum**	**BAEDU303**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-III	**Life Skill Training**	**BAEDU304**	Students are given training for skill of social relations and skill of cooperative and team work through activities.	
Sem.-IV	**Curriculum Development & Evaluation**	**BAEDU401**	**CO1**	Describe the nature and Characteristics of curriculum
			CO2	Explain the various foundations and components of curriculum
			CO3	Differentiate among goals, aims and objectives, general objectives, course objectives and lesson objectives
			CO4	State levels of course content
			CO5	Discuss the need and guiding principles of curriculum development

			CO6	Analyse different methods and media used in transactional processes and different types of evaluation
Sem.-IV	**Guidance and Counseling**	**BAEDU402**	**CO1**	Classify different types of guidance
			CO2	Describe the concept of counselling and differentiate between guidance and counselling
			CO3	Analyse different tools and techniques of guidance and Counselling
			CO4	Organize guidance Program at school Level
Sem.-IV	**English Compulsory**	**ENG401**	**CO1**	Critically analyse the poetry and prose text of book English for Empowerment.
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Compose paragraphs from the post reading activities suggested in the prescribed text
			CO4	Prepare newspaper, official and research reports
			CO5	Illustrate idioms and phrases in sentences
			CO6	Reconstruct sentences by combining pairs of sentences and develop sentences using the given words as different parts of speech
Sem.-IV	**Punjabi Compulsory**	**PBC401**	**CO1**	Develop interest in reading Punjabi ikangi (one act play)
			CO2	Know contribution of Punjabi ikangikaar
			CO3	Know shabadshrenian in Punjabi grammar
			CO4	Identify dialects (upbhasha) of Punjabi
Sem.-IV	**History & Culture of Punjab**	**HCP401**	**CO1**	Describe the Sikh struggle for soverignity from 1716-1765
			CO2	Explain the role of Dal Khalsa, Rakhi, Gurmat, Misls and Banda Bahadur
			CO3	Analyse the Ranjit Singh's rise to power along with civil and military administration
			CO4	Understand the political development from 1839-1845
			CO5	Illustrate new developments in Literature, art and architecture in Punjab
			CO6	Visualise social life with special reference to position of women, festivals, dance and games in Punjab
Sem.-IV	**Economics**	**ECO401**	**CO1**	Explain the various mathematical and statistical tools in decision making.
			CO2	Outline the applications of matrices and derivatives.
			CO3	Analyze the univariate data.
			CO4	Define interpolation and its methods.

			CO5	Describe correlation, its types and measurement.
			CO6	Illustrate the fitting of trend line and construction of price and quantity indices
Sem.-IV	**Elective English**	**ENO401**	**CO1**	Understand the richness of literature and critically appreciate literary texts
			CO2	Acquire extensive knowledge of English as a language in its various textual forms and transform to be creative, thoughtful, imaginative and effective communicators in a diverse and changing society.
			CO3	Understand the principles of grammar and one word substitution and various forms of figure of speech and classify a detailed study of literary devices.
			CO4	Integrate effectively and respectfully with diverse teams, facilitate them in such a way that English learning becomes a pleasurable endeavour and they learn at self-pace.
			CO5	Relate various literary aspects through the text which capacitates them to enrich their literary, research and cultural values and also make them aware of self and society.
			CO6	Compile and analyse the different ways in which the grammar has been described like précis writing and comprehension.
Sem.-IV	**History**	**HIS401**	**CO1**	Understand teachings Sikh Gurus and development of Sikh religion.
			CO2	Analyze Mughal Sikh relationship and establishment of Sikh raj by Banda Singh Bahadur
			CO3	Describe various features of Maharaja Ranjit Singh's administration and evaluate Anglo-Sikh relations.
			CO4	Understand new administrative structure and policies adopted by Britishers in Punjab.
			CO5	Describe Social-Religious movements in Punjab .Also evaluate various events ofFreedom Movement andpartition of Punjab.
			CO6	Describe various developments from 1947 to1966 in Punjab.
Sem.-IV	**Mathematics**	**MAT401**	**CO1**	Distinguish between concept of sequence and series and determine the limit of a sequence and convergence and approximate sum of series.
			CO2	Derive the solution of Bessel's equations, Legendre's

				equation, their recurrence relations and orthogonal properties.
			CO3	Define, differentiate and integrate functions represented as a power series expansion, including Taylor's series and solve related problems.
			CO4	Know about Laplace transform, inverse Laplace transform and inverse Laplace trabsform and apply these to solve problems.
			CO5	Determine the dynamic response of the system to applied loadings, using Newton's law and understand the concept of simple Harmonic motion elastic string, curvilinear motion of a particle.
			CO6	Apply the principle of work and energy and the principle of impulse and momentum to mechanical system.
Sem.-IV	**Political Science**	**POL401**	**CO1**	This paper enrich the understanding of students of the working of the Indian political parties, the party system with reference to various state & national political parties, , election and voting behaviour.
			CO2	This paper also examines certain key issue and debates in contemporary India.
			CO3	To identify how electoral rules and procedure in India effect election outcome.
			CO4	Explore the various emerging trends in Indian politics
			CO5	Describe the role of caste, religion, and regionalism in Indian political system
			CO6	Explore the basic features of Indian foreign policy and describe the non-alignment moment and its relevance in contemporary scenario
Sem.-IV	**Elective Punjabi**	**PBI401**	**CO1**	Analyse the poetry of the text Madhkalikaavsugandhia.
			CO2	Comprehend stories and its characters of text kathaparvah.
			CO3	Understand the history of Punjabi literature from 1701-1900 with special reference to jangnama and kiss sahit.
			CO4	Describe literacy criticism.
			CO5	Know different dialects of Punjabi language.
Sem.-IV	**School Related Practicum**	**BAEDU403**	Students are taken for various field visits as prescribed in syllabus.	

Sem.-IV	**Life Skill Training**	**BAEDU404**	Students are given training for skill of social relations and skill of cooperative and team work through activities.	
Sem.-V	**Technological Bases of education and Pedagogy**	**BAEDU501**	**CO1**	Discuss the concept and types of educational technology
			CO2	Discriminate Various phases and levels of Teaching
			CO3	Prepare test items as per bloom's taxonomy
			CO4	Apply various models of teaching
Sem.-V	**Health and Yoga Education**	**BAEDU502**	**CO1**	Understand the importance, concept, aims and objectives of Health Education
			CO2	Enlighten about balanced diet, infectious diseases and their control
			CO3	Impart and apply knowledge to use good postures for various purposes and first Aid
			CO4	Learn the different type of Yoga and understand their implications
			CO 5	Insight into practical aspect of Yoga in contemporary times
			CO 6	Assess concept of holistic health and contribution of yoga in promoting holistic health.
Sem.-V	**English Compulsory**	**ENG501**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Explain the prescribed play 'Driving Miss Daisy' by Alfred Ubry in their own words
			CO4	Compose essays on social and current topics in their own words
			CO5	Modify the given sentences after identifying errors
			CO6	Write antonyms of given words
Sem.-V	**Punjabi Compulsory**	**PBC501**	**CO1**	Madhkali Punjabi KavAdhayan.
			CO2	Main Objective of Madhkali Punjabi Adhayan.
			CO3	Explaination and Central Ideas of MadhkalipunjabiKavita.
			CO4	Introduction and Importance to punjabi Lippi.
			CO5	To Provide knowledge of Grammar.
			CO6	Introduction and importance of Sentence Formation.
Sem.-	**History & Culture**	**HCP501**	**CO1**	Explain the concept of colonialism in the context of history and culture

V	**of Punjab**		**CO2**	Explain the concept of nationalism in the context of history and culture
			CO3	Understand the social religious reform movements with special reference to Namdharis and AryaSamaj.
			CO4	Describe the various movement of national importance such as Ghadar movement, JallianwalaBagh and Gurdwara reform movement.
Sem.-V	**Economics**	**ECO501**	**CO1**	Categorize the essential tools and concepts of development economics.
			CO2	Explain what makes underdevelopment persist and what helps development succeed.
			CO3	Discuss the diverse dimension and measures of development, as well as the application of microeconomic analysis to issues of development in poor countries.
			CO4	Define the household decisions and the analysis of institutions and norms influencing development.
			CO5	Demonstrate the understanding between growth & development.
			CO6	Analyze empirical evidence on the patterns of Economic development.
Sem.-V	**Elective English**	**ENO501**	**CO1**	Develop intellectual, personal and professional abilities through the effective study of literature.
			CO2	Add extensive knowledge of English as a language in its various textual forms and to become creative, thoughtful, imaginative and effective communicators through poetry and fiction in a diverse and changing society.
			CO3	Familiarize students with Modern Literature in Translation through different representative samples of poetry and able to recognize the rhythm, meter and other musical aspects of poetry.
			CO4	Work effectively and respectfully with diverse teams, facilitate them in such a way that English learning becomes a pleasurable endeavour and they learn at self-pace.
			CO5	Determine with various literary aspects through the text which capacitates them to enrich their literary, research and cultural values and also make them aware of self and society.

			CO6	Lead to a greater understanding of the human communicative action through an objective study of applied grammar and are able to recognize the literary terms related to Indian Literature.
Sem.-V	**History**	**HIS501**	**CO1**	Discuss the impact of the colonial period on the region, formation of British administration and movements of national importance
			CO2	Trace historical development of Arya Samaj academic institutions
			CO3	To describe the participation of Punjabis in different movements for freedom struggle
			CO4	To recall partition of Punjab and problems of rehabilitation.
			CO5	To develop understanding about establishment of Punjabi suba and development of agriculture due to green revolution.
Sem.-V	**Mathematics**	**MAT501**	**CO1**	Determine convergence of improper integrals with discontinuities in their domain or infinite limits of integration.
			CO2	Learn the theory of Riemann integral, mean value theorems and use theory in solving definite integrals in different fields of science and engineering.
			CO3	Exposure on Rings, integral domains, subrings and ideals, Quotient Rings, Primes and Maximal ideals.
			CO4	Brief discussion on groups, subgroups, Lagrange's theorem, homeomorphisms, Isomorphism, Polynomial Rings.
			CO5	Demonstrate the concept of Probability, Random variables, density function, moments and moment generating functions .
			CO6	Develop the knowledge about distribution based on discrete and continuous Random variables and apply them in real world problems.
Sem.-V	**Political Science**	**POL501**	**CO1**	Students go through the comparative study of different countries and government.
			CO2	Examine the constitutional system of U.K and USA. Also make a difference of the political and executive institution of both countries
			CO3	Students also learn about the current political system, judiciary system, political parties, and pressure groups

				of both countries.
			CO4	To identify various issues and challenges towards international relations
			CO5	To understand the comparative method of international government and politics.
			CO6	Students gain the knowledge about the judiciary system of UK and USA.
Sem.-V	**Elective Punjabi**	**PBI501**	**CO1**	AnalysePuratan Punjabi Kavita
			CO2	Develop interest in reading Punjabi drama (moyansaarnakai)
			CO3	Know history of Punjabi literature from early period to 1700
			CO4	Understand bhartikaavshastar and forms of literature
Sem.-V	**School Related Practicum**	**BAEDU503**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-V	**Life Skill Training**	**BAEDU504**	Students are given training for skill of social relations and skill of cooperative and team work through activities.	
Sem.-VI	**Educational research and statistics**	**BAEDU601**	**CO1**	Explain the concept of educational research
			CO2	Differentiate various methods of educational research
			CO3	Use different tools of educational research
			CO4	Apply various statistical techniques in educational research
Sem.-VI	**Value Education**	**BAEDU602**	**CO1**	Describe the concept of value and value system.
			CO2	Understand and explain various intervention strategies for value inculcation in students.
			CO3	Identify and apply various tools of value inculcation.
			CO4	Explain philosophical, sociological and psychological bases of value education.
			CO 5	Analyse the concept and factors affecting value preferences.
			CO 6	Assess concept and process of assessment of values.
Sem.-VI	**English Compulsory**	**ENG601**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Summarise the given paragraph in their own words
			CO4	Illustrate idioms and phrases in sentences

			CO5	Substitute the given sentence with one appropriate word
Sem.-VI	**Punjabi Compulsory**	**PBC601**	**CO1**	To provide knowledge of Punjabi novel.
			CO2	To understand various aspects of Punjabi novel.
			CO3	To make students capable to write precise.
			CO4	To motivate students to write an essay for newspaper on various topics like Cultural, Academics, Sports and Literary.
			CO5	To Provide knowledge of various aspects of Gurmukhi Lippi.
			CO6	Provide knowledge of various types of sentence.
Sem.-VI	**History & Culture of Punjab**	**HCP601**	**CO1**	Discuss the history of the Punjab in the post 1947 period
			CO2	Describe the new trends in social and economic life of Punjab after independence
			CO3	Analyse green revolution and its impacts
			CO4	Explain new social issues such as gender discrimination, drug menace, farmer sluiced
Sem.-VI	**Economics**	**ECO601**	**CO1**	Develop ideas of the basic characteristics of Indian economy, its potential on natural resources.
			CO2	Discuss the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.
			CO3	Graph the importance of planning undertaken by the government of India.
			CO4	Summarize the basic features of Punjab's Economy, sources of revenue, how the state government finance its programmes and projects.
			CO5	Develop the knowledge on the various objectives, failures and achievements as the foundation of the on-going planning and economic reforms taken by the government.
			CO6	Point out Economic reforms in India & Problems of Indian Economy
Sem.-VI	**Elective English**	**ENO601**	**CO1**	Enhance students' awareness in the aesthetics of literature while critically appreciating literary texts.
			CO2	Acquire extensive knowledge of English as a language in its various textual forms and to become creative, thoughtful, imaginative and effective communicators in a diverse and changing society.
			CO3	Develops the deeper knowledge of English literature

				and explore the ability to appreciate ideas and think critically
			CO4	Read and write analytically in a variety of formats, including essays, report writing and translation.
			CO5	Differentiate critical and theoretical approaches to the reading and analysis of literary texts in multiple genres as well as acquainted with various literary aspects through the text which capacitates them to enrich their literary, research and cultural values and also make them aware of self and society
			CO6	Form an idea about the various stages in the development of English language.
Sem.-VI	**History**	**HIS601**	**CO1**	Acquaintance with modern period in world history
			CO2	Understand selected revolutions, unification, causes and consequences of world war-I and II in world history
			CO3	To discuss the unification of Italy and Germany
			CO4	To illustrate the Mejie restoration and modernisation in japan
			CO5	To analyse the division of Europe in two blocks and world war first and second
Sem.-VI	**Mathematics**	**MAT601**	**CO1**	Distinguish between the concepts of sequence and series and determine limits of sequence and convergence and approximate sum of series
			CO2	Define, differentiate and integrate functions represented as a power series expansion and Fourier series expansion including Taylor's series solve related problems.
			CO3	Explain methods to find solution to linear ,non-linear equations, ordinary differential equations using numerical methods
			CO4	Develop the knowledge about interpolation, numerical differentiation, numerical integration, and methods of solving integrations of functions.
			CO5	To understand the concept of Linear transformations, Rank and Nullity of a linear transformations, vector space of linear transformations.
			CO6	Knowledge about Vector spaces, subspaces, Algebra of subspace, Linearspan, Linear Independence and dependence of vectors, Basis and dimensions of a vector space.

Sem.-VI	**Political Science**	**POL601**	**CO1**	This paper provides knowledge for the international relations, theories, and the values implicit in each of these in different ways and an overview of the broad theories and concept use to understand international politics.
			CO2	Analysis of the Second World War, cold war, various international organizations. Explore various principles of world politics like balance of power, collective security.
			CO3	To appreciate the post war developments through the emergence of third world.
			CO4	To understand the emerging area in international relations.
			CO5	To identify various issues and challenges towards international relations.
			CO6	To analyses the international security Arms Race. Arms control and Disarmament.
Sem.-VI	**Elective Punjabi**	**PBI601**	**CO1**	Analyse the poetry of ancient Punjabi poets mentioned in a book 'ShbadSvera
			CO2	Critically examines essays of book 'NibandhParkash'
			CO3	Know history of Punjabi literature.
			CO4	Understand Pachami Kaav Shastar and develop interest in reading and writing essay
			CO5	Acquire the wide knowledge about BhashaVigyaan(linguistics)
Sem.-VI	**School Related Practicum**	**BAEDU603**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-VI	**Life Skill Training**	**BAEDU604**	Students are given training for skill of social relations and skill of cooperative and team work through activities.	
Sem.-VII	**Philosophical, Sociological and Political perspective**	**BAEDU701**	**CO1**	Explain the discipline of education in philosophical, sociological and Political perspective.
			CO2	Discuss the contribution of eminent thinkers to education.
			CO3	Understand goals and values of emerging Indian society.
			CO4	Aware of current political issues in education special reference to human rights.
			CO5	Analyse implication of Article 21A,RTE act 2009.
			CO6	Assess the Education in 21stcentury,role and functions

				of UNESCO & UNICEF.
Sem.-VII	**The Learner Nature and Development**	**BAEDU702**	**CO1**	Generalize various theories of personality along with its assessment
			CO2	Distinguish various theories of Learning and transfer of Learning
			CO3	Describe the concept of creativity and motivation
			CO4	Realize the importance of mental health and Develop mental hygiene
Sem.-VII	**Theory of Instructional Technology**	**BAEDU703**	**CO1**	Describe the objectives and their formulation of Instructional design.
			CO2	Explain the principles of instructional design and apply them to develop design of instruction.
			CO3	Understand concept, process, and barriers of communication and apply optimizing communication skill for oral performance.
			CO4	Compare different media and their application.
			CO5	Analyse the concept, process and application of Flanders's Interaction Categories Systems, team teaching, group interaction, Simulation teaching.
			CO6	Discuss the need, concept, principles, rational, types of programmed Instruction and apply it to development of program.
Sem.-VII	**School Management**	**BAEDU704**	**CO1**	Appraise various elements of school management and classroom management.
			CO2	Develop leadership and decision making abilities in themselves
			CO3	Apply TQM in Education
			CO4	Analyse the working of SMC at school level
			CO5	Use ICT in various components of educational management
			CO6	Assess various aspects of supervision
Sem.-VII	**Information & Communication Technology (ICT) in Education**	**BAEDU705**	**CO1**	Define basic computer hardware architecture.
			CO2	Recognize input and output devices of Computers and how it works.
			CO3	To read various characteristics of computer languages.
			CO4	To define about the operating system and types.
			CO5	Accomplish creating basic documents, presentations with their properties.
			CO6	To understand about internet, working with E-mails.

Sem.-VII	**Teaching of Social Studies**	**TSST706**	**CO1**	Explain the aims and objectives of teaching social studies
			CO2	Explain different methods, devices and techniques of teaching social studies.
			CO3	Analyse modern concepts and tools of evaluation
			CO4	Prepare and make effective use of teaching aids
			CO5	Develop various skills in questioning, explaining, map reading, set introduction, stimulus variation
			CO6	Explain challenging situations in the society
Sem.-VII	**Teaching of Mathematics**	**TMAT707**	**CO1**	Understand and appreciate the uses and significance of Mathematics in daily life, learn various approaches of teaching Mathematics and to use them judiciously.
			CO2	Learn the methods of providing instruction for the classroom, organize curricular activities, appreciate activities to develop aesthetics of Mathematics and update their knowledge of content in mathematics.
			CO3	Develop an ability to understand various methods of evaluation of students' performance in mathematics.
			CO4	State the aim and objectives of teaching mathematics. And also understand various techniques of teaching of mathematics.
			CO5	Develop skill making teaching learning process experimental and joyful.
Sem.-VII	**Teaching of English**	**TENG708**	**CO1**	Understand the place of English language teaching in India
			CO2	Apply different principles of teaching and learning
			CO3	Identify different methods, approaches, techniques of teaching English
			CO4	Utilize the four skills of language that is listening, speaking, reading and writing in teaching
			CO5	Prepare lesson plans and test items for testing various language activities
Sem.-VII	**Teaching of Punjabi**	**TPBI709**	**CO1**	Understand the origin of Punjabi language
			CO2	Acquire the skill of listening, speaking, reading and writing language
			CO3	Learn methods of teaching prose, poetry and grammar
			CO4	Use of audio-visual aids and evaluation techniques
			CO5	Learn development of lesson plan

Sem.-VIII	**Document Analysis**	**BAEDU800**	Students will visit nearby Govt. and Private schools for 16 weeks and perform various tasks. After the completion of this Internship Programme students will be able to: ❖ Develop a comprehensive understanding of existing classroom practices. ❖ Develop a critical understanding of textbook lessons of individual subjects and their suitability for learning. ❖ Draw linkages between various pedagogy courses and classroom practices. ❖ Critically review policy and state documents on education and seek to effect ideas into classroom practices. ❖ Develop and design alternative teaching – learning materials. ❖ Assess factors that contribute to a classroom culture, its creation and maintenance. ❖ Explore possibilities of innovation and create space for alternative practices. ❖ Design, choose, organize, and conduct individual and group activities. ❖ Reflect on personal experiences of classroom management. ❖ Learn to set realistic goals in terms of children's learning, classroom culture and management, curricular form and content and pedagogic practices. ❖ Develop the ability to innovate within existing frameworks by alternative practices. ❖ Purposefully use the skills of systematic observations, record keeping and for reflection on teaching-learning process.
Sem.-VIII	**SWOT Analysis**		
Sem.-VIII	**Identification Problem Children**		
Sem.-VIII	**Organization of School Function**		
Sem.-VIII	**Record Keeping**		
Sem.-VIII	**Organization of Co-curricular/Cultural Activities in School**		
Sem.-VIII	**Organization of Morning Assembly in School**		
Sem.-VIII	**Organization of Awareness Programs in School**		
Sem.-VIII	**Cleanliness and Beautification of School**		
Sem.-VIII	**Conducting Carrere Counseling Sessions in School**		
Sem.-VIII	**Training of Two Life Skills to School Children**		
Sem.-VIII	**Preparation of Various School Records**		

Mapping of Course Outcomes (COs) with Programme Outcomes(POs)

Programme Outcome																
College code	**Course Out-comes**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PO 13**	**PO 14**	**PO 15**
Semester I																
BAEDU 101	**CO1**	3	2	1	2	1	2	1	X	1	1	2	X	X	X	2
	CO2	3	2	3	1	2	2	3	2	1	3	1	X	X	3	1
	CO3	3	2	2	1	2	2	3	1	2	3	1	X	X	3	2
	CO4	3	2	2	3	1	2	1	2	2	1	2	3	2	2	2
	CO5	3	2	3	3	1	2	3	2	3	1	3	2	2	3	2
BAEDU 102	**CO1**	3	1	X	X	2	X	1	2	1	X	X	X	X	1	2
	CO2	3	1	3	2	3	1	2	2	3	1	3	X	X	1	1
	CO3	3	1	3	3	3	1	2	3	2	1	1	X	X	2	2
	CO4	3	1	1	3	3	1	3	3	2	1	3	3	3	3	2
	CO5	3	1	X	X	2	X	1	2	1	X	1	X	3	1	2
	CO6	3	1	2	3	3	1	3	3	2	1	2	X	X	2	2
ENG101	**CO1**	3	3	3	X	3	2	2	1	3	1	2	1	1	1	1
	CO2	3	3	2	X	1	X	2	X	2	1	3	X	X	1	1
	CO3	2	3	2	3	2	1	X	1	2	1	X	1	2	X	1
	CO4	2	3	2	3	2	1	X	X	2	1	X	X	2	X	1
	CO5	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
	CO6	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
PBC101	**CO1**	3	3	3	3	3	1	1	2	3	1	3	1	3	3	3
	CO2	3	3	X	3	X	X	X	X	X	1	3	X	X	X	3
	CO3	3	3	1	2	1	1	X	1	1	1	3	1	2	3	3
	CO4	3	3	3	3	3	1	X	3	3	1	3	2	3	3	3
HCP10	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2

1	**CO2**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
ECO101	**CO1**	3	X	3	1	1	2	X	3	2	X	X	X	X	X	3
	CO2	3	X	2	1	1	2	X	3	2	X	X	X	X	X	3
	CO3	3	X	1	2	1	2	X	3	3	X	X	X	X	X	2
	CO4	3	X	1	1	2	2	X	3	3	X	X	X	X	X	3
	CO5	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO6	3	X	1	1	1	2	X	3	2	X	X	X	X	X	2
ENO101	**CO1**	3	3	3	1	3	1	2	1	3	1	1	2	1	1	1
	CO2	3	3	X	X	1	X	1	X	X	1	2	1	1	1	1
	CO3	3	3	2	2	2	1	X	1	2	1	1	1	1	1	1
	CO4	3	3	X	3	1	X	X	X	X	1	1	X	1	1	1
	CO5	3	3	X	3	1	X	X	X	X	1	1	X	1	1	1
	CO6	3	3	X	3	X	X	X	X	X	1	1	X	1	1	1
HIS101	**CO1**	3	2	3	2	2	1	1	2	2	1	2	2	3	2	2
	CO2	3	2	3	2	3	1	1	3	2	1	2	2	3	2	2
	CO3	3	2	3	2	3	1	1	2	2	1	2	2	2	2	2
	CO4	3	2	3	2	2	1	1	2	2	1	2	2	X	2	2
	CO5	3	2	3	2	2	1	1	3	2	1	2	2	X	2	2
	CO6	3	2	3	2	2	1	1	2	2	1	2	2	X	2	2
MAT101	**CO1**	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO2	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO3	2	2	2	3	2	2	1	X	1	1	2	2	2	2	2
	CO4	3	3	3	3	2	3	2	2	2	3	3	2	2	3	1
	CO5	3	X	1	3	X	X	1	1	X	2	2	1	X	1	2
	CO6	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
POL101	**CO1**	3	3	3	2	2	1	2	2	1	X	2	2	2	X	X

	CO2	3	3	2	1	1	1	2	1	1	X	2	2	2	1	X
	CO3	3	3	3	1	1	X	1	1	2	X	2	X	3	X	2
	CO4	3	3	3	2	1	2	2	1	1	X	1	X	1	1	2
	CO5	3	3	3	1	X	X	1	X	3	X	1	2	3	2	1
	CO6	2	3	3	1	X	1	1	1	2	X	2	1	1	2	X
PBI101	**CO1**	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO2	2	2	1	2	2	X	1	X	1	2	2	2	2	2	2
	CO3	2	2	1	1	1	X	1	X	1	1	2	X	1	1	2
	CO4	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
	CO5	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
Semester II																
BAEDU 201	**CO1**	3	1	1	X	2	X	1	2	1	X	X	X	1	1	2
	CO2	3	1	2	2	3	1	2	2	3	1	3	X	1	1	1
	CO3	3	1	3	3	3	1	2	2	2	1	1	X	1	1	2
	CO4	3	1	2	2	2	1	2	2	2	1	2	2	3	3	2
	CO5	3	1	3	3	3	3	3	1	3	2	3	3	2	2	3
BAEDU 202	**CO1**	3	1	X	X	2	X	1	2	1	X	X	X	X	1	2
	CO2	3	1	3	2	3	1	2	2	3	1	3	X	X	1	1
	CO3	3	1	3	3	3	1	2	3	2	1	1	X	X	2	2
	CO4	3	1	1	3	3	1	3	3	2	1	3	3	3	3	2
ENG201	**CO1**	3	3	3	X	3	2	2	1	3	1	2	1	1	1	1
	CO2	3	3	2	X	1	X	2	X	2	1	3	X	X	1	1
	CO3	2	3	2	3	2	1	X	1	2	1	X	1	2	X	1
	CO4	2	3	2	3	2	1	X	X	2	1	X	X	2	X	1
	CO5	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
	CO6	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
PBC201	**CO1**	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO3	3	3	2	3	2	1	2	1	1	1	3	1	3	3	3
	CO4	3	3	2	3	2	X	X	3	1	1	3	X	3	3	3

HCP201	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
ECO201	**CO1**	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO2	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO3	3	X	1	1	1	2	X	3	3	X	X	X	X	X	2
	CO4	3	X	1	1	1	2	X	3	3	X	X	X	X	X	3
	CO5	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO6	3	X	1	1	1	2	X	3	2	X	X	X	X	X	2
ENO201	**CO1**	3	3	3	1	3	1	2	1	3	1	1	2	1	1	1
	CO2	3	3	X	X	1	X	1	X	X	1	2	1	1	1	1
	CO3	3	3	2	2	2	1	X	1	2	1	1	1	1	1	1
	CO4	3	3	X	3	1	X	X	X	X	1	1	X	1	1	1
	CO5	3	3	X	3	1	X	X	X	X	1	1	X	1	1	1
	CO6	3	3	X	3	X	X	X	X	X	1	1	X	1	1	1
HIS201	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
MAT201	**CO1**	2	1	2	2	1	X	X	1	1	1	2	2	2	2	2
	CO2	1	X	3	3	1	X	2	X	1	2	2	X	2	2	2
	CO3	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
	CO4	3	1	2	3	1	X	X	1	X	X	2	X	3	1	2
	CO5	3	X	3	3	2	1	2	3	2	X	2	2	X	1	3
	CO6	2	X	1	2	1	1	3	X	2	X	2	2	2	X	2

POL201	**CO1**	3	2	2	3	2	2	2	2	2	X	1	2	X	2	2
	CO2	1	X	3	2	2	2	2	1	1	X	2	2	1	1	1
	CO3	2	3	2	2	2	1	1	1	3	X	2	1	1	1	1
	CO4	3	3	3	2	1	2	3	1	2	X	1	2	2	2	1
	CO5	3	3	3	2	2	1	1	2	1	X	1	1	1	1	2
	CO6	2	3	3	2	1	1	2	1	2	X	2	1	X	2	1
PBI201	**CO1**	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO2	2	2	1	2	2	X	1	X	1	2	2	2	2	2	2
	CO3	2	2	1	1	1	X	1	X	1	1	2	X	1	1	2
	CO4	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
	CO5	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
ENV	**CO1**	1	2	1	2	2	1	X	X	1	1	2	1	2	1	2
	CO2	2	1	1	X	1	X	2	X	1	X	1	1	1	2	1
	CO3	3	1	1	1	2	X	1	X	1	1	2	1	2	1	2
	CO4	2	X	1	2	1	X	1	X	2	1	X	1	2	X	2
	CO5	2	X	1	1	2	1	X	1	2	1	1	2	2	X	1
	CO6	1	X	2	2	1	1	2	2	1	X	1	2	2	X	2
Semester III																
BAEDU 301	**CO1**	3	1	2	2	2	X	1	2	1	X	2	X	1	1	1
	CO2	3	1	2	2	3	1	1	2	1	X	1	X	1	2	1
	CO3	3	1	3	2	3	1	1	2	1	X	1	X	1	1	1
	CO4	3	1	2	2	2	2	2	2	1	1	X	1	1	1	1
BAEDU 302	**CO1**	3	1	2	2	2	X	1	2	1	X	2	X	1	1	1
	CO2	3	1	2	2	3	1	1	2	1	X	1	X	1	2	1
	CO3	3	1	3	2	3	1	1	2	1	X	1	X	1	1	1
	CO4	3	1	2	2	2	2	2	2	1	1	X	1	1	1	1
	CO5	3	2	1	X	3	2	3	2	1	3	2	1	3	3	X
	CO6	2	3	X	2	1	2	3	2	1	2	3	3	X	3	2
ENG301	**CO1**	3	3	2	X	3	1	2	1	2	1	2	1	1	1	1
	CO2	3	3	1	X	1	X	2	X	1	1	2	X	X	1	1

	CO3	2	3	3	3	3	1	X	1	3	1	3	1	2	X	1
	CO4	2	3	3	3	3	X	X	1	3	1	3	X	2	X	1
	CO5	2	3	2	3	3	X	X	1	2	1	3	X	X	X	1
	CO6	2	3	3	3	X	X	X	X	3	1	3	X	X	X	1
PBC301	**CO1**	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	3	3	1	3	3	3
	CO3	3	3	2	3	X	1	1	X	1	X	3	1	2	3	3
	CO4	3	3	X	3	X	X	X	X	X	X	3	X	2	3	3
HCP301	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
ECO301	**CO1**	3	X	3	1	1	1	X	1	1	X	X	X	X	X	3
	CO2	3	X	2	1	1	1	X	1	1	X	X	X	X	X	3
	CO3	3	X	1	2	1	1	X	1	1	X	X	X	X	X	2
	CO4	3	X	1	1	2	1	X	1	1	X	X	X	X	X	3
	CO5	3	X	1	1	1	1	X	1	2	X	X	X	X	X	1
	CO6	3	X	1	1	1	1	X	1	2	X	X	X	X	X	2
ENO301	**CO1**	3	3	3	1	2	2	2	2	2	X	1	3	2	1	2
	CO2	3	3	2	2	1	3	3	2	2	1	1	3	2	2	2
	CO3	3	3	2	3	2	2	2	1	2	x	x	2	2	2	2
	CO4	3	3	3	3	3	2	3	1	2	1	1	3	2	3	3
	CO5	3	3	3	3	2	2	2	1	2	1	1	3	2	2	2
	CO6	3	3	2	2		1	1	x	1	2	x	2	2	1	1
HIS301	**CO1**	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO2	3	2	3	2	3	1	1	2	2	1	2	2	1	2	2
	CO3	3	2	3	2	2	1	1	2	2	1	2	2	3	2	2
	CO4	3	2	3	2	3	1	1	2	2	1	2	2	1	2	2

	CO5	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO6	3	2	2	2	2	1	1	2	2	1	2	2	2	2	2
MAT301	**CO1**	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO2	3	2	2	3	1	X	2	1	2	1	3	X	2	2	2
	CO3	3	X	3	2	2	1	2	1	2	3	3	X	2	2	3
	CO4	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO5	3	1	2	2	X	1	3	1	2	X	1	1	2	1	1
POL301	**CO1**	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO2	3	2	2	3	1	X	2	1	2	1	3	X	2	2	2
	CO3	3	X	3	2	2	1	2	1	2	3	3	X	2	2	3
	CO4	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO5	3	1	2	2	X	1	3	1	2	X	1	1	2	1	1
PBI301	**CO1**	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO2	2	2	1	2	2	X	1	X	1	2	2	2	2	2	2
	CO3	2	2	1	1	1	X	1	X	1	1	2	X	1	1	2
	CO4	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
	CO5	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
Semester IV																
BAEDU401	**CO1**	3	2	2	2	3	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	3	2	3	2	1	2	1	1	2	X	1	2	1
	CO3	3	2	3	3	3	1	2	2	1	2	1	X	1	3	1
	CO4	3	3	2	3	3	2	X	2	2	X	3	1	3	3	2
	CO5	3	2	X	2	3	2	2	1	3	1	X	3	3	2	1
	CO6	2	3	X	1	2	2	3	1	2	3	1	X	3	3	2
BAEDU402	**CO1**	3	2	2	2	3	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	3	2	3	1	1	1	1	1	2	X	1	2	1
	CO3	3	2	3	3	3	1	2	2	1	2	1	X	1	2	1
	CO4	3	3	2	3	3	2	2	2	2	2	3	1	3	3	2
ENG401	**CO1**	3	3	2	X	3	1	2	1	2	1	2	1	1	1	1
	CO2	3	3	1	X	1	X	2	X	1	1	2	X	X	1	1

	CO3	2	3	3	3	3	1	X	1	3	1	3	1	2	X	1
	CO4	2	3	3	3	3	X	X	1	3	1	3	X	2	X	1
	CO5	2	3	2	3	3	X	X	X	2	1	3	X	X	X	1
	CO6	2	3	3	3	1	X	X	X	3	1	3	X	X	X	1
PBC401	**CO1**	3	3	3	3	2	1	2	3	1	1	3	2	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	1	3	2	3	3	3
	CO3	3	3	X	3	X	X	X	X	X	X	3	X	2	3	3
	CO4	3	3	2	3	X	1	2	X	1	1	3	1	2	3	3
HCP401	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
ECO401	**CO1**	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO2	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO3	3	X	1	1	1	2	X	3	3	X	X	X	X	X	2
	CO4	3	X	1	1	1	2	X	3	3	X	X	X	X	X	3
	CO5	3	X	1	1	1	2	X	3	2	X	X	X	X	X	1
	CO6	3	X	1	1	1	2	X	3	2	X	X	X	X	X	2
ENO401	**CO1**	3	3	3	1	2	2	2	2	2	X	1	3	2	1	2
	CO2	3	3	2	2	1	3	3	2	2	1	1	3	2	2	2
	CO3	3	3	2	3	2	2	2	1	2	1	x	2	2	2	2
	CO4	3	3	3	3	3	2	3	1	2	1	1	3	2	3	3
	CO5	3	3	3	3	2	2	2	1	2	1	1	3	2	2	2
	CO6	3	3	1	2	1	1	2	x	2	x	1	2	2	2	2
HIS401	**CO1**	3	3	2	2	2	1	1	2	2	1	2	2	3	3	2
	CO2	3	3	3	2	3	1	1	2	2	1	2	2	1	3	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	2	1	3	2
	CO4	3	3	2	2	2	1	1	2	2	1	2	2	1	2	2

	CO5	3	3	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO6	3	3	2	2	2	1	1	2	2	1	2	2	1	3	2
MAT401	**CO1**	3	X	1	2	1	X	2	X	2	x	3	2	2	1	1
	CO2	3	X	2	3	2	X	2	1	1	X	2	2	1	2	1
	CO3	3	X	1	2	1	X	2	X	2	X	3	2	2	1	1
	CO4	2	X	1	2	1	1	3	X	2	X	2	2	2	X	2
	CO5	3	1	X	3	X	1	2	1	2	X	3	1	2	1	2
	CO6	3	2	3	1	2	X	1	2	1	1	1	1	2	1	1
POL401	**CO1**	3	3	3	2	2	1	2	2	1	X	2	2	2	X	X
	CO2	3	3	3	1	2	1	2	1	1	X	2	2	2	1	X
	CO3	3	3	3	1	1	X	1	1	2	X	2	X	3	X	2
	CO4	3	3	3	2	1	2	2	1	2	X	1	X	1	1	2
	CO5	3	3	3	1	X	X	1	X	2	X	1	2	2	2	1
	CO6	2	3	2	1	X	1	1	1	2	X	2	2	1	2	X
PBI401	**CO1**	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO2	2	2	1	2	2	X	1	X	1	2	2	2	2	2	2
	CO3	2	2	1	1	1	X	1	X	1	1	2	X	1	1	2
	CO4	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
	CO5	2	3	1	2	1	1	1	1	2	2	2	1	1	X	2
Semester V																
BAEDU501	**CO1**	3	2	2	1	2	2	2	1	1	2	1	X	1	2	1
	CO2	3	2	2	1	3	1	1	2	1	2	1	X	1	1	1
	CO3	3	2	2	2	2	2	3	2	2	2	1	X	1	2	2
	CO4	3	2	2	2	2	2	3	2	2	2	2	X	2	3	2
BAEDU502	**CO1**	3	2	2	1	2	2	2	1	1	2	1	X	1	2	1
	CO2	3	2	2	1	3	1	1	2	1	2	1	X	1	1	1
	CO3	3	2	3	2	2	X	3	1	2	2	1	X	1	2	2
	CO4	3	2	2	2	2	2	3	2	3	2	2	X	2	3	2
	CO5	3	2	3	X	2	3	3	1	1	3	1	3	X	2	2
	CO6	3	1	1	2	X	3	2	1	3	X	2	2	1	3	2

ENG501	**CO1**	3	3	3	1	3	1	1	1	3	1	2	1	1	1	1
	CO2	3	3	2	1	X	X	X	X	2	1	2	1	X	1	1
	CO3	3	3	3	1	3	1	1	1	3	1	2	1	X	1	1
	CO4	3	3	2	3	3	1	X	1	2	1	1	1	1	1	1
	CO5	3	3	X	3	X	X	X	X	X	1	1	X	X	1	1
	CO6	3	3	X	3	X	X	X	X	X	1	1	X	X	1	1
PBC501	**CO1**	1	2	1	3	1	2	1	2	3	1	2	3	1	2	2
	CO2	1	1	3	1	X	1	X	1	1	3	1	2	2	3	3
	CO3	3	X	2	X	2	X	2	1	2	1	3	2	2	1	1
	CO4	2	3	1	1	3	2	2	X	2	2	1	1	X	2	2
	CO5	2	2	X	1	1	3	1	2	X	2	2	X	3	X	X
	CO6	X	1	2	2	1	1	3	2	1	X	2	1	2	1	1
HCP501	**CO1**	3	2	2	1	2	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO3	3	3	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO4	3	3	2	2	3	1	1	1	1	1	2	1	2	2	1
ECO501	**CO1**	2	X	X	X	X	X	X	X	2	X	1	X	X	X	X
	CO2	2	X	1	X	2	X	X	X	2	X	X	X	X	X	2
	CO3	2	1	1	1	3	1	X	1	2	X	X	X	X	X	1
	CO4	1	1	2	2	1	1	X	2	1	X	X	X	X	X	2
	CO5	3	X	1	1	1	1	X	1	2	X	1	X	X	X	2
	CO6	2	X	1	2	1	1	X	X	X	X	X	X	X	X	1
ENG501	**CO1**	3	3	3	1	2	2	2	2	2	X	1	3	2	1	2
	CO2	3	3	2	2	1	3	3	2	2	1	1	3	2	2	2
	CO3	3	3	2	3	2	2	2	1	2	x	1	2	2	2	2
	CO4	3	3	3	3	3	2	3	1	2	1	1	3	2	3	3
	CO5	3	3	3	3	2	2	2	1	2	1	1	3	2	2	2
	CO6	3	3	2	2	1	2	2	1	2	x	1	2	2	2	2
HIS501	**CO1**	3	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO2	3	X	2	3	1	X	1	1	X	X	2	1	2	1	2

	CO3	2	2	2	3	2	2	1	X	1	1	2	2	2	2	2
	CO4	3	3	3	3	2	3	2	2	2	3	3	2	2	3	1
	CO5	3	X	1	2	X	X	1	1	X	2	2	1	X	1	2
MAT501	**CO1**	3	X	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO2	3	X	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO3	2	1	3	3	1	1	1	1	2	2	3	1	3	3	3
	CO4	3	2	2	2	1	1	2	1	3	3	2	1	2	3	2
	CO5	3	1	3	3	2	1	3	X	2	1	3	X	3	2	1
	CO6	3	1	2	3	1	X	2	X	1	X	2	X	X	2	3
POL501	**CO1**	3	3	3	3	2	2	1	2	1	X	2	2	2	2	2
	CO2	3	3	3	2	2	1	1	1	2	X	2	2	2	2	2
	CO3	3	3	2	2	3	1	2	1	2	X	2	1	2	2	1
	CO4	3	3	3	2	1	1	2	2	1	X	1	X	2	2	2
	CO5	3	2	3	1	2	2	1	2	2	X	2	1	1	2	1
	CO6	2	3	3	1	2	1	2	X	1	X	2	X	1	2	1
PBI501	**CO1**	3	3	3	3	3	1	1	2	3	1	3	1	3	3	3
	CO2	3	3	X	3	X	X	X	X	X	1	3	X	X	X	3
	CO3	3	3	1	2	1	1	X	1	1	1	3	1	2	3	3
	CO4	3	3	3	3	3	1	X	3	3	1	3	2	3	3	3
Semester VI																
BAEDU601	**CO1**	3	2	1	1	1	2	1	2	1	1	1	X	1	1	1
	CO2	3	2	2	2	3	2	2	2	2	1	2	X	1	2	1
	CO3	3	3	2	2	3	2	3	2	2	2	2	X	2	3	2
	CO4	3	1	3	2	3	3	3	2	2	2	2	X	1	2	1
BAEDU602	**CO1**	3	2	1	1	1	2	1	2	1	1	1	X	1	1	1
	CO2	3	2	2	2	3	2	2	2	2	1	2	X	1	2	1
	CO3	3	3	2	2	3	2	3	2	2	2	2	X	2	3	2
	CO4	3	1	3	2	3	3	3	2	2	2	2	X	1	2	1
	CO5	3	2	1	1	2	3	1	2	3	X	2	3	1	2	3
	CO6	2	3	1	2	1	3	2	3	3	2	2	1	X	1	2

ENG601	**CO1**	3	3	3	1	3	1	1	1	3	1	1	1	1	1	1
	CO2	3	3	X	X	X	X	1	X	X	1	1	X	X	1	1
	CO3	3	3	2	3	2	1	1	1	2	1	2	1	X	1	1
	CO4	3	3	2	3	2	X	X	X	2	1	1	X	1	1	1
	CO5	3	3	X	3	2	X	X	X	X	1	1	X	X	1	1
PBC601	**CO1**	1	2	3	2	1	3	2	X	3	2	1	2	3	2	1
	CO2	2	X	2	1	2	2	1	1	1	1	X	1	1	1	2
	CO3	X	2	1	1	1	1	X	2	2	3	2	3	2	3	X
	CO4	3	1	X	3	2	2	2	2	X	2	3	X	1	1	3
	CO5	1	1	2	2	X	1	2	3	2	X	1	2	1	1	1
	CO6	1	3	1	1	3	X	1	1	2	1	2	1	2	X	1
HCP601	**CO1**	3	2	2	1	2	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO3	3	3	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO4	3	3	2	2	3	1	1	1	1	1	2	1	2	2	1
ECO601	**CO1**	3	X	2	1	1	X	X	X	X	X	1	1	2	2	1
	CO2	2	1	1	1	1	1	1	X	X	1	2	1	1	X	1
	CO3	2	1	X	X	1	X	1	1	X	X	X	X	1	2	1
	CO4	2	X	2	X	1	1	X	1	X	X	X	1	1	2	2
	CO5	3	X	2	2	1	1	X	X	X	X	X	X	X	2	1
	CO6	2	1	2	2	X	X	X	X	1	X	1	1	X	2	1
ENO601	**CO1**	3	3	3	1	2	2	2	2	2	X	1	3	2	1	2
	CO2	3	3	2	2	1	3	3	2	2	1	1	3	2	2	2
	CO3	3	3	3	3	2	2	2	2	2	x	1	2	3	2	2
	CO4	3	3	3	3	3	2	3	1	2	1	1	3	2	3	3
	CO5	3	3	3	3	2	2	2	1	2	1	1	3	2	2	2
	CO6	3	3	3	2	2	2	1	1	1	x	1	2	2	2	2
HIS601	**CO1**	3	1	2	1	2	X	X	X	X	X	1	1	2	2	1
	CO2	3	1	2	1	2	1	1	X	X	2	2	2	1	X	1
	CO3	3	1	1	X	1	X	1	1	X	X	X	X	1	2	1

	CO4	3	1	2	X	2	1	X	1	X	X	X	1	2	2	2
	CO5	3	1	2	2	1	1	X	X	X	X	X	X	X	2	1
MAT601	**CO1**	3	X	3	3	3	1	1	X	1	3	3	X	3	2	2
	CO2	2	X	2	3	3	1	1	X	1	2	3	X	3	2	2
	CO3	3	1	3	3	2	X	1	1	2	3	2	1	1	2	2
	CO4	3	1	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO5	3	1	2	3	1	1	2	2	1	1	2	3	3	3	3
	CO6	2	X	2	3	3	1	1	X	1	2	3	X	3	2	2
POL601	**CO1**	3	3	3	2	1	1	1	2	X	X	1	2	2	1	2
	CO2	3	3	3	2	2	2	3	2	X	X	1	3	2	1	2
	CO3	3	3	3	2	2	2	1	1	1	X	2	3	2	1	2
	CO4	3	3	3	2	3	2	2	1	X	X	1	2	1	1	2
	CO5	3	3	2	1	2	1	2	2	X	X	1	3	1	1	2
	CO6	2	3	2	1	2	1	2	2	1	X	X	1	2	1	1
PBI601	**CO1**	3	X	1	1	1	X	X	X	X	X	1	1	2	2	1
	CO2	3	X	1	1	1	1	1	X	X	1	1	1	1	X	1
	CO3	3	1	X	X	1	X	1	1	X	X	X	X	1	1	1
	CO4	3	X	1	X	1	1	X	1	X	X	X	1	1	1	1
	CO5	3	X	1	1	1	1	X	X	X	X	X	X	X	1	1
Semester VII																
BAEDU 701	**CO1**	3	2	2	3	2	2	3	2	3	X	1	3	1	2	1
	CO2	3	2	3	2	2	3	2	2	1	1	1	2	1	2	1
	CO3	3	3	1	3	1	1	3	2	1	1	2	2	1	2	1
	CO4	3	1	2	2	2	1	1	1	1	X	1	1	2	2	1
	CO5	3	2	3	3	2	1	3	X	2	3	3	2	3	3	2
	CO6	3	3	1	X	3	2	1	2	1	2	2	3	3	1	3
BAEDU 702	**CO1**	3	2	2	2	2	2	3	2	1	X	1	1	1	2	1
	CO2	3	2	2	2	2	2	2	2	1	X	1	1	1	2	1
	CO3	3	3	1	1	1	1	2	2	1	X	2	2	1	2	1
	CO4	3	1	2	2	2	1	1	1	1	X	1	1	2	2	1

BAEDU 703	**CO1**	3	3	2	3	2	1	2	3	1	2	1	3	2	1	2
	CO2	3	2	3	3	2	1	3	1	2	1	2	3	2	3	1
	CO3	3	1	3	X	2	2	2	2	2	2	1	3	2	2	2
	CO4	3	2	3	2	2	2	1	1	X	3	1	3	2	3	1
	CO5	3	2	2	2	2	1	2	1	2	3	2	1	2	3	2
	CO6	3	1	3	2	2	2	3	1	1	X	1	2	1	3	1
BAEDU 704	**CO1**	3	3	2	2	2	1	2	1	1	1	1	1	2	3	1
	CO2	3	2	3	3	3	X	3	1	1	1	2	X	2	3	1
	CO3	3	1	3	3	3	2	2	2	2	2	1	1	2	2	1
	CO4	3	2	3	3	2	2	1	1	1	X	1	1	2	3	1
	CO5	3	1	2	2	2	1	2	1	1	3	1	1	2	3	1
	CO6	3	1	2	2	2	X	3	1	1	X	1	1	1	3	1
BAEDU 705	**CO1**	X	X	X	2	1	X	X	1	2	3	1	X	X	X	2
	CO2	X	1	3	2	2	X	X	1	2	3	1	X	X	X	2
	CO3	X	X	X	X	2	1	X	2	X	3	1	X	X	X	2
	CO4	X	X	X	2	1	1	X	1	1	3	X	X	X	X	2
	CO5	2	X	3	3	3	2	2	1	3	3	3	X	X	1	2
	CO6	2	2	2	3	2	X	X	1	3	3	3	1	2	1	2
TSST706	**CO1**	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
TMAT707	**CO1**	3	X	1	3	2	1	2	1	X	X	3	X	X	X	1
	CO2	2	X	1	3	1	2	1	1	1	X	X	X	X	X	2
	CO3	1	1	X	1	X	X	2	1	X	X	X	X	X	X	2
	CO4	3	2	X	1	X	X	2	X	X	X	3	X	1	X	1
	CO5	X	1	1	3	2	1	X	X	X	1	X	2	X	X	X
TENG7	**CO1**	3	3	3	X	3	X	X	X	3	X	X	X	X	X	X

08	**CO2**	3	3	3	X	3	X	X	1	3	X	X	X	X	X	1
	CO3	3	3	2	2	3	1	2	1	2	X	3	X	X	2	1
	CO4	3	3	2	X	3	X	2	1	2	X	2	X	X	2	2
	CO5	3	3	2	3	2	2	2	X	2	3	3	X	2	2	1
TPBI709	**CO1**	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Mapping of Course Outcomes (COs) with Programme Specific Outcomes(PSOs)

College code	Course Out-comes	PSO1	PSO2	PSO3	PSO4
BAEDU101	**CO1**	3	1	2	1
	CO2	3	3	2	1
	CO3	3	2	2	1
	CO4	3	3	1	1
	CO5	3	2	2	1
BAEDU102	**CO1**	3	2	X	X
	CO2	2	X	X	1
	CO3	3	2	X	1
	CO4	2	3	3	1
	CO5	2	X	3	X
	CO6	2	1	X	1
ENG101	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X

	CO6	X	X	X	X
PBC101	**CO1**	3	1	3	1
	CO2	3	1	3	1
	CO3	3	1	3	1
	CO4	3	1	3	1
HCP101	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
ECO101	**CO1**	3	3	3	2
	CO2	3	3	2	1
	CO3	3	3	3	2
	CO4	3	3	3	3
	CO5	3	2	2	3
	CO6	3	2	2	2
ENO101	**CO1**	2	X	1	X
	CO2	1	X	1	X
	CO3	2	X	2	X
	CO4	1	X	2	X
	CO5	1	X	2	X
	CO6	1	X	2	X
HIS101	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	3	1
	CO4	3	3	3	1
	CO5	3	3	3	2
	CO6	3	3	3	2
MAT101	**CO1**	3	2	2	2

	CO2	3	2	3	1
	CO3	2	1	2	1
	CO4	1	2	2	1
	CO5	1	2	1	X
	CO6	1	2	1	X
POL101	**CO1**	1	1	3	2
	CO2	3	2	2	1
	CO3	2	1	3	2
	CO4	2	2	2	X
	CO5	2	2	3	1
	CO6	2	1	2	3
PBI101	**CO1**	2	3	3	2
	CO2	2	3	1	2
	CO3	1	1	1	1
	CO4	1	2	2	X
	CO5	2	3	1	2
BAEDU201	**CO1**	3	2	2	1
	CO2	2	X	2	2
	CO3	3	2	2	1
	CO4	2	3	3	3
	CO5	3	2	2	3
BAEDU202	**CO1**	3	2	X	X
	CO2	2	X	X	1
	CO3	3	2	X	1
	CO4	2	3	3	1
ENG201	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X

	CO6	X	X	X	X
PBC201	**CO1**	3	1	3	1
	CO2	3	1	3	1
	CO3	3	1	3	1
	CO4	3	1	3	1
HCP201	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
ECO201	**CO1**	3	1	2	1
	CO2	3	1	2	1
	CO3	3	1	2	1
	CO4	3	1	2	1
	CO5	3	1	2	1
	CO6	3	1	2	1
ENO201	**CO1**	2	X	1	X
	CO2	1	X	1	X
	CO3	2	X	2	X
	CO4	1	X	2	X
	CO5	1	X	2	X
	CO6	1	X	2	X
HIS201	**CO1**	3	3	3	2
	CO2	3	3	3	2
	CO3	3	3	3	2
	CO4	3	3	3	1
	CO5	3	3	3	3
	CO6	3	3	3	X
MAT201	**CO1**	1	2	2	1

	CO2	1	2	1	X
	CO3	1	2	1	X
	CO4	3	2	3	1
	CO5	3	3	2	3
	CO6	2	2	2	1
POL201	**CO1**	2	2	2	1
	CO2	3	3	2	2
	CO3	2	2	3	X
	CO4	2	3	2	1
	CO5	3	3	3	X
	CO6	2	2	2	1
PBI201	**CO1**	2	3	3	2
	CO2	2	3	1	2
	CO3	1	1	1	1
	CO4	1	2	2	X
	CO5	2	3	1	2
ENV	**CO1**	3	X	X	3
	CO2	1	1	X	3
	CO3	2	1	X	3
	CO4	2	X	3	3
	CO5	1	X	X	3
	CO6	2	1	1	3
BAEDU301	**CO1**	3	X	1	X
	CO2	3	X	1	X
	CO3	3	X	1	X
	CO4	3	X	1	X
BAEDU302	**CO1**	3	1	1	1
	CO2	3	X	1	X
	CO3	3	2	1	2
	CO4	3	X	1	X

	CO5	3	2	X	3
	CO6	2	3	1	X
ENG301	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC301	**CO1**	3	2	3	1
	CO2	3	1	2	1
	CO3	3	2	3	1
	CO4	3	1	3	1
HCP301	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
ECO301	**CO1**	3	3	3	2
	CO2	2	2	2	1
	CO3	2	2	3	2
	CO4	1	3	3	3
	CO5	3	2	2	3
	CO6	1	1	1	1
ENO301	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	2	3
	CO4	3	3	3	3
	CO5	3	3	3	x
	CO6	3	3	3	3

HIS301	**CO1**	3	3	3	1
	CO2	3	3	3	1
	CO3	3	3	3	3
	CO4	3	3	3	1
	CO5	3	3	3	1
	CO6	3	3	3	2
MAT301	**CO1**	3	3	3	1
	CO2	3	2	2	1
	CO3	3	2	3	2
	CO4	2	3	3	3
	CO5	2	2	2	3
POL301	**CO1**	2	2	2	1
	CO2	3	3	2	2
	CO3	2	2	3	X
	CO4	2	3	2	1
	CO5	3	3	3	X
	CO6	2	2	2	1
PBI301	**CO1**	2	3	3	2
	CO2	2	3	1	2
	CO3	1	1	1	1
	CO4	1	2	2	X
	CO5	2	3	1	2
BAEDU401	**CO1**	3	1	2	2
	CO2	3	1	2	2
	CO3	3	1	2	2
	CO4	3	1	2	3
	CO5	2	2	3	1
	CO6	3	3	2	1
BAEDU402	**CO1**	3	1	2	2
	CO2	3	1	2	2

	CO3	3	1	2	2
	CO4	3	1	2	3
ENG401	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC401	**CO1**	3	2	1	1
	CO2	3	3	3	3
	CO3	3	1	3	1
	CO4	3	1	1	1
HCP401	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
ECO401	**CO1**	3	1	2	1
	CO2	3	1	2	1
	CO3	3	1	2	1
	CO4	3	1	2	1
	CO5	3	1	2	1
	CO6	3	1	2	1
ENO401	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	2	3
	CO4	3	3	3	3
	CO5	3	3	3	x
	CO6	3	3	3	3

HIS401	**CO1**	3	3	3	3
	CO2	3	3	3	2
	CO3	3	3	3	1
	CO4	3	3	3	1
	CO5	3	3	3	1
	CO6	3	3	3	1
MAT401	**CO1**	3	2	2	X
	CO2	2	2	3	1
	CO3	3	2	2	X
	CO4	2	2	2	1
	CO5	3	3	2	2
	CO6	3	2	1	2
POL401	**CO1**	1	2	3	2
	CO2	3	3	2	X
	CO3	1	2	3	2
	CO4	1	2	2	1
	CO5	2	X	3	2
	CO6	2	3	2	X
PBI401	**CO1**	2	3	3	2
	CO2	2	3	1	2
	CO3	1	1	1	1
	CO4	1	2	2	X
	CO5	2	3	1	2
BAEDU501	**CO1**	3	3	X	2
	CO2	3	2	2	3
	CO3	3	3	2	3
	CO4	3	3	2	3
BAEDU502	**CO1**	3	3	X	2
	CO2	3	2	2	3
	CO3	3	3	2	3

	CO4	3	3	2	3
	CO5	2	3	2	1
	CO6	3	2	3	2
ENG501	**CO1**	2	X	X	X
	CO2	1	X	X	X
	CO3	2	X	X	X
	CO4	1	X	2	X
	CO5	X	X	2	X
	CO6	X	X	2	X
PBC501	**CO1**	2	1	3	2
	CO2	3	1	2	3
	CO3	2	2	1	1
	CO4	2	2	1	1
	CO5	1	1	2	2
	CO6	1	3	2	1
HCP501	**CO1**	2	1	2	2
	CO2	2	1	2	2
	CO3	2	1	1	1
	CO4	2	2	1	1
ECO501	**CO1**	1	X	X	1
	CO2	1	X	X	X
	CO3	1	X	X	X
	CO4	1	X	1	X
	CO5	1	X	X	1
	CO6	1	1	X	1
ENG501	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	2	3
	CO4	3	3	3	3
	CO5	3	3	3	x

	CO6	3	3	3	3
HIS501	**CO1**	3	1	2	2
	CO2	3	2	2	1
	CO3	1	1	2	1
	CO4	1	2	1	1
	CO5	1	2	1	X
MAT501	**CO1**	3	3	2	X
	CO2	3	1	2	2
	CO3	2	2	1	1
	CO4	3	2	1	1
	CO5	2	2	2	2
	CO6	3	3	2	1
POL501	**CO1**	1	1	2	2
	CO2	3	2	2	X
	CO3	2	X	1	2
	CO4	2	2	2	X
	CO5	1	2	2	1
	CO6	3	2	2	2
PBI501	**CO1**	3	1	2	1
	CO2	3	1	2	1
	CO3	3	1	2	1
	CO4	3	1	2	1
BAEDU601	**CO1**	3	X	1	2
	CO2	3	X	2	3
	CO3	3	X	1	3
	CO4	3	X	2	3
BAEDU602	**CO1**	3	X	1	2
	CO2	3	X	2	3
	CO3	3	X	1	3
	CO4	3	X	2	3

	CO5	2	3	3	1
	CO6	2	1	3	1
ENG601	**CO1**	2	X	X	X
	CO2	X	X	X	X
	CO3	2	X	2	X
	CO4	X	X	2	X
	CO5	X	X	2	X
PBC601	**CO1**	1	2	3	2
	CO2	2	1	1	1
	CO3	2	1	1	1
	CO4	1	3	2	2
	CO5	3	2	2	3
	CO6	1	1	1	2
HCP601	**CO1**	2	2	3	2
	CO2	2	2	1	2
	CO3	2	1	1	1
	CO4	2	3	2	2
ECO601	**CO1**	1	X	X	X
	CO2	1	X	1	X
	CO3	X	X	X	X
	CO4	1	X	X	X
	CO5	X	X	X	X
	CO6	X	X	X	X
ENO601	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	2	3
	CO4	3	3	3	3
	CO5	3	3	3	x
	CO6	3	3	3	3
HIS601	**CO1**	2	2	1	2

	CO2	2	2	2	1
	CO3	1	1	1	1
	CO4	2	1	X	1
	CO5	1	1	X	1
	CO6	1	1	X	X
MAT601	**CO1**	3	3	3	2
	CO2	3	2	3	2
	CO3	2	2	3	1
	CO4	2	3	2	2
	CO5	2	2	2	2
	CO6	2	2	3	1
POL601	**CO1**	2	2	2	1
	CO2	1	2	1	2
	CO3	2	2	1	2
	CO4	2	1	2	1
	CO5	2	2	2	X
	CO6	2	X	2	X
PBI601	**CO1**	1	1	X	X
	CO2	1	X	1	X
	CO3	X	X	X	X
	CO4	1	X	X	X
	CO5	X	X	X	X
BAEDU701	**CO1**	3	3	1	1
	CO2	3	2	1	1
	CO3	2	1	1	X
	CO4	2	3	1	2
	CO5	3	2	1	3
	CO6	2	3	1	2
BAEDU702	**CO1**	3	X	1	1
	CO2	3	X	1	1

	CO3	2	1	1	X
	CO4	2	X	1	X
BAEDU703	**CO1**	3	1	3	2
	CO2	3	2	2	X
	CO3	3	3	2	2
	CO4	3	X	1	3
	CO5	3	2	2	3
	CO6	3	1	1	1
BAEDU704	**CO1**	3	1	3	2
	CO2	3	2	1	X
	CO3	3	1	2	1
	CO4	3	X	X	X
	CO5	3	1	2	3
	CO6	3	X	1	1
BAEDU705	**CO1**	2	1	X	X
	CO2	2	1	X	X
	CO3	2	1	X	X
	CO4	2	1	X	X
	CO5	2	1	X	3
	CO6	2	3	X	3
TSST706	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	3	3
	CO4	3	3	3	3
	CO5	3	3	3	3
	CO6	3	3	3	3
TMAT707	**CO1**	2	3	X	1
	CO2	2	2	1	1
	CO3	3	1	X	X
	CO4	2	2	1	2

	CO5	1	X	1	X
TENG708	**CO1**	3	3	3	X
	CO2	3	3	3	X
	CO3	3	3	2	2

Course Outcomes (COs) of B.Sc. B.Ed.

	CO4	3	3	2	X
	CO5	3	3	2	3
TPBI709	**CO1**	3	3	3	3
	CO2	3	3	3	3
	CO3	3	3	3	3
	CO4	3	3	3	3
	CO5	3	3	3	3

Sem.	Course Name	Course Code	Course Outcome	
Sem.-I	**Education in Emerging Indian Society**	**BSCEDU101**	**CO1**	Understand and compare evolution of Education in India during Vedic, Buddhist, Medieval and British period.
			CO2	Analyse recommendations of various Education commissions since Independence
			CO3	Summarise educational provision in Indian constitution with special reference to Right to Education
			CO4	Explain the role of education for social and cultural change
			CO5	Assess the relationship of education with various economic issues such as poverty, inequality and poverty.
Sem.-I	**School Organization and Administration**	**BSCEDU102**	**CO1**	Describe the Concept and Principles of school management
			CO2	Maintain Various Components of School Plant
			CO3	Prepare plans at institution level
			CO4	Maintain school records and conduct co-curricular activities
			CO 5	Develop Qualities Of a good Teacher
			CO 6	Construct Time Table using its Principles
Sem.-I	**English Compulsory**	**ENG101**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Compose paragraphs of descriptive and narrative nature
			CO4	Translate from vernacular to English
			CO 5	Modify sentences from active to passive and vice versa
			CO 6	Use modals and determiners in sentences
Sem.-I	**Punjabi**	**PBC101**	**CO1**	Analyse Adhunik Punjabi Kavita (modern Punjabi poetry)

	Compulsory		**CO2**	Understand Punjabi grammar, essay writing and composition
			CO3	Summarise the given paragraph in their own words
			CO4	Compose essays in Punjabi writing
Sem.-I	**History & Culture of Punjab**	**HCP101**	**CO1**	Understand ancient Punjab and historical sources with special reference to Harappan Culture
			CO2	Explain political, social, economic and religious life of people of Rig Vedic and Later Vedic Age
			CO3	Analyse the origin and evolution of caste system
			CO4	Illustrate historical importance of the epics Ramayana and Mahabharata
			CO 5	Describe impact of Alexander's Invasion
			CO 6	Know about important historical places of Punjab
Sem.-I	**Mathematics**	**MAT101**	**CO1**	Comprehend special properties of circles, parabola, ellipse and hyperbola, conjugate hyperbola, asymptote of hyperbola, rectangular hyperbola.
			CO2	Solve problems on Transformation of axes, joint equation of pair of straight lines and angle between them, joint equation of lines joining origin to the intersection of a line and a curve.
			CO3	Know about Hyperbolic functions, their differentiation .learn successive differentiation and Leibnitz's theorem.
			CO4	Determine Limits and continuity at a point or an interval. Also distinguishes between types of discontinuity at a point.
			CO5	Analyze functions and their graphs and learn to produce rigorous proofs of results that arise in the context of calculus, Geometric value theorems.
			CO6	Apply the concepts of real numbers, geometrical interpretation, and De Moivre theorem, functions of complex variables and rank of matrix.
Sem.-I	**Paper I (Inorganic Chemistry-A)**	**CHM101A1**	**CO1**	Understand the essential facts relating inorganic chemistry concepts.
			CO2	Comprehend Atomic Structure, Periodic properties of elements.
			CO3	Describe Chemistry of Noble Gases.

			CO4	Know about *s*-Block Elements.
			CO5	Explain Chemical Bonding(V.B.T, VSEPR , hybridization MOT)
			CO6	Determine the percentage ionic character from dipole moment and electronegative difference.
Sem.-I	**Paper II (Organic Chemistry-A)**	**CHM101A2**	**CO1**	Understand the structure and bonding of organic compounds
			CO2	Comprehend mechanisms of different organic reactions
			CO3	Describe alkanes and cycloalkanes and including their synthesis and chemical reactions
			CO4	Know about optical isomerism in organic compounds
			CO5	Explain geometrical isomerism and conformational isomerism in organic compounds
			CO6	Understand mechanism of free radical halogenations of alkanes
Sem.-I	**Paper III (Physical Chemistry-A)**	**CHM101A3**	**CO1**	Acquire the knowledge of mathematical concepts and its application in evaluation of analytical data
			CO2	Explain gaseous state and deviation in their behaviour from ideal gases behaviour
			CO3	Know about Maxwell distribution of molecular velocity, collision number and mean free path.
			CO4	Describe of reaction, rate of reaction ,kinetics and their mechanism
			CO5	Understand the effect of temperature on rate of reaction , collision theory , catalysis and radioactive decay
			CO6	To understand the Michaelismenten equation foe enzyme catalysis and its mechanism
Sem.-I	**Physics Paper A (Mechanics-I)**	**PHY101A**	**CO1**	Know about spherical and coordinate system
			CO2	Understand the concept of centre of mass ,angular momentum and various relationships of momentum
			CO3	Explain motion under force obeying inverse square law.
			CO4	Comprehend the important connections between theory and experiment.
			CO5	Analyse Newton's law of motion and conservation principles.
			CO6	Apply vector theorems of mechanics and interpret the results.

Sem.-I	**Physics - Paper B (Vibrations, Waves & E.M. Theory-I)**	**PHY101B**	**CO1**	Understand the decay of free vibrations due to damping, types of damping and electromagnetic Damping.
			CO2	Explain transient and steady state behaviour and power supply to an oscillator and its vibration with frequency.
			CO3	Know about simple harmonic motions, Torsional Pendulum, and transverse vibrations
			CO4	Analyse the significance of transverse wave and wave equation.
			CO5	Comprehend the concept of simple harmonic vibrations of same frequency and different frequency
			CO6	Use Lissajous figures to understand simple harmonic vibrations of same frequency and different frequencies
Sem.-I	**Physics- Paper C (Electricity & Magnetism-I)**	**PHY101C**	**CO1**	Know the vocabulary and concepts of physics as it applies to: Principles of Electric Fields and Gauss's Law.
			CO2	Understand the relationship between electrical charge, electrical field, electrical potential
			CO3	Use electromagnetic theory and principles in a wide range of Applications and Learn a variety of advanced mathematical methods and computer technique
			CO4	Apply a variety of advanced mathematical methods and computer techniques.
			CO5	Analyse what the electric field and electric potential in, and around, a conductor look like
Sem.-I	**Botany**	**BOT101**	**CO1**	Understand the diversity in lower plants with their structural differentiation and life cycle.
			CO2	Learn the diversity in various life forms of the plant kingdom.
			CO3	Extend a systematic study of algae and fungi.
			CO4	Know about basic structural unit of life i.e. cell and its organelles.
			CO5	Extrapolate the structural and cytological basis of functional differentiation in plants.
			CO6	Extend the study of prokaryotic and eukaryotic diversity of life forms.
Sem.-I	**Zoology**	**ZOO101**	**CO1**	Know lower and medically important non chordates, their life cycle and preventive measures.

			CO2	Identify and Classify thenon-chordatesup to orders.
			CO3	Explain the prokaryotic and eukaryotic diversity of life forms.
			CO4	Gain knowledge about basic structural unit of life that is cell and its organelles
			CO5	Demonstrate the principal and application of microscopy, fixative techniques and culture the microorganism like amoeba, paramecium.
			CO6	Differentiate between normal and cancer cell and its type.
Sem.-I	**School Related Practicum**	**BSCEDU103**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-I	**Life Skill Training**	**BSCEDU104**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-II	**Philosophical & Sociological Foundations of Education**	**BSCEDU201**	**CO1**	Define the concept and types of education
			CO2	Understand the philosophy of educational thinkers of India with special reference to Guru Nanak Dev Ji, Mahatma Gandhi, Rabindra Nath Tagore and Swami Vivekananda.
			CO3	Identify relationship between philosophy and education, Sociology and education
			CO4	Compare education with training, instruction and indoctrination
			CO5	Describe the relationship of education with socio cultural change, modernization and social mobility.
Sem.-II	**Psychological Foundations of Education**	**BSCEDU202**	**CO1**	Associate psychology and education
			CO2	Apply the theories of intelligence for its measurement
			CO3	Understand the causes of individual differences with special reference to aptitude, attitude and interest.
			CO4	Administer the recent trends in education of exceptional children.
Sem.-I	**English Compulsory**	**ENG201**	**CO1**	Critically analyse the poetry and prose text and comprehend the unseen passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Design personal and official letters

			CO4	Translate from vernacular to English
			CO 5	Modify direct speech to indirect speech
			CO 6	Use prepositions and conjunctions in sentences
Sem.-I	**Punjabi Compulsory**	**PBC201**	**CO1**	Study Punjabi story writers and their writings.
			CO2	Develop skill of writing advertisement for daily life
			CO3	Illustrate idioms in sentences
			CO4	Apply principles of grammar in language
Sem.-I	**History & Culture of Punjab**	**HCP201**	**CO1**	Describe social, economic and religious life of people during the Mauryan Empire
			CO2	Explain the impact of Buddhism and Jainism on Punjab with special reference to 4th Buddhist council
			CO3	Analyse the impact of Kanishka's rule on Punjab
			CO4	Illustrate salient features of Gandhara school of art and cultural and scientific developments during the rule of Guptas
			CO 5	Understand developments in literature and education and depiction of Punjab in accounts of Chinese travellers Fahien and Hwen Tsang
			CO 6	Know society and culture of Punjab on the eve of the Turkish Invasion
Sem.-II	**Mathematics**	**MAT201**	**CO1**	Apply Integral Calculus to find arc length of a curve, arc length of a parametric curves area under a curve, surface area, and volume of revolution, curvature, volute and involute and chord of curvature.
			CO2	Derive reduction formulae for complex integrations and hence integrate functions of much higher degree which are applicable in real life situations.
			CO3	Explain and apply Euclid's algorithm on synthetic division to find roots of polynomials.
			CO4	Implement transformation of the equations to solve roots. Also solve cubic using Cardon's method and biquadratic using Descartes method & Ferrari's method.
			CO5	Acquire knowledge about sphere, cylinders as a surface, and different kinds of cylinders such as right

				circular, elliptic, hyperbolic and parabolic cylinders in standard form.
			CO6	Comprehend equation of cone, ellipsoid, hyperboloid, paraboloid in standard form.
Sem.-II	**Paper V (Inorganic Chemistry-B)**	**CHM201A1**	**CO1**	Appraise p-block elements and chemical bonding.
			CO2	Understand close packing in ionic solids and radius ratio rule.
			CO3	Comprehend lattice energy and Born Haber cycle.
			CO4	Know about polarising power and polarisability using fajan's rule.
			CO5	Describe hydrides, oxides, oxyacids of p-block elements.
			CO6	Know about the basics properties of halogens, interhalogens and polyhalides.
Sem.-II	**Paper VI (Organic Chemistry-B)**	**CHM201A2**	**CO1**	Comprehend alkenes and cycloalkenes including their synthesis and chemical reactions
			CO2	Know about dienes and alkynes incorporating their methods of formation ,structures and chemical reactions
			CO3	Understand the arenes and aromaticity in organic compounds
			CO4	Describe mechanisms of aromatic electrophilic substitutions reactions
			CO5	Appraise methods of formation and chemical reaction of alkyl halides and aryl halides
			CO6	Understand the substitution at allylic and vinylic position of alkenes.
Sem.-II	**Paper VII (Physical Chemistry-B)**	**CHM201A3**	**CO1**	Appraise thermodynamics, first law of thermodynamics.
			CO2	Understand the expansion of ideal gases under isothermal and adiabatic conditions
			CO3	Describe standard state and enthalpy of formation using Hess's law
			CO4	Know colloidal state, its classifications ,sols ,emulsions and gels
			CO5	Comprehend ideal and non-ideal solutions and their colligative properties.
			CO6	Learn how to determine colligative properties.
Sem.-II	**Paper A**	**PHY201A**	**CO1**	Know about rigid body motion, Euler's equation.

	(Mechanics-II)		**CO2**	Understand various transformations, inertial and non-inertial frames and Foucault's pendulum.
			CO3	Explain the concept of stationary universal frame of reference and Michelson Morley experiment.
			CO4	Comprehend special theory of relativity, Lorentz transformations and relativistic effect.
			CO5	Analyse mass energy equivalence, relativistic momentum and energy and concept of Murkowski space.
Sem.-II	**Paper B (Vibrations, Waves & E.M. Theory-II)**	**PHY201B**	**CO1**	Understand the decay of free vibrations due to damping, types of damping and Electromagnetic damping.
			CO2	Explain transient and steady state behaviour and power supply an oscillator and its vibration with frequency
			CO3	Calculate what happens when waves move from one medium to another and be able to explain dispersion, group and phase velocity
			CO4	Comprehend applications of transverse and longitudinal waves
			CO5	Solve wave equation and understand significance of transverse waves
Sem.-II	**Paper C(Electricity & Magnetism II)**	**PHY201C**	**CO1**	Know the Principles of Magnetic Fields, sources of Magnetic Fields, Faraday's Law, Inductance, Alternating Current Circuits, and Electromagnetic Waves
			CO2	Solve mathematical problems involving magnetic forces, fields, and various electro-magnetic Circuits.
			CO3	Apply mathematical methods to understand electromagnetic problems to real life situations
			CO4	Use Maxwell's equations in calculations featuring: both free and stationary EM waves.
			CO5	Understand electromagnetic induction and its applications.
Sem.-II	**Botany**	**BOT201**	**CO1**	Understand how different life forms have evolved from simpler to complex ones.
			CO2	Infer developmental stages from lower to higher plants.
			CO3	Identify and explain the life cycle of Bryophytes (the amphibians of plant kingdom).
			CO4	Learn the genetic basis of evolutionary trends in plants.

			CO5	Understand the role of genetics in plant differentiation.
			CO6	Analyse various aspects of hereditary trends observed in successive generations.
Sem.-II	**Zoology**	**ZOO201**	**CO1**	Classify the Non-Chordates from Platyhelminthes to Hemichordate
			CO2	Describe the social and medically important insects.
			CO3	Study the external morphology and anatomy of the non-chordates.
			CO4	Gain the conceptual knowledge of ecology, ecosystem, ecological factors and Renewable and non-renewable resources
			CO5	Understand the values of biotic communities, natural resources, environment degradation and its conservation
			CO6	Summarize the IUCN Red list, conservation projects, Wildlife (Protection) Act, 1972
Sem.-II	**School Related Practicum**	**BSCEDU203**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-II	**Life Skill Training**	**BSCEDU204**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-II	**Env. & Road Safety Edu. & Violence against Women & Children**	**ENV**	**CO1**	Understand the value of environment
			CO2	Drive the knowledge of road safety provisions
			CO3	Discuss various laws regarding violence against women and children
			CO4	Develop basic knowledge about the environment and its allied problems
			CO5	Analyse the roles of organisms as part of interconnected food webs, populations, communities, and ecosystems
			CO6	Discuss about the environment and the resources to act at our own level to protect them.
Sem.-III	**Human Development**	**BSCEDU301**	**CO1**	Recognize the role of education in human development
			CO2	Analyse various aspects of human development
			CO3	Differentiate various stages of human development
			CO4	Generalize different theories of human development

Sem.-III	**School Community Participation**	**BSCEDU302**	**CO1**	Describe the concept of Universalization of Elementary Education and its significance
			CO2	Discuss concept of Sarva Shiksha Abiyan and its implementation
			CO3	Define the meaning and concept of Life Long Education
			CO4	Analyse techniques and causes of slow progress
			CO 5	Identify concept and implementation of vocationalization of Education
			CO 6	Assess the role of NCERT, SCERT, SIE, DIET, Village Education Committees, NGO's and Parent-Teacher Associations.
Sem.-III	**English Compulsory**	**ENG301**	**CO1**	Critically analyse the poetry and prose text of book English for Empowerment.
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Compose paragraphs from the post reading activities suggested in the prescribed text
			CO4	Design notes from paragraphs
			CO5	Reconstruct a paragraph using appropriate punctuation marks
			CO6	Transform sentences from one kind to another
Sem.-III	**Punjabi Compulsory**	**PBC301**	**CO1**	Have knowledge of Punjabi nibandh writers and develop understanding of punjabi culture by reading Punjabi nibandh (essay) thoroughly.
			CO2	Understand Punjabi language and develop letter writing skill
			CO3	Know origin and development of Punjabi language
			CO4	Define and classify bhavansh.
Sem.-III	**History & Culture of Punjab**	**HCP301**	**CO1**	Describe the Culture in Punjab during Turko-Afghan and Mughal rule
			CO2	Imbibe the teachings of Guru Nanak
			CO3	Analyse the features of Bhakti Movement and Sufism
			CO4	Understand the contribution of Guru Angad Dev, Guru Amar Das and Guru Ramdas for development of Sikhism
			CO5	Illustrate the transformation of Sikhism with special reference to martyrdom of Guru Arjun Dev, Guru

				Teg Bahadur and New Policy of Guru Hargobind
			CO6	Know the post Khalsa activities of Guru Gobind Singh
Sem.-III	**Mathematics**	**MAT301**	**CO1**	Know about limit and continuity, Partial differentiation, implicit function, Euler's theorem on homogeneous function, Taylor's theorem, parallelogram, and law of forces, Equilibrium of three forces acting at a point, triangle law of forces, Lami's theorem, Moments, couples and friction.
			CO2	Verify Exact differential equation; define the geometrical meaning of differential equation.
			CO3	Derive orthogonal Trajectory and envelope of the differential equation.
			CO4	Develop equilibrium relationships for non-accelerating two or three dimensional rigid bodies acting on by external forces and moments.
			CO5	Understand and compute equilibrium of three coplanar forces acting on a rigid body and solve simultaneous differential equations.
Sem.-III	**Paper IX (Inorganic Chemistry-A)**	**CHM301A1**	**CO1**	Explain the bonding, magnetic as well as spectral properties of transition metal complexes
			CO2	Understand the Chemistry of Coordination Compounds
			CO3	Demonstration of color and spectral properties of co-ordination compounds.
			CO4	Elaboration of magnetic behaviour related to transition and inner transition metals.
			CO5	Inculcate the concepts of lanthanide and actinide contraction.
			CO6	To understand the use of coordination compounds.
Sem.-III	**Paper X (Organic Chemistry-A)**	**CHM301A2**	**CO1**	Inculcate the knowledge of alcohols i.emono,di,tri hydric alcohols
			CO2	Understand the chemical reactions of vicinal glycols and glycerol.
			CO3	Describe phenols and their properties
			CO4	Understand the aldehyde and ketones
			CO5	Discuss the formation of aldehydes and ketones
			CO6	To understand the mechanism of nucleophilic addition to carbonyl compounds.

Sem.-III	**Paper XI (Physical Chemistry-A)**	**CHM301A3**	**CO1**	Understand the intermolecular forces in liquids, liquid crystals and their classifications.
			CO2	Discuss the chemical equilibrium , law of mass action and relationship and types of equilibrium constant
			CO3	Comprehension of the second law of thermodynamics, carnot cycle and its efficiency.
			CO4	Appraisal of entropy change in ideal gases and its mixing.
			CO5	Inculcate the concepts of third law of thermodynamics
			CO6	To understand the classification and structures of liquid crystals
Sem.-III	**Paper A** **(Statistical Physics & Thermodynamics-I)**	**PHY301A**	**CO1**	Understand how statistics of the microscopic world can be used to explain the thermal features of macroscopic world.
			CO2	Be able to use statistical principles in a wide range of applications and learn a variety of mathematical techniques
			CO3	Understand different classical and quantum mechanical distribution functions
			CO4	Can explain phase transitions and magnetization in magnetic system
			CO5	Familiarize with procedures for deriving the relation between thermodynamics parameters such as pressure, temperature, entropy and heat capacity from the distribution functions.
			CO6	Learn a variety of mathematical techniques.
Sem.-III	**Paper B (Optics & Lasers-I)**	**PHY301B**	**CO1**	Develop an understanding of principles of optics. And able to build connections between mathematical development and conceptual understanding.
			CO2	To build connections between mathematical development and conceptual understanding.
			CO3	Distinguish the methods of polarization by reflection, refraction and scattering.
			CO4	Learn different types of fibre and lasers along with principle, properties of laser beam.
			CO5	Understand the phenomenon of interference and diffraction.
			CO6	Apply skill to find the wavelength of spectral lines using plane diffraction grating.

Sem.-III	**Paper C (Quantum Physics-I)**	**PHY301C**	**CO1**	Learn the mathematical tools needed to solve quantum mechanics problems.
			CO2	Complete knowledge about wave-particle duality and uncertainty principle.
			CO3	Fully understand the differences between classical quantum mechanics.
			CO4	Learn how to solve Schrodinger equation for simple potentials.
			CO5	Spot, identify and relate the Eigen value problems for energy, momentum and central potentials.
			CO6	Able to solve wave equations, fundamental postulates of quantum physics.
Sem.-III	**Botany**	**BOT301**	**CO1**	To learn Fossils, their type and formation.
			CO2	To discuss the geological time scale.
			CO3	To describe general features of Fossil seed plants.
			CO4	Basic body plan of Flowering plants.
			CO5	To describe modification of different parts of plants.
			CO6	To demonstrate vegetative and reproductive morphology of plants bearing the enclosed seeds.
Sem.-III	**Zoology**	**ZOO301**	**CO1**	Classify and Identify the chordates From Protochordates to Amphibia.
			CO2	Study the basic structure of different type specimens.
			CO3	To understand how different life forms have evolved from simpler to complex ones and know about theories of origin of life and evidences of evolution.
			CO4	Gain the knowledge of structure and classification of bio-molecules, enzymes and co-enzymes.
			CO5	To analyze the composition, function, and blood grouping including Rh factor of blood.
			CO6	Demonstrate the knowledge of working of heart, ECG, blood pressure and cardiac output
Sem.-III	**School Related Practicum**	**BSCEDU303**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-III	**Life Skills Training**	**BSCEDU304**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-IV	**Curriculum**	**BSCEDU401**	**CO1**	Describe the nature and Characteristics of curriculum

	Development & Evaluation		**CO2**	Explain the various foundations and components of curriculum
			CO3	Differentiate among goals, aims and objectives, general objectives, course objectives and lesson objectives
			CO4	State levels of course content
			CO5	Discuss the need and guiding principles of curriculum development
			CO6	Analyse different methods and media used in transactional processes and different types of evaluation
Sem.-IV	**Guidance And Counseling**	**BSCEDU402**	**CO1**	Classify different types of guidance
			CO2	Describe the concept of counselling and differentiate between guidance and counselling
			CO3	Analyse different tools and techniques of guidance and Counselling
			CO4	Organize guidance Program at school Level
Sem.-IV	**English Compulsory**	**ENG401**	**CO1**	Critically analyse the poetry and prose text of book English for Empowerment.
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Compose paragraphs from the post reading activities suggested in the prescribed text
			CO4	Prepare newspaper, official and research reports
			CO5	Illustrate idioms and phrases in sentences
			CO6	Reconstruct sentences by combining pairs of sentences and develop sentences using the given words as different parts of speech
Sem.-IV	**Punjabi Compulsory**	**PBC401**	**CO1**	Develop interest in reading Punjabi ikangi (one act play)
			CO2	Know contribution of Punjabi ikangikaar
			CO3	Know shabadshrenian in Punjabi grammar
			CO4	Identify dialects (upbhasha) of Punjabi
Sem.-IV	**History & Culture of Punjab**	**HCP401**	**CO1**	Describe the Sikh struggle for soverignity from 1716-1765
			CO2	Explain the role of Dal Khalsa, Rakhi, Gurmat, Misls and Banda Bahadur

			CO3	Analyse the Ranjit Singh's rise to power along with civil and military administration
			CO4	Understand the political development from 1839-1845
			CO5	Illustrate new developments in Literature, art and architecture in Punjab
			CO6	Visualise social life with special reference to position of women, festivals, dance and games in Punjab
Sem.-IV	**Mathematics**	**MAT401**	**CO1**	Distinguish between concept of sequence and series and determine the limit of a sequence and convergence and approximate sum of series.
			CO2	Derive the solution of Bessel's equations, Legendre's equation, their recurrence relations and orthogonal properties.
			CO3	Define, differentiate and integrate functions represented as a power series expansion, including Taylor's series and solve related problems.
			CO4	Know about Laplace transform, inverse Laplace transform and inverse Laplace trabsform and apply these to solve problems.
			CO5	Determine the dynamic response of the system to applied loadings, using Newton's law and understand the concept of simple Harmonic motion elastic string, curvilinear motion of a particle.
			CO6	Apply the principle of work and energy and the principle of impulse and momentum to mechanical system.
Sem.-IV	**Paper XIII (Inorganic Chemistry-B)**	**CHM401A1**	**CO1**	Understand the chemistry of Lanthanides and Actinides elements; their properties and separation.
			CO2	Inculcate the concept of acids and bases.
			CO3	Comprehension of theories to understand the classification of acids-bases.
			CO4	Appraisal of oxidation and reduction. to use redox potential data.
			CO5	Describe non-aqueous solvents; their types and properties; principles involved in the extraction of elements.
			CO6	To understand the physical properties of different solvents.
Sem.-IV	**Paper XIV (Organic**	**CHM401A2**	**CO1**	Acquire the knowledge of carboxylic acids, halo acids, malic acids, tartaric acid and citric acids.

	Chemistry-B)		**CO2**	Classification of the Organic Compounds of Nitrogen.
			CO3	Detection of elements and functional groups in simple organic compounds.
			CO4	Understanding of ethers, epoxides, oils & detergents.
			CO5	To compare the preparation of alkyl and aryl amines.
			CO6	To understand the cleavage and auto oxidation of ethers and epoxide.
Sem.-IV	**Paper XV (Physical Chemistry-B)**	**CHM401A3**	**CO1**	Learn the necessary chemical knowledge about electrochemistry.
			CO2	Appraisal of electrical transport of electrolytes, conductance with dilution.
			CO3	Understanding of Nernst distribution law and thermodynamic derivation.
			CO4	Description of type of reversible electrode, E.M.F. of cell and electrochemical series.
			CO5	Comprehension of electrolytic and galvanic cell, computation of E.M.F., thermodynamic quantities of cell reactions.
			CO6	To know about the applications of concentration cell.
Sem.-IV	**Paper A (Statistical Physics & Thermodynamics-II)**	**PHY401A**	**CO1**	Understand the statistical relation with, various terms and cycles of thermodynamics.
			CO2	Understand the application of thermodynamics to thermoelectric Effect and various Maxwell's thermodynamic relations and applications.
			CO3	Understand the efficiency of Carnot's engine and significance of first law and second law of thermodynamics.
			CO4	Ability to evaluate entropy changes in wide range of processes and determine the reversibility and irreversibility of a process from such calculations.
			CO5	Understand the interrelationship between thermodynamic functions and ability to use such relationships to solve practical problems.
			CO6	To know the Clayperon equation and thermo dynamical treatment of Joule-Thomson effect.
Sem.-IV	**Paper B (Optics &Lasers-II)**	**PHY401B**	**CO1**	To know the concept of interaction of light with matter.
			CO2	To study the uses of Einstein's coefficients and their relations.

			CO3	To discuss the theory of broadening in laser and its type.
			CO4	To learn about the different types of lasers, its principles, properties of laser beam.
			CO5	To get acquainted with applications of lasers in holography and reconstruction of image.
			CO6	To study the concept of fibre optics and its applications.
Sem.-IV	**Paper C (Quantum Physics-II)**	**PHY401C**	**CO1**	To study the excitation of atoms with radiation by transition probability, spontaneous transition and selection rules.
			CO2	To understand the spectrum of hydrogen atom, Frank-Hertz experiment, line structure and Zeeman effect.
			CO3	To get the knowledge of spin orbit coupling including electron magnetic moment and total angular momentum.
			CO4	To learn about the exchange symmetry of wave functions, shells and subshells in atoms and in atomic spectra.
			CO5	To recognize regularities in atomic spectra, x-ray spectra, absorption spectra and interaction energy.
			CO6	To get the exposure of molecular bonding, symmetric structures, rotational, vibrational and electronic level and spectra of molecules.
Sem.-IV	**Botany**	**BOT401**	**CO1**	To Understand the highly advanced and evolved group of plants "ANGIOSPERMS" with their structural differentiation and reproduction.
			CO2	To illustrate gradual transition from seedless plants to seed plants and the origin of structural and functional complexity in the plant kingdom.
			CO3	To recognize the importance of taxonomy and species concepts.
			CO4	To understand structure development and reproduction in flowering plants – the most fascinating group of plants on earth.
			CO5	To analyze internal structure of various plant parts, their growth patterns and abnormalities in structural development.
			CO6	To describe the vast range of variation found in flowering plants for the foundation of applied branches like horticulture, floriculture, floriculture and arboriculture.

Sem.-IV	**ZOOLOGY**	**ZOO401**	**CO1**	Classify the chordates from Reptiles to Mammals and gain knowledge of type specimens..
			CO2	Identify poisonous and non-poisonous snakes and flight adaptations of birds.
			CO3	Understand the biological species concept, Micro, Macro, human evolution and fossil Dating.
			CO4	Analyze the process of Lipid metabolism by B-oxidation of fatty acids and interaction of carbohydrates and lipids etc.
			CO5	Study the structure of nephron, osmoregulation, counter current mechanism and chemical and physiological basis of skeletal muscle contraction..
			CO6	Gain the knowledge of neuron, origin and propagation of impulse along the axon and endocrinology.
Sem.-IV	**School Related Practicum**	**BSCEDU403**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-IV	**Life Skill Training**	**BSCEDU404**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-V	**Technological Bases of education and Pedagogy**	**BSCEDU501**	**CO1**	Discuss the concept and types of educational technology
			CO2	Discriminate Various phases and levels of Teaching
			CO3	Prepare test items as per bloom's taxonomy
			CO4	Apply various models of teaching
Sem.-V	**Health and Yoga Education**	**BSCEDU502**	**CO1**	Understand the importance, concept, aims and objectives of Health Education
			CO2	Enlighten about balanced diet, infectious diseases and their control
			CO3	Impart and apply knowledge to use good postures for various purposes and first Aid
			CO4	Learn the different type of Yoga and understand their implications
			CO 5	Insight into practical aspect of Yoga in

				contemporary times
			CO 6	Assess concept of holistic health and contribution of yoga in promoting holistic health.
Sem.-V	**English Compulsory**	**ENG501**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Explain the prescribed play 'Driving Miss Daisy' by Alfred Ubry in their own words
			CO4	Compose essays on social and current topics in their own words
			CO 5	Modify the given sentences after identifying errors
			CO 6	Write antonyms of given words
Sem.-V	**Punjabi Compulsory**	**PBC501**	**CO1**	Madhkali Punjabi KavAdhayan.
			CO2	Main Objective of Madhkali Punjabi Adhayan.
			CO3	Explaination and Central Ideas of MadhkalipunjabiKavita.
			CO4	Introduction and Importance to punjabi Lippi.
			CO 5	To Provide knowledge of Grammar.
			CO 6	Introduction and importance of Sentence Formation.
Sem.-V	**History & Culture of Punjab**	**HCP501**	**CO1**	Explain the concept of colonialism in the context of history and culture
			CO2	Explain the concept of nationalism in the context of history and culture
			CO3	Understand the social religious reform movements with special reference to Namdharis and AryaSamaj.
			CO4	Describe the various movement of national importance such as Ghadar movement, JallianwalaBagh and Gurdwara reform movement
Sem.-V	**Mathematics**	**MAT501**	**CO1**	Determine convergence of improper integrals with

				discontinuities in their domain or infinite limits of integration.
			CO2	Learn the theory of Riemann integral, mean value theorems and use theory in solving definite integrals in different fields of science and engineering.
			CO3	Exposure on Rings, integral domains, subrings and ideals, Quotient Rings, Primes and Maximal ideals.
			CO4	Brief discussion on groups, subgroups, Lagrange's theorem, homeomorphisms, Isomorphism, Polynomial Rings.
			CO5	Demonstrate the concept of Probability, Random variables, density function, moments and moment generating functions.
			CO6	Develop the knowledge about distribution based on discrete and continuous Random variables and apply them in real world problems.
Sem.-V	**Paper XVII (Inorganic Chemistry-A)**	**CHM501A1**	**CO1**	Comprehension of crystal field theory and valence bond theory of metal ligand bonding in transition metal complexes.
			CO2	Description of thermodynamic and kinetic aspects of Metal Complexes.
			CO3	Knowledge about synthesis, structure, properties and applications of organometallic compounds of Li,Al,Hg,Sn and Ti.
			CO4	Analysis of metal-ethylenic complexes, homogeneous hydrogenation and mononuclear carbonyls
			CO5	Explanation of metalloporphyrins, nitrogen fixation and biological role of alkali and alkaline earth metal ions.
			CO6	To appraise the biological importance of Alkali and Alkaline earth metals
Sem.-V	**Paper XVIII (Organic Chemistry-A)**	**CHM501A2**	**CO1**	Appraisal of the use of spectroscopic techniques to analyze the synthesised organic compounds.
			CO2	Demonstration of infrared spectroscopy to detect the present functional groups in the given organic compounds.
			CO3	Apply the concept of nuclear magnetic resonance (NMR) spectroscopy to find the structure of the given organic compounds.
			CO4	Count the biological importance of carbohydrates.

			CO5	Understanding of aromatic character of pyrole, furan, thioophene and pyridine; comparison of their basicity.
			CO6	To interpret the NMR spectra of simple organic compounds.
Sem.-V	**Paper XIX (Physical Chemistry-A)**	**CHM501A3**	**CO1**	Description of elementary quantum mechanics, black body radiation, Schrodinger wave equation for H-atom.
			CO2	Apply the Schrodinger wave equation to find the wavefunctions of the given system to account for its stability.
			CO3	Demonstrate the use of quantum mechanics to calculate the hybridisation of atomic orbitals.
			CO4	Inculcate the knowledge of photochemical reactions and the laws governing the photochemical reactions.
			CO5	Description of fluorescence, phosphorscence and quantum yield of photochemical reactions.
			CO6	To understand the photochemistry of carbonyl compounds and alkenes
Sem.-V	**Paper A (Condensed Matter Physics-I)**	**PHY501A**	**CO1**	Understand basic concepts and mathematical methods of solid state physics.
			CO2	Explore important connections between theory, experiment, and current applications.
			CO3	Explore important connections between theory, experiment and current applications.
			CO4	Acquire knowledge about various crystal structures.
			CO5	Introducing basic concepts via diffraction method, lattice vibrations and free electrons.
			CO6	Understand about various Semiconductors, their band structures and energy-gap.
Sem.-V	**Paper B (Electronics & Solid State Devices-I)**	**PHY501B**	**CO1**	Analyse the electric circuit using network theorems.
			CO2	Understand about semiconductors and their various devices.
			CO3	Acquire knowledge about the transistors, amplifiers and their applications.
			CO4	Familiarize with the concept of Biased, Unbiased junction diodes.
			CO5	Understanding about the filters, rectifiers and smooth use of CRO.
			CO6	Reproduce the I-V characteristics of Bipolar Junction Transistors.

Sem.-V	**Paper C (Nuclear & Particle Physics-I)**	**PHY501C**	**CO1**	Acquire knowledge about nuclear and particle physics.
			CO2	Develop and communicate analytical skills in subatomic physics and develop familiarity with the vast areas of nuclear and particle physics as well as develop an interest in these subjects.
			CO3	Have deep knowledge about nuclear fission and nuclear fusion.
			CO4	Fully Understand the concept of alpha, beta gamma radiations and their properties.
			CO5	How to use reactor and know the concept of neutrons.
			CO6	To get the exposure of conservation laws and kinematics, Q-value equation, Coulomb (Rutherford) scattering cross section and distance of nearest approach
Sem.-V	**Botany**	**BOT501**	**CO1**	Understand the concept of function and metabolism of plants.
			CO2	Acquire the knowledge about Structural Diversity of various plant forms with plant differentiation.
			CO3	Learn biological aspects like nitrogen fixation and mineral nutrition.
			CO4	Describe Ecology and the role of the Environment in causing structural and functional variation in plants.
			CO5	Understand the present day problems of varied nature like pollution
			CO6	Illustrate Global Warming and conservation of natural resources
Sem.-V	**Zoology**	**ZOO501**	**CO1**	Understand the process of gametogenesis, vitellogenesis, fertilization and parthenogenesis
			CO2	Conceptual knowledge of development up to three germs layers in *Herdmania*, frog, chick etc.
			CO3	Gain knowledge of fetal membranes, mammalian placenta, their formation and functions.
			CO4	To understand the concept of Entomology, Economic Entomology and Pest Management
			CO5	Identify and classify the pest of crops, vegetables, Stored grains and medical important insects.
			CO6	Develop skill in Agriculture Practices like pest controls and nature of damage.
Sem.-V	**School Related Practicum**	**BSCEDU503**	Students are taken for various field visits as prescribed in syllabus.	

Sem.-V	**Life Skill Training**	**BSCEDU504**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-VI	**Educational research and statistics**	**BSCEDU601**	**CO1**	Explain the concept of educational research
			CO2	Differentiate various methods of educational research
			CO3	Use different tools of educational research
			CO4	Apply various statistical techniques in educational research
Sem.-VI	**Value Education**	**BSCEDU602**	**CO1**	Describe the concept of value and value system.
			CO2	Understand and explain various intervention strategies for value inculcation in students.
			CO3	Identify and apply various tools of value inculcation.
			CO4	Explain philosophical, sociological and psychological bases of value education.
			CO 5	Analyse the concept and factors affecting value preferences.
			CO 6	Assess concept and process of assessment of values.
Sem.-VI	**English Compulsory**	**ENG601**	**CO1**	Critically analyse the poetry and prose text and comprehend the passage from prose text
			CO2	Apply communication skills in a diverse society and learn at self-pace.
			CO3	Summarise the given paragraph in their own words
			CO4	Illustrate idioms and phrases in sentences
			CO5	Substitute the given sentence with one appropriate word
Sem.-VI	**Punjabi Compulsory**	**PBC601**	**CO1**	To provide knowledge of Punjabi novel.
			CO2	To understand various aspects of Punjabi novel.
			CO3	To make students capable to write precise.
			CO4	To motivate students to write an essay for newspaper on various topics like Cultural, Academics, Sports and Literary.
			CO5	To Provide knowledge of various aspects of

				Gurumukhi Lippi.
			CO6	Provide knowledge of various types of sentence.
Sem.-VI	**History & Culture of Punjab**	**HCP601**	**CO1**	Discuss the history of the Punjab in the post 1947 period
			CO2	Describe the new trends in social and economic life of Punjab after independence
			CO3	Analyse green revolution and its impacts
			CO4	Explain new social issues such as gender discrimination, drug menace, farmer sluiced
Sem.-VI	**Mathematics**	**MAT601**	**CO1**	Distinguish between the concepts of sequence and series and determine limits of sequence and convergence and approximate sum of series.
			CO2	Define , differentiate and integrate functions represented as a power series expansion and fourier series expansion including Taylor's series solve related problems
			CO3	Explain methods to find solution to linear, non-linear equations, ordinary differential equations using numerical methods.
			CO4	Develop the knowledge about interpolation, numerical differentiation, numerical integration, and methods of solving integrations of functions.
			CO5	To understand the concept of Linear transformations, Rank and Nullity of a linear transformations, vector space of linear transformations.
			CO6	Knowledge about Vector spaces, subspaces, Algebra of subspace, Linear span, Linear Independence and dependence of vectors, Basis and dimensions of a vector space.
Sem.-VI	**Paper XXI (Inorganic Chemistry-B)**	**CHM601A1**	**CO1**	Inculcate the knowledge of Silicones and Phosphazenes.
			CO2	Comprehension of HSAB concept, symbiosis and theoretical basis of hardness and softness.
			CO3	Knowledge about types and selection rules for electronic transitions.
			CO4	Analysis of Orgel- energy level diagram for d1 and d9 states.
			CO5	Description of magnetic properties of transition metal complexes.

			CO6	To understand symbiosis and its theoretical basis
Sem.-VI	**Paper XXII (Organic Chemistry-B)**	**CHM601A2**	**CO1**	Familiarized with Amino Acids, Peptides, Proteins and Nucleic Acids.
			CO2	Description of synthetic polymer; their types, synthesis and uses.
			CO3	Inculcate the knowledge of organic synthesis via enolates.
			CO4	Description of organometallic compounds; its types and their synthesis.
			CO5	To understand the doubal helical structure of DNA.
			CO6	To understand the preparation and reactions of amino acids.
Sem.-VI	**Paper XXIII (Physical Chemistry-B)**	**CHM601A3**	**CO1**	Learn the necessary chemical knowledge about electrochemistry.
			CO2	Appraisal of electrical transport of electrolytes, conductance with dilution.
			CO3	Understanding of Nernst distribution law and thermodynamic derivation.
			CO4	Description of type of reversible electrode, E.M.F. of cell and electrochemical series.
			CO5	Comprehension of electrolytic and galvanic cell, computation of E.M.F., thermodynamic quantities of cell reactions.
			CO6	To know about the applications of concentration cell.
Sem.-VI	**Paper A (Condensed Matter Physics-II)**	**PHY601A1**	**CO1**	Understand the concepts of Lattice dynamics, scattering of photons by phonons and in- depth
			CO2	To study Einstein and Debye theory of Specific heat of solids.
			CO3	Knowledge about magnetic materials, their classifications and dielectric properties of solids.
			CO4	Familiarize with the concept of superconductivity and formation of cooper pairs.
			CO5	Acquire knowledge about electric susceptibility, ClausiusMossotti equation ideas of material and nanoscale.
			CO6	Acquire knowledge about nanoparticles, their structure, fabrication and application of nanotechnology in various fields.
Sem.-VI	**Paper B (Electronics &**	**PHY601A2**	**CO1**	Understand about semiconductors and their various devices.

	Solid State Devices-II)		**CO2**	Acquire knowledge about the transistors. Amplifiers and their applications.
			CO3	Understand the basis of feedback amplifiers and advantages of negative voltage devices.
			CO4	Acquire knowledge about logic gates and their uses in digital electronics.
			CO5	Classify different types of FETs and demonstrate feedback amplifiers, OP-AMPs and oscillator circuits .
			CO6	To get the exposure of analog and digital communication and develop familiarities with the vast area of electronics in brief account of satellite communication.
Sem.-VI	**Paper C (Nuclear & Particle Physics-II)**	**PHY601A3**	**CO1**	Acquire knowledge in the content areas of nuclear and particle physics, focusing on concepts that are commonly used in this area.
			CO2	Develop familiarity with the vast areas of nuclear and particle physics as well as develop an interest in these subjects
			CO3	Understand the basic knowledge about standard model of elementary particles and interactions
			CO4	Understand the role of nuclear particle physics in energy production, medicine, astrophysics - for example how to search for dark matter and how to understand the origin of the elements in the universe.
			CO5	Understand basic knowledge the quark- gluons plasma.
			CO6	A basic understanding of nuclear properties and models that describe the quantum structures, decay and reactions of nuclei.
Sem.-VI	**Botany**	**BOT601**	**CO1**	Understand plant development, differentiation and regulatory mechanism,
			CO2	To learn basics in tissue culture.
			CO3	To recognize Photosynthesis its Significance, historical aspect and action spectra.
			CO4	Recall Plant wealth, economic importance.
			CO5	Illustrate cultivation practices of plants.
			CO6	Describe forest Conservation

Sem.-VI	**Zoology**	**ZOO601**	**CO1**	Summarize the Mendelian and Non-Mendelian ratios (Non allelic gene interaction), gene modifications due to incomplete dominance and Pleiotropic genes.
			CO2	Analyse the process of linkage, crossing over, gene, genetic code, mutation and inborn errors of metabolism and regulation of gene expression.
			CO3	Gain the knowledge Population and Applied genetics; gene cloning, DNA fingerprinting
			CO4	Acquire the knowledge of Sericulture, Apiculture, Lac Culture, IPM program and perspectives in IPM
			CO5	Understand the banned pesticides and also their ill effects on environment and on flora and fauna.
			CO6	Develop Skill for Entrepreneurship
Sem.-VI	**School Related Practicum**	**BSCEDU603**	Students are taken for various field visits as prescribed in syllabus.	
Sem.-VI	**Life Skill Training**	**BSCEDU604**	Students are given training for skill of communication and skill of creative thinking through activities.	
Sem.-VII	**Philosophical, Sociological and Political perspective**	**BSCEDU701**	**CO1**	Explain the discipline of education in philosophical, sociological and Political perspective.
			CO2	Discuss the contribution of eminent thinkers to education.
			CO3	Understand goals and values of emerging Indian society.
			CO4	Aware of current political issues in education special reference to human rights.
			CO5	Analyse implication of Article 21A,RTE act 2009.
			CO6	Assess the Education in 21st century, role and functions of UNESCO & UNICEF.
Sem.-VII	**The Learner Nature and Development**	**BSCEDU702**	**CO1**	Generalize various theories of personality along with its assessment
			CO2	Distinguish various theories of Learning and transfer of Learning
			CO3	Describe the concept of creativity and motivation
			CO4	Realize the importance of mental health and Develop mental hygiene
Sem.-VII	**Theory of Instructional Technology**	**BSCEDU703**	**CO1**	Describe the objectives and their formulation of Instructional design.
			CO2	Explain the principles of instructional design and apply them to develop design of instruction.

			CO3	Understand concept, process, and barriers of communication and apply optimizing communication skill for oral performance.
			CO4	Compare different media and their application.
			CO5	Analyse the concept, process and application of Flanders's Interaction Categories Systems, team teaching, group interaction, Simulation teaching.
			CO6	Discuss the need, concept, principles, rational, types of programmed Instruction and apply it to development of program.
Sem.-VII	**School Management**	**BSCEDU704**	**CO1**	Appraise various elements of school management and classroom management.
			CO2	Develop leadership and decision making abilities in themselves
			CO3	Apply TQM in Education
			CO4	Analyse the working of SMC at school level
			CO5	Use ICT in various components of educational management
			CO6	Assess various aspects of supervision
Sem.-VII	**Information & Communication Technology (ICT) in Education**	**BSCEDU705**	**CO1**	Define basic computer hardware architecture.
			CO2	Recognize input and output devices of Computers and how it works.
			CO3	To read various characteristics of computer languages.
			CO4	To define about the operating system and types.
			CO5	Accomplish creating basic documents, presentations with their properties.
			CO6	To understand about internet, working with E-mails.
Sem.-VII	**Teaching of Science**	**TSCI706**	**CO1**	Understand the nature, scope values and objectives of teaching Science.
			CO2	Develop competence in teaching different topics of Science effectively, develop scientific temper & provide teaching in scientific method to their student,
			CO3	Use various methods with appropriateness of content, level and classroom situations to make

				pupil‘s learning meaningful, utilize the instructional materials effectively in the Teaching of Science and organize co- curricular activities & practical work in Science.
			CO4	Enhance activity and creativity in relation to the immediate surroundings and also show some responsibility of their own health and hygiene.
			CO5	Understand science is an interdisciplinary area of learning.
Sem.-VII	**Teaching of Mathematics**	**TMAT707**	**CO1**	Understand and appreciate the uses and significance of Mathematics in daily life, learn various approaches of teaching Mathematics and to use them judiciously.
			CO2	Learn the methods of providing instruction for the classroom organize curricular activities, appreciate activities to develop aesthetics of Mathematics and update their knowledge of content in mathematics.
			CO3	Develop an ability to understand various methods of evaluation of students’ performance in mathematics.
			CO4	State the aim and objectives of teaching mathematics. And also understand various techniques of teaching of mathematics.
			CO5	Develop skill making teaching learning process experimental and joyful.
Sem.-VII	**Teaching of English**	**TENG708**	**CO1**	Understand the place of English language teaching in India
			CO2	Apply different principles of teaching and learning
			CO3	Identify different methods, approaches, techniques of teaching English
			CO4	Utilize the four skills of language that is listening, speaking, reading and writing in teaching
			CO5	Prepare lesson plans and test items for testing various language activities
Sem.-VIII	**Document Analysis**	**BSCEDU800**	Students will visit nearby Govt. and Private schools for 16 weeks and perform various tasks. After the completion of this Internship Programme students will be able to: ❖ Develop a comprehensive understanding of existing classroom practices. ❖ Develop a critical understanding of textbook lessons of individual subjects and their suitability for learning. ❖ Draw linkages between various pedagogy courses	
Sem.-VIII	**SWOT Analysis**			
Sem.-VIII	**Identification Problem Children**			
Sem.-	**Organization of**			

VIII	**School Function**		and classroom practices. ❖ Critically review policy and state documents on education and seek to effect ideas into classroom practices. ❖ Develop and design alternative teaching – learning materials. ❖ Assess factors that contribute to a classroom culture, its creation and maintenance. ❖ Explore possibilities of innovation and create space for alternative practices. ❖ Design, choose, organize, and conduct individual and group activities. ❖ Reflect on personal experiences of classroom management. ❖ Learn to set realistic goals in terms of children's learning, classroom culture and management, curricular form and content and pedagogic practices. ❖ Develop the ability to innovate within existing frameworks by alternative practices. ❖ Purposefully use the skills of systematic observations, record keeping and for reflection on teaching-learning process
Sem.-VIII	**Record Keeping**		
Sem.-VIII	**Organization of Co-curricular/Cultural Activities in School**		
Sem.-VIII	**Organization of Morning Assembly in School**		
Sem.-VIII	**Organization of Awareness Programs in School**		
Sem.-VIII	**Cleanliness and Beautification of School**		
Sem.-VIII	**Conducting Carrere Counseling Sessions in School**		
Sem.-VIII	**Training of Two Life Skills to School Children**		
Sem.-VIII	**Preparation of Various School Records**		

Mapping of Course Outcomes(COs) with Programme Outcomes(POs)

Programme Outcome																
College code	**Course Out-comes**	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PO 13**	**PO 14**	**PO 15**
Semester I																
BSCED U101	**CO1**	3	2	1	2	1	2	1	X	1	1	2	X	X	X	2
	CO2	3	2	3	1	2	2	3	2	1	3	1	X	X	3	1

	CO3	3	2	2	1	2	2	3	1	2	3	1	X	X	3	2
	CO4	3	2	2	3	1	2	1	2	2	1	2	3	2	2	2
	CO5	3	2	3	3	1	2	3	2	3	1	3	2	2	3	2
BSCED U102	**CO1**	3	1	X	X	2	X	1	2	1	X	X	X	X	1	2
	CO2	3	1	3	2	3	1	2	2	3	1	3	X	X	1	1
	CO3	3	1	3	3	3	1	2	3	2	1	1	X	X	2	2
	CO4	3	1	1	3	3	1	3	3	2	1	3	3	3	3	2
	CO5	3	1	X	X	2	X	1	2	1	X	1	X	3	1	2
	CO6	3	1	2	3	3	1	3	3	2	1	2	X	X	2	2
ENG101	**CO1**	3	3	3	X	3	2	2	1	3	1	2	1	1	1	1
	CO2	3	3	2	X	1	X	2	X	2	1	3	X	X	1	1
	CO3	2	3	2	3	2	1	X	1	2	1	X	1	2	X	1
	CO4	2	3	2	3	2	1	X	X	2	1	X	X	2	X	1
	CO5	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
	CO6	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
PBC101	**CO1**	3	3	3	3	3	1	1	2	3	1	3	1	3	3	3
	CO2	3	3	X	3	X	X	X	X	X	1	3	X	X	X	3
	CO3	3	3	1	2	1	1	X	1	1	1	3	1	2	3	3
	CO4	3	3	3	3	3	1	X	3	3	1	3	2	3	3	3
HCP101	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
MAT101	**CO1**	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO2	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO3	2	2	2	3	2	2	1	X	1	1	2	2	2	2	2
	CO4	3	3	3	3	2	3	2	2	2	3	3	2	2	3	1
	CO5	3	X	1	3	X	X	1	1	X	2	2	1	X	1	2

	CO6	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
CHM101A1	**CO1**	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
	CO2	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
	CO3	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
	CO4	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
	CO5	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
	CO6	2	2	1	1	1	1	1	1	1	1	2	X	1	2	1
CHM101A2	**CO1**	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO2	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO3	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO4	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO5	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO6	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
CHM101A3	**CO1**	2	2	X	1	1	1	1	1	1	1	X	X	2	2	X
	CO2	1	2	X	1	1	1	1	1	1	1	X	X	1	2	X
	CO3	2	2	X	1	1	1	1	1	1	1	X	X	1	2	X
	CO4	1	2	X	1	1	1	1	1	1	1	X	X	1	2	X
	CO5	2	2	X	1	1	1	1	1	1	1	X	X	1	2	X
	CO6	2	2	X	1	1	1	1	1	1	1	X	X	1	2	X
PHY101A	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	1
	CO4	2	X	X	1	2	1	X	X	X	X	X	1	X	1	2
	CO5	3	1	2	1	X	X	X	1	X	2	X	1	1	1	1
	CO6	2	1	2	1	2	X	1	2	3	X	2	2	1	X	X
PHY101B	**CO1**	3	2	1	1	1	2	X	1	X	2	1	X	1	X	1
	CO2	3	3	1	1	2	2	X	2	1	3	1	1	X	X	1
	CO3	2	2	2	1	2	2	1	1	1	2	1	X	X	X	1
	CO4	3	1	1	1	1	2	X	2	X	2	1	X	X	X	X
	CO5	3	1	2	1	2	2	2	1	1	3	1	1	X	X	1

	CO6	3	2	1	1	1	2	X	2	1	2	1	X	1	1	1
PHY101C	**CO1**	3	2	2	2	1	2	1	1	2	X	1	X	2	2	1
	CO2	2	1	2	2	2	1	1	1	X	X	2	X	1	1	2
	CO3	3	2	1	2	1	1	2	1	1	X	1	X	2	2	1
	CO4	3	2	2	2	2	2	1	2	X	X	2	X	1	1	1
	CO5	2	2	2	2	1	1	2	2	X	X	2	X	2	2	1
	CO6	3	1	1	3	1	2	1	2	1	X	1	X	2	1	2
BOO101	**CO1**	3	1	3	3	3	2	3	2	3	1	3	X	X	3	3
	CO2	3	1	2	2	3	3	2	2	2	X	2	X	X	2	3
	CO3	3	1	2	3	2	3	2	2	1	X	2	X	X	2	3
	CO4	3	1	3	2	3	2	2	2	2	X	2	X	X	1	3
	CO5	3	1	2	2	2	2	1	2	2	X	2	X	X	2	3
	CO6	3	1	2	2	2	2	1	2	2	X	2	X	X	2	3
ZOO101	**CO1**	2	1	1	1	1	3	1	2	2	1	2	X	X	1	3
	CO2	3	2	2	2	2	1	1	2	2	1	2	1	1	1	3
	CO3	2	2	3	2	2	2	1	1	2	2	2	X	1	2	3
	CO4	2	1	3	3	2	2	2	1	2	3	1	X	1	2	2
	CO5	3	2	3	3	3	2	2	2	3	2	2	X	2	1	3
	CO6	2	2	2	3	3	2	3	2	3	2	3	X	2	2	3
Semester II																
BSCEDU201	**CO1**	3	1	1	X	2	X	1	2	1	X	X	X	1	1	2
	CO2	3	1	2	2	3	1	2	2	3	1	3	X	1	1	1
	CO3	3	1	3	3	3	1	2	2	2	1	1	X	1	1	2
	CO4	3	1	2	2	2	1	2	2	2	1	2	2	3	3	2
	CO5	3	1	3	3	3	3	3	1	3	2	3	3	2	2	3
BSCEDU202	**CO1**	3	1	X	X	2	X	1	2	1	X	X	X	X	1	2
	CO2	3	1	3	2	3	1	2	2	3	1	3	X	X	1	1
	CO3	3	1	3	3	3	1	2	3	2	1	1	X	X	2	2
	CO4	3	1	1	3	3	1	3	3	2	1	3	3	3	3	2
ENG20	**CO1**	3	3	3	X	3	2	2	1	3	1	2	1	1	1	1

1	**CO2**	3	3	2	X	1	X	2	X	2	1	3	X	X	1	1
	CO3	2	3	2	3	2	1	X	1	2	1	X	1	2	X	1
	CO4	2	3	2	3	2	1	X	X	2	1	X	X	2	X	1
	CO5	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
	CO6	2	3	2	3	2	X	X	X	2	1	X	X	X	X	1
PBC201	**CO1**	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO3	3	3	2	3	2	1	2	1	1	1	3	1	3	3	3
	CO4	3	3	2	3	2	X	X	3	1	1	3	X	3	3	3
HCP201	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
MAT201	**CO1**	2	1	2	2	1	X	X	1	1	1	2	2	2	2	2
	CO2	1	X	3	3	1	X	2	X	1	2	2	X	2	2	2
	CO3	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
	CO4	3	1	2	3	1	X	X	1	X	X	2	X	3	1	2
	CO5	3	X	3	3	2	1	2	3	2	X	2	2	X	1	3
	CO6	2	X	1	2	1	1	3	X	2	X	2	2	2	X	2
CHM201A1	**CO1**	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO2	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO3	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO4	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO5	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO6	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
CHM201A2	**CO1**	2	x	1	1	1	1	2	2	1	1	2	x	1	2	2
	CO2	2	x	1	1	1	1	2	2	1	1	2	x	1	2	2
	CO3	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2

	CO4	2	X	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO5	2	x	1	1	1	1	2	2	1	1	2	X	1	2	2
	CO6	2	x	1	1	1	1	2	2	1	1	2	X	1	2	2
CHM201A3	**CO1**	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
	CO2	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
	CO3	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
	CO4	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
	CO5	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
	CO6	2	X	1	1	1	1	2	2	1	1	2	x	1	1	2
PHY201A	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	1
	CO4	2	X	X	1	2	1	X	X	X	X	X	1	X	1	2
	CO5	3	1	2	1	X	X	X	1	X	2	X	1	1	1	1
PHY201B	**CO1**	3	1	2	3	3	1	2	X	1	1	X	1	X	X	2
	CO2	3	1	1	1	1	2	3	1	2	1	1	2	1	1	3
	CO3	2	1	1	1	2	2	2	1	1	2	1	2	X	X	3
	CO4	1	1	2	1	1	2	1	X	1	2	1	2	1	1	3
	CO5	2	1	1	2	1	1	2	2	2	2	X	2	X	X	3
PHY201C	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	3
	CO4	2	X	X	1	2	1	X	X	X	X	X	1	X	1	1
	CO5	3	1	2	1	X	X	X	1	X	2	X	1	1	1	2
BOO201	**CO1**	3	1	2	3	2	2	3	2	2	2	3	X	X	3	2
	CO2	3	1	2	3	2	3	2	3	3	3	2	X	X	2	3
	CO3	3	1	3	3	3	3	2	2	1	1	2	X	X	3	3
	CO4	3	1	2	2	3	2	2	2	2	X	2	X	X	1	3
	CO5	3	1	2	1	1	2	1	2	3	1	2	x	x	2	3
	CO6	3	1	2	1	1	2	1	2	3	1	2	x	x	2	3

ZOO201	**CO1**	2	1	2	1	1	3	2	1	2	1	2	X	1	1	3
	CO2	3	2	2	2	2	2	1	2	2	1	2	X	1	1	3
	CO3	2	2	3	1	2	2	1	1	2	2	2	X	1	2	3
	CO4	3	2	3	3	2	2	2	2	3	3	1	X	2	3	2
	CO5	3	2	3	3	3	2	2	2	3	2	2	X	2	2	3
	CO6	2	2	2	2	3	2	3	2	3	2	3	X	2	2	3
Semester III																
BSCEDU301	**CO1**	3	1	2	2	2	X	1	2	1	X	2	X	1	1	1
	CO2	3	1	2	2	3	1	1	2	1	X	1	X	1	2	1
	CO3	3	1	3	2	3	1	1	2	1	X	1	X	1	1	1
	CO4	3	1	2	2	2	2	2	2	1	1	X	1	1	1	1
BSCEDU302	**CO1**	3	1	2	2	2	X	1	2	1	X	2	X	1	1	1
	CO2	3	1	2	2	3	1	1	2	1	X	1	X	1	2	1
	CO3	3	1	3	2	3	1	1	2	1	X	1	X	1	1	1
	CO4	3	1	2	2	2	2	2	2	1	1	X	1	1	1	1
	CO5	3	2	1	X	3	2	3	2	1	3	2	1	3	3	X
	CO6	2	3	X	2	1	2	3	2	1	2	3	3	X	3	2
ENG301	**CO1**	3	3	2	X	3	1	2	1	2	1	2	1	1	1	1
	CO2	3	3	1	X	1	X	2	X	1	1	2	X	X	1	1
	CO3	2	3	3	3	3	1	X	1	3	1	3	1	2	X	1
	CO4	2	3	3	3	3	X	X	1	3	1	3	X	2	X	1
	CO5	2	3	2	3	3	X	X	1	2	1	3	X	X	X	1
	CO6	2	3	3	3	X	X	X	X	3	1	3	X	X	X	1
PBC301	**CO1**	3	3	3	3	2	1	2	3	1	1	3	1	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	3	3	1	3	3	3
	CO3	3	3	2	3	X	1	1	X	1	X	3	1	2	3	3
	CO4	3	3	X	3	X	X	X	X	X	X	3	X	2	3	3
HCP301	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2

	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
MAT301	**CO1**	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO2	3	2	2	3	1	X	2	1	2	1	3	X	2	2	2
	CO3	3	X	3	2	2	1	2	1	2	3	3	X	2	2	3
	CO4	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO5	3	1	2	2	X	1	3	1	2	X	1	1	2	1	1
CHM301A1	**CO1**	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
	CO2	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
	CO3	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
	CO4	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
	CO5	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
	CO6	2	2	1	1	1	1	1	2	1	1	1	X	1	1	3
CHM301A2	**CO1**	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO2	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO3	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO4	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO5	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO6	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
CHM301A3	**CO1**	2	2	1	1	1	1	1	1	1	1	2	x	2	2	1
	CO2	2	2	1	1	1	1	1	1	1	1	2	X	2	2	1
	CO3	2	2	1	1	1	1	1	1	1	1	2	X	2	2	1
	CO4	2	2	1	1	1	1	1	1	1	1	2	X	2	2	1
	CO5	2	2	1	1	1	1	1	1	1	1	2	x	2	2	1
	CO6	2	2	1	1	1	1	1	1	1	1	2	x	2	2	1
PHY301A	**CO1**	1	2	1	1	1	2	X	1	X	2	1	X	1	X	1
	CO2	3	1	3	2	2	2	X	2	1	3	1	X	1	X	1
	CO3	2	2	1	1	2	2	X	1	1	2	2	1	X	1	2
	CO4	3	1	1	1	1	2	X	2	X	2	1	X	2	X	X

	CO5	1	1	2	X	2	2	1	2	1	3	2	1	1	X	1
	CO6	1	1	2	X	2	2	1	2	1	3	2	1	1	X	1
PHY301B	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	1
	CO4	2	X	X	1	2	1	X	X	X	X	X	1	X	1	1
	CO5	3	1	2	1	X	X	X	1	X	2	X	1	1	1	2
	CO6	3	1	2	1	X	X	X	1	X	2	X	1	1	1	2
PHY301C	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	1
	CO4	2	X	X	1	2	1	X	X	X	X	X	1	X	1	1
	CO5	3	1	2	1	X	X	X	1	X	2	X	1	1	1	1
	CO6	3	1	2	1	X	X	X	1	X	2	X	1	1	1	1
BOO301	**CO1**	3	1	3	2	3	2	3	2	3	1	3	X	X	2	3
	CO2	3	1	2	3	2	3	2	2	2	1	2	X	X	3	2
	CO3	3	1	3	3	3	3	2	2	2	1	2	X	X	2	3
	CO4	3	1	1	2	3	2	2	2	2	X	2	X	X	1	3
	CO5	3	1	2	2	1	2	1	2	1	x	2	x	x	2	3
	CO6	3	1	2	2	1	2	1	2	1	x	2	x	x	2	3
ZOO301	**CO1**	2	1	2	1	1	3	2	1	2	1	2	X	1	1	3
	CO2	3	2	2	2	2	2	1	2	2	1	2	X	1	1	3
	CO3	2	2	3	1	2	2	1	1	2	2	2	X	1	2	3
	CO4	3	2	3	3	2	2	2	2	3	3	1	X	2	3	2
	CO5	3	2	3	3	3	2	2	2	3	2	2	X	2	2	3
	CO6	2	2	2	2	3	2	3	2	3	2	3	X	2	2	3
Semester IV																
BSCEDU401	**CO1**	3	2	2	2	3	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	3	2	3	2	1	2	1	1	2	X	1	2	1
	CO3	3	2	3	3	3	1	2	2	1	2	1	X	1	3	1

	CO4	3	3	2	3	3	2	X	2	2	X	3	1	3	3	2
	CO5	3	2	X	2	3	2	2	1	3	1	X	3	3	2	1
	CO6	2	3	X	1	2	2	3	1	2	3	1	X	3	3	2
BSCEDU402	**CO1**	3	2	2	2	3	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	3	2	3	1	1	1	1	1	2	X	1	2	1
	CO3	3	2	3	3	3	1	2	2	1	2	1	X	1	2	1
	CO4	3	3	2	3	3	2	2	2	2	2	3	1	3	3	2
ENG401	**CO1**	3	3	2	X	3	1	2	1	2	1	2	1	1	1	1
	CO2	3	3	1	X	1	X	2	X	1	1	2	X	X	1	1
	CO3	2	3	3	3	3	1	X	1	3	1	3	1	2	X	1
	CO4	2	3	3	3	3	X	X	1	3	1	3	X	2	X	1
	CO5	2	3	2	3	3	X	X	X	2	1	3	X	X	X	1
	CO6	2	3	3	3	1	X	X	X	3	1	3	X	X	X	1
PBC401	**CO1**	3	3	3	3	2	1	2	3	1	1	3	2	3	3	3
	CO2	3	3	3	3	2	1	2	3	1	1	3	2	3	3	3
	CO3	3	3	X	3	X	X	X	X	X	X	3	X	2	3	3
	CO4	3	3	2	3	X	1	2	X	1	1	3	1	2	3	3
HCP401	**CO1**	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO2	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO3	3	3	2	2	2	1	1	2	2	1	2	3	1	2	2
	CO4	3	3	2	2	3	1	1	2	2	1	2	3	1	2	2
	CO5	3	3	2	2	2	1	1	2	2	1	2	X	3	2	2
	CO6	3	X	2	2	X	1	1	2	2	1	2	X	1	X	X
MAT401	**CO1**	3	X	1	2	1	X	2	X	2	x	3	2	2	1	1
	CO2	3	X	2	3	2	X	2	1	1	X	2	2	1	2	1
	CO3	3	X	1	2	1	X	2	X	2	X	3	2	2	1	1
	CO4	2	X	1	2	1	1	3	X	2	X	2	2	2	X	2
	CO5	3	1	X	3	X	1	2	1	2	X	3	1	2	1	2
CHM401A1	**CO1**	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO2	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2

	CO3	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO4	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO5	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO6	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
CHM401A2	**CO1**	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO2	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO3	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO4	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO5	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO6	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
CHM401A3	**CO1**	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO2	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO3	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO4	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO5	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO6	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
PHY401A	**CO1**	1	2	1	1	1	2	X	1	X	2	1	X	1	X	1
	CO2	3	1	3	2	2	2	X	2	1	3	1	X	1	X	1
	CO3	2	2	1	1	2	2	X	1	1	2	2	1	X	1	2
	CO4	3	1	1	1	1	2	X	2	X	2	1	X	2	X	X
	CO5	1	1	2	X	2	2	1	2	1	3	2	1	1	X	1
	CO6	2	2	1	X	1	X	2	X	1	X	2	2	X	1	1
PHY401B	**CO1**	2	X	X	2	1	X	X	X	X	X	X	1	1	1	1
	CO2	3	1	X	3	2	1	1	X	X	X	1	3	X	1	2
	CO3	2	X	X	1	X	X	X	1	X	X	X	2	1	X	1
	CO4	2	2	1	1	3	X	X	2	X	1	1	1	2	X	2
	CO5	3	2	1	2	2	X	1	1	X	1	2	1	X	X	X
	CO6	3	2	1	X	1	X	2	1	1	X	2	2	X	X	X
PHY401C	**CO1**	3	2	1	2	3	1	1	X	X	1	X	1	1	1	1
	CO2	3	2	2	2	2	1	X	X	X	2	1	2	1	1	1

	CO3	3	2	2	2	1	1	X	1	X	2	1	1	2	X	2
	CO4	3	2	1	1	3	X	X	2	X	1	1	1	2	X	2
	CO5	3	2	1	X	2	X	1	1	X	1	2	2	X	X	X
	CO6	3	2	1	X	1	X	2	X	1	X	2	2	X	X	X
BOO401	**CO1**	3	1	2	3	2	3	3	3	3	2	3	X	X	3	2
	CO2	3	1	2	2	2	3	2	2	2	1	2	X	X	2	3
	CO3	3	1	3	3	3	2	2	2	2	2	2	X	X	3	2
	CO4	3	1	3	2	1	2	2	2	1	X	3	X	X	2	3
	CO5	3	1	2	2	3	3	1	2	2	2	2	x	x	1	2
	CO6	3	1	2	2	3	3	1	2	2	2	2	x	x	1	2
ZOO401	**CO1**	2	1	1	1	1	3	1	2	2	1	2	X	1	1	3
	CO2	3	2	2	2	2	1	1	2	2	1	2	X	1	1	3
	CO3	2	2	3	2	2	2	1	1	2	2	2	X	1	2	3
	CO4	2	1	3	3	2	2	2	1	2	3	1	X	1	2	2
	CO5	3	2	3	3	3	2	2	2	2	2	2	X	2	1	3
	CO6	2	2	2	3	3	2	3	2	2	2	2	X	2	2	3
Semester V																
BSCEDU501	**CO1**	3	2	2	1	2	2	2	1	1	2	1	X	1	2	1
	CO2	3	2	2	1	3	1	1	2	1	2	1	X	1	1	1
	CO3	3	2	2	2	2	2	3	2	2	2	1	X	1	2	2
	CO4	3	2	2	2	2	2	3	2	2	2	2	X	2	3	2
BSCEDU502	**CO1**	3	2	2	1	2	2	2	1	1	2	1	X	1	2	1
	CO2	3	2	2	1	3	1	1	2	1	2	1	X	1	1	1
	CO3	3	2	3	2	2	X	3	1	2	2	1	X	1	2	2
	CO4	3	2	2	2	2	2	3	2	3	2	2	X	2	3	2
	CO5	3	2	3	X	2	3	3	1	1	3	1	3	X	2	2
	CO6	3	1	1	2	X	3	2	1	3	X	2	2	1	3	2
ENG501	**CO1**	3	3	3	1	3	1	1	1	3	1	2	1	1	1	1
	CO2	3	3	2	1	X	X	X	X	2	1	2	1	X	1	1
	CO3	3	3	3	1	3	1	1	1	3	1	2	1	X	1	1

	CO4	3	3	2	3	3	1	X	1	2	1	1	1	1	1	1
	CO5	3	3	X	3	X	X	X	X	X	1	1	X	X	1	1
	CO6	3	3	X	3	X	X	X	X	X	1	1	X	X	1	1
PBC501	**CO1**	1	2	1	3	1	2	1	2	3	1	2	3	1	2	2
	CO2	1	1	3	1	X	1	X	1	1	3	1	2	2	3	3
	CO3	3	X	2	X	2	X	2	1	2	1	3	2	2	1	1
	CO4	2	3	1	1	3	2	2	X	2	2	1	1	X	2	2
	CO5	2	2	X	1	1	3	1	2	X	2	2	X	3	X	X
	CO6	X	1	2	2	1	1	3	2	1	X	2	1	2	1	1
HCP501	**CO1**	3	2	2	1	2	1	2	1	1	1	1	X	1	2	1
	CO2	3	2	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO3	3	3	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO4	3	3	2	2	3	1	1	1	1	1	2	1	2	2	1
MAT501	**CO1**	3	X	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO2	3	X	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO3	2	1	3	3	1	1	1	1	2	2	3	1	3	3	3
	CO4	3	2	2	2	1	1	2	1	3	3	2	1	2	3	2
	CO5	3	1	3	3	2	1	3	X	2	1	3	X	3	2	1
	CO6	3	1	2	3	1	X	2	X	1	X	2	X	X	2	3
CHM501A1	**CO1**	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO2	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO3	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO4	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO5	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
	CO6	2	2	1	1	1	1	1	2	1	1	2	X	1	1	1
CHM501A2	**CO1**	3	2	1	1	1	1	1	1	1	1	1	x	1	2	1
	CO2	3	2	1	1	1	1	1	1	1	1	1	X	1	2	1
	CO3	3	2	1	1	1	1	1	1	1	1	1	X	1	2	1
	CO4	3	2	1	1	1	1	1	1	1	1	1	X	1	2	1
	CO5	3	2	1	1	1	1	1	1	1	1	1	x	1	2	1

	CO6	3	2	1	1	1	1	1	1	1	1	1	x	1	2	1
CHM501A3	**CO1**	3	2	1	1	1	1	1	1	1	1	2	x	1	1	1
	CO2	3	2	1	1	1	1	1	1	1	1	2	X	1	1	1
	CO3	3	2	1	1	1	1	1	1	1	1	2	X	1	1	1
	CO4	3	2	1	1	1	1	1	1	1	1	2	X	1	1	1
	CO5	3	2	1	1	1	1	1	1	1	1	2	x	1	1	1
	CO6	3	2	1	1	1	1	1	1	1	1	2	x	1	1	1
PHY501A	**CO1**	3	1	1	2	X	X	X	X	1	X	1	1	1	X	1
	CO2	2	1	2	2	X	1	X	X	1	X	X	1	1	1	1
	CO3	3	1	2	1	3	2	2	1	1	2	1	3	2	2	3
	CO4	1	1	X	X	X	1	X	X	X	X	X	1	2	X	1
	CO5	1	1	1	X	1	1	X	X	X	1	X	1	1	1	2
	CO6	2	1	X	1	2	X	1	1	X	1	1	2	1	2	3
PHY501B	**CO1**	3	1	2	3	3	1	1	X	1	1	X	1	X	X	1
	CO2	3	1	1	1	1	2	3	1	2	1	1	2	1	1	2
	CO3	2	1	1	1	2	2	2	1	1	2	1	2	X	X	3
	CO4	1	1	2	1	1	2	1	X	1	2	1	2	1	1	2
	CO5	2	1	1	2	1	1	2	2	2	2	X	2	X	X	3
	CO6	1	1	2	1	X	2	1	2	1	1	1	1	X	X	2
PHY501C	**CO1**	3	X	1	3	2	1	2	1	X	X	3	X	X	X	1
	CO2	2	X	1	3	1	2	1	1	1	X	X	1	X	X	2
	CO3	1	1	X	1	X	X	2	1	2	X	X	X	X	2	2
	CO4	3	2	X	1	X	X	2	X	X	X	3	X	1	X	1
	CO5	X	1	1	3	2	1	X	X	X	1	X	2	X	X	X
	CO6	2	1	1	2	2	1	1	X	X	1	X	1	X	X	X
BOO501	**CO1**	3	1	3	2	3	3	3	3	3	1	3	X	X	2	3
	CO2	3	1	2	2	2	2	2	2	3	X	2	X	X	2	3
	CO3	3	1	3	3	3	3	2	2	2	1	2	X	X	3	2
	CO4	3	1	3	2	3	2	2	2	1	1	3	X	X	1	2
	CO5	3	1	2	2	1	3	1	2	2	x	2	x	x	2	3

	CO6	3	1	3	3	3	3	2	2	2	1	2	X	X	3	2
ZOO501	**CO1**	2	1	1	1	1	3	1	2	2	1	2	X	1	1	3
	CO2	3	2	2	2	2	1	1	2	2	1	2	X	1	1	3
	CO3	2	2	2	2	2	2	1	1	2	2	2	X	1	1	3
	CO4	2	1	2	3	2	2	2	1	2	3	1	X	1	2	2
	CO5	3	2	2	2	2	2	2	2	3	2	2	X	1	1	3
	CO6	2	2	2	3	2	2	3	2	2	2	2	X	2	2	3
Semester-VI																
BSCEDU601	**CO1**	3	2	1	1	1	2	1	2	1	1	1	X	1	1	1
	CO2	3	2	2	2	3	2	2	2	2	1	2	X	1	2	1
	CO3	3	3	2	2	3	2	3	2	2	2	2	X	2	3	2
	CO4	3	1	3	2	3	3	3	2	2	2	2	X	1	2	1
BSCEDU602	**CO1**	3	2	1	1	1	2	1	2	1	1	1	X	1	1	1
	CO2	3	2	2	2	3	2	2	2	2	1	2	X	1	2	1
	CO3	3	3	2	2	3	2	3	2	2	2	2	X	2	3	2
	CO4	3	1	3	2	3	3	3	2	2	2	2	X	1	2	1
	CO5	3	2	1	1	2	3	1	2	3	X	2	3	1	2	3
	CO6	2	3	1	2	1	3	2	3	3	2	2	1	X	1	2
ENG601	**CO1**	3	3	3	1	3	1	1	1	3	1	1	1	1	1	1
	CO2	3	3	X	X	X	X	1	X	X	1	1	X	X	1	1
	CO3	3	3	2	3	2	1	1	1	2	1	2	1	X	1	1
	CO4	3	3	2	3	2	X	X	X	2	1	1	X	1	1	1
	CO5	3	3	X	3	2	X	X	X	X	1	1	X	X	1	1
PBC601	**CO1**	1	2	3	2	1	3	2	X	3	2	1	2	3	2	1
	CO2	2	X	2	1	2	2	1	1	1	1	X	1	1	1	2
	CO3	X	2	1	1	1	1	X	2	2	3	2	3	2	3	X
	CO4	3	1	X	3	2	2	2	2	X	2	3	X	1	1	3
	CO5	1	1	2	2	X	1	2	3	2	X	1	2	1	1	1
	CO6	1	3	1	1	3	X	1	1	2	1	2	1	2	X	1
HCP60	**CO1**	3	2	2	1	2	1	2	1	1	1	1	X	1	2	1

1	**CO2**	3	2	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO3	3	3	2	2	3	1	1	1	1	1	1	X	1	2	1
	CO4	3	3	2	2	3	1	1	1	1	1	2	1	2	2	1
MAT601	**CO1**	3	X	3	3	3	1	1	X	1	3	3	X	3	2	2
	CO2	2	X	2	3	3	1	1	X	1	2	3	X	3	2	2
	CO3	3	1	3	3	2	X	1	1	2	3	2	1	1	2	2
	CO4	3	1	3	3	2	X	1	X	1	1	2	2	2	3	2
	CO5	3	1	2	3	1	1	2	2	1	1	2	3	3	3	3
	CO6	3	1	2	3	1	1	2	2	1	1	2	3	3	3	3
CHM601A1	**CO1**	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
	CO2	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
	CO3	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
	CO4	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
	CO5	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
	CO6	2	X	1	1	1	1	2	2	1	2	2	X	2	1	2
CHM601A2	**CO1**	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO2	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO3	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO4	2	X	1	1	1	1	2	2	1	2	2	X	1	2	2
	CO5	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
	CO6	2	X	1	1	1	1	2	2	1	2	2	x	1	2	2
CHM601A3	**CO1**	2	X	1	1	1	1	2	3	1	1	1	x	1	2	2
	CO2	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO3	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO4	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO5	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
	CO6	2	X	1	1	1	1	2	3	1	1	1	X	1	2	2
PHY601A	**CO1**	3	1	2	X	X	2	X	2	X	X	1	X	X	X	2
	CO2	3	1	2	X	X	2	X	1	X	1	X	X	X	X	2
	CO3	3	1	2	2	1	2	X	2	1	1	1	X	X	X	1

	CO4	3	1	1	1	1	2	X	2	X	X	X	X	X	X	X
	CO5	3	1	2	2	1	3	1	2	1	2	1	X	X	2	1
	CO6	3	1	1	2	1	1	1	2	1	1	2	X	X	1	1
PHY601B	**CO1**	3	1	2	1	X	2	X	2	X	2	1	X	X	X	2
	CO2	3	2	2	2	1	3	1	2	1	2	1	X	X	X	2
	CO3	3	1	2	2	1	2	X	2	X	1	2	X	X	X	1
	CO4	3	2	2	2	1	2	X	2	X	2	2	X	X	X	1
	CO5	3	1	3	2	1	2	X	2	X	2	X	X	X	2	1
	CO6	2	1	1	2	1	1	X	1	X	2	X	1	1	2	1
PHY601C	**CO1**	3	X	1	3	2	1	2	1	X	X	3	X	X	X	1
	CO2	2	X	1	3	1	2	1	1	1	X	X	1	X	X	2
	CO3	1	1	X	1	X	X	2	1	2	X	X	X	X	2	2
	CO4	3	2	X	1	X	X	2	X	X	X	3	X	1	X	1
	CO5	X	1	1	3	2	1	X	X	X	1	X	2	X	X	X
	CO6	1	1	2	1	1	2	X	X	2	X	1	1	X	1	1
BOO601	**CO1**	3	1	2	2	3	3	3	3	2	1	3	X	X	2	3
	CO2	3	1	2	2	2	3	2	2	3	2	2	X	X	3	2
	CO3	3	1	3	3	3	2	3	2	2	1	2	X	X	2	3
	CO4	3	1	3	2	1	2	2	3	1	X	2	X	X	1	3
	CO5	3	1	2	2	3	3	1	2	2	X	3	X	X	2	2
	CO6	3	1	2	2	3	3	3	3	2	1	3	X	X	2	3
ZOO601	**CO1**	2	1	2	1	1	2	1	2	2	1	2	X	1	1	3
	CO2	3	2	2	2	2	1	1	2	2	1	2	X	1	1	3
	CO3	3	2	2	2	2	2	1	1	2	2	2	X	1	2	3
	CO4	3	2	3	2	2	2	2	1	2	2	1	X	1	2	2
	CO5	3	2	2	2	2	2	2	2	3	2	2	X	2	1	3
	CO6	3	3	3	3	3	2	3	2	3	2	3	X	2	3	3
Semester VII																
BAEDU701	**CO1**	3	2	2	3	2	2	3	2	3	X	1	3	1	2	1
	CO2	3	2	3	2	2	3	2	2	1	1	1	2	1	2	1

	CO3	3	3	1	3	1	1	3	2	1	1	2	2	1	2	1
	CO4	3	1	2	2	2	1	1	1	1	X	1	1	2	2	1
	CO5	3	2	3	3	2	1	3	X	2	3	3	2	3	3	2
	CO6	3	3	1	X	3	2	1	2	1	2	2	3	3	1	3
BSCED U702	**CO1**	3	2	2	2	2	2	3	2	1	X	1	1	1	2	1
	CO2	3	2	2	2	2	2	2	2	1	X	1	1	1	2	1
	CO3	3	3	1	1	1	1	2	2	1	X	2	2	1	2	1
	CO4	3	1	2	2	2	1	1	1	1	X	1	1	2	2	1
BSCED U703	**CO1**	3	3	2	3	2	1	2	3	1	2	1	3	2	1	2
	CO2	3	2	3	3	2	1	3	1	2	1	2	3	2	3	1
	CO3	3	1	3	X	2	2	2	2	2	2	1	3	2	2	2
	CO4	3	2	3	2	2	2	1	1	X	3	1	3	2	3	1
	CO5	3	2	2	2	2	1	2	1	2	3	2	1	2	3	2
	CO6	3	1	3	2	2	2	3	1	1	X	1	2	1	3	1
BSCED U704	**CO1**	3	3	2	2	2	1	2	1	1	1	1	1	2	3	1
	CO2	3	2	3	3	3	X	3	1	1	1	2	X	2	3	1
	CO3	3	1	3	3	3	2	2	2	2	2	1	1	2	2	1
	CO4	3	2	3	3	2	2	1	1	1	X	1	1	2	3	1
	CO5	3	1	2	2	2	1	2	1	1	3	1	1	2	3	1
	CO6	3	1	2	2	2	X	3	1	1	X	1	1	1	3	1
BSCED U705	**CO1**	X	X	X	2	1	X	X	1	2	3	1	X	X	X	2
	CO2	X	1	3	2	2	X	X	1	2	3	1	X	X	X	2
	CO3	X	X	X	X	2	1	X	2	X	3	1	X	X	X	2
	CO4	X	X	X	2	1	1	X	1	1	3	X	X	X	X	2
	CO5	2	X	3	3	3	2	2	1	3	3	3	X	X	1	2
	CO6	2	2	2	3	2	X	X	1	3	3	3	1	2	1	2
TSCI706	**CO1**	2	X	1	3	2	1	2	1	X	X	3	X	X	1	1
	CO2	3	X	1	3	1	2	1	1	1	1	X	3	X	X	2
	CO3	1	2	X	1	X	X	2	1	1	2	X	X	X	1	2
	CO4	2	2	X	1	X	X	2	X	X	X	3	X	1	X	1

	CO5	X	1	1	3	2	1	X	X	2	1	X	2	X	X	X
TMAT707	**CO1**	3	X	1	3	2	1	2	1	X	X	3	X	X	X	1
	CO2	2	X	1	3	1	2	1	1	1	X	X	X	X	X	2
	CO3	1	1	X	1	X	X	2	1	X	X	X	X	X	X	2
	CO4	3	2	X	1	X	X	2	X	X	X	3	X	1	X	1
	CO5	X	1	1	3	2	1	X	X	X	1	X	2	X	X	X
TENG708	**CO1**	3	3	3	X	3	X	X	X	3	X	X	X	X	X	X
	CO2	3	3	3	X	3	X	X	1	3	X	X	X	X	X	1
	CO3	3	3	2	2	3	1	2	1	2	X	3	X	X	2	1
	CO4	3	3	2	X	3	X	2	1	2	X	2	X	X	2	2
	CO5	3	3	2	3	2	2	2	X	2	3	3	X	2	2	1

Mapping of Course Outcomes (COs) with Programme Specific Outcomes (PSOs)

College code	Course Outcomes	PSO 1	PSO 2	PSO 3	PSO 4
BSCEDU101	**CO1**	3	1	2	1
	CO2	3	3	2	1
	CO3	3	2	2	1
	CO4	3	3	1	1
	CO5	3	2	2	1
BSCEDU102	**CO1**	3	2	X	X
	CO2	2	X	X	1
	CO3	3	2	X	1
	CO4	2	3	3	1
	CO5	2	X	3	X
	CO6	2	1	X	1
ENG101	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X

	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC101	**CO1**	3	1	3	1
	CO2	3	1	3	1
	CO3	3	1	3	1
	CO4	3	1	3	1
HCP101	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
MAT101	**CO1**	1	2	2	1
	CO2	1	2	1	X
	CO3	1	2	1	X
	CO4	3	2	3	1
	CO5	3	3	2	3
	CO6	2	2	2	1
CHM101A1	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM101A2	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1

	CO6	3	2	1	1
CHM101A3	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
PHY101A	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	X
	CO4	3	2	X	X
	CO5	2	1	X	X
PHY101B	**CO1**	3	3	1	2
	CO2	2	2	X	1
	CO3	1	1	1	2
	CO4	2	1	X	2
	CO5	3	2	X	3
PHY101C	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	X
	CO4	3	2	X	X
	CO5	3	2	1	X
BOO101	**CO1**	3	3	3	3
	CO2	3	2	3	2
	CO3	2	2	2	3
	CO4	2	3	1	1
	CO5	3	2	2	1
	CO6	3	2	2	1
ZOO101	**CO1**	2	2	2	3
	CO2	2	3	2	3

	CO3	3	2	2	3
	CO4	3	2	2	3
	CO5	3	2	2	3
	CO6	3	3	2	3
BSCEDU201	**CO1**	3	2	2	1
	CO2	2	X	2	2
	CO3	3	2	2	1
	CO4	2	3	3	3
	CO5	3	2	2	3
BSCEDU202	**CO1**	3	2	X	X
	CO2	2	X	X	1
	CO3	3	2	X	1
	CO4	2	3	3	1
ENG201	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC201	**CO1**	3	1	3	1
	CO2	3	1	3	1
	CO3	3	1	3	1
	CO4	3	1	3	1
HCP201	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
MAT201	**CO1**	1	2	2	1

	CO2	1	2	1	X
	CO3	1	2	1	X
	CO4	3	2	3	1
	CO5	3	3	2	3
	CO6	2	2	2	1
CHM201A1	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM201A2	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM201A3	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
PHY201A	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	X
	CO4	3	2	X	X
	CO5	2	1	X	X
PHY201B	**CO1**	3	3	1	2
	CO2	2	2	X	1

	CO3	1	1	1	2
	CO4	2	1	X	2
	CO5	3	2	X	3
PHY201C	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	X
	CO4	3	2	X	X
	CO5	3	2	1	X
BOO201	**CO1**	3	3	3	3
	CO2	3	2	3	2
	CO3	2	2	2	3
	CO4	2	3	1	1
	CO5	3	2	2	1
	CO6	3	2	2	1
ZOO201	**CO1**	2	2	2	3
	CO2	2	3	2	3
	CO3	3	2	2	3
	CO4	3	2	2	3
	CO5	3	2	2	3
	CO6	3	3	2	3
BSCEDU301	**CO1**	3	X	1	X
	CO2	3	X	1	X
	CO3	3	X	1	X
	CO4	3	X	1	X
BSCEDU302	**CO1**	3	1	1	1
	CO2	3	X	1	X
	CO3	3	2	1	2
	CO4	3	X	1	X
	CO5	3	2	X	3
	CO6	2	3	1	X

ENG301	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC301	**CO1**	3	2	3	1
	CO2	3	1	2	1
	CO3	3	2	3	1
	CO4	3	1	3	1
HCP301	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
MAT301	**CO1**	3	3	3	1
	CO2	3	2	2	1
	CO3	3	2	3	2
	CO4	2	3	3	3
	CO5	2	2	2	3
CHM301A1	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1
	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
CHM301A2	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1

	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
CHM301A3	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1
	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
PHY301A	**CO1**	2	3	1	1
	CO2	2	1	X	2
	CO3	3	2	X	2
	CO4	1	1	X	3
	CO5	3	2	X	2
	CO6	3	2	X	2
PHY301B	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	X
	CO4	3	2	X	X
	CO5	3	2	1	X
	CO6	3	2	1	X
PHY301C	**CO1**	2	X	X	2
	CO2	3	1	X	3
	CO3	2	X	X	1
	CO4	2	X	X	1
	CO5	3	1	2	1
	CO6	3	1	2	1
BOO301	**CO1**	2	3	3	3
	CO2	3	2	3	2
	CO3	2	2	2	3

	CO4	1	3	1	1
	CO5	3	2	1	2
	CO6	3	2	1	2
ZOO301	**CO1**	2	2	2	3
	CO2	2	2	2	3
	CO3	3	2	2	3
	CO4	2	2	2	3
	CO5	3	2	2	3
	CO6	3	3	2	3
BSCEDU401	**CO1**	3	1	2	2
	CO2	3	1	2	2
	CO3	3	1	2	2
	CO4	3	1	2	3
	CO5	2	2	3	1
	CO6	3	3	2	1
BSCEDU402	**CO1**	3	1	2	2
	CO2	3	1	2	2
	CO3	3	1	2	2
	CO4	3	1	2	3
ENG401	**CO1**	2	1	X	X
	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
PBC401	**CO1**	3	2	1	1
	CO2	3	3	3	3
	CO3	3	1	3	1
	CO4	3	1	1	1
HCP401	**CO1**	2	1	X	X

	CO2	2	X	X	X
	CO3	X	X	3	X
	CO4	X	X	3	X
	CO5	X	X	X	X
	CO6	X	X	X	X
MAT401	**CO1**	3	2	2	X
	CO2	2	2	3	1
	CO3	3	2	2	X
	CO4	2	2	2	1
	CO5	3	3	2	2
CHM401A1	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM401A2	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM401A3	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
PHY401A	**CO1**	2	3	1	1
	CO2	2	1	X	2

	CO3	3	2	X	2
	CO4	1	1	X	3
	CO5	3	2	X	2
	CO6	3	2	1	1
PHY401B	**CO1**	3	3	X	X
	CO2	1	2	X	X
	CO3	2	2	X	X
	CO4	X	1	2	1
	CO5	2	1	X	X
	CO6	3	2	2	2
PHY401C	**CO1**	3	3	X	X
	CO2	3	2	X	X
	CO3	3	2	X	1
	CO4	2	X	1	X
	CO5	2	3	2	X
	CO6	1	2	X	X
BOO401	**CO1**	3	2	3	2
	CO2	3	3	3	3
	CO3	1	2	1	3
	CO4	2	3	2	1
	CO5	3	2	1	2
	CO6	3	2	3	2
ZOO401	**CO1**	2	2	2	3
	CO2	2	2	2	3
	CO3	3	2	2	3
	CO4	2	2	2	3
	CO5	3	2	2	3
	CO6	3	2	2	3
BSCEDU501	**CO1**	3	3	X	2
	CO2	3	2	2	3

	CO3	3	3	2	3
	CO4	3	3	2	3
BSCEDU502	**CO1**	3	3	X	2
	CO2	3	2	2	3
	CO3	3	3	2	3
	CO4	3	3	2	3
	CO5	2	3	2	1
	CO6	3	2	3	2
ENG501	**CO1**	2	X	X	X
	CO2	1	X	X	X
	CO3	2	X	X	X
	CO4	1	X	2	X
	CO5	X	X	2	X
	CO6	X	X	2	X
PBC501	**CO1**	2	1	3	2
	CO2	3	1	2	3
	CO3	2	2	1	1
	CO4	2	2	1	1
	CO5	1	1	2	2
	CO6	1	3	2	1
HCP501	**CO1**	2	1	2	2
	CO2	2	1	2	2
	CO3	2	1	1	1
	CO4	2	2	1	1
MAT501	**CO1**	3	3	2	X
	CO2	3	1	2	2
	CO3	2	2	1	1
	CO4	3	2	1	1
	CO5	2	2	2	2
	CO6	3	3	2	1

CHM501A1	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1
	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
CHM501A2	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1
	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
CHM501A3	**CO1**	3	1	1	1
	CO2	3	1	1	1
	CO3	3	1	1	1
	CO4	3	1	1	1
	CO5	3	1	1	1
	CO6	3	1	1	1
PHY501A	**CO1**	2	3	1	1
	CO2	2	1	X	2
	CO3	1	2	X	2
	CO4	1	1	X	3
	CO5	2	2	X	2
	CO6	3	2	1	1
PHY501B	**CO1**	3	3	X	X
	CO2	1	2	X	X
	CO3	2	2	X	X
	CO4	X	1	2	1
	CO5	2	1	X	X
	CO6	3	2	2	2

PHY501C	**CO1**	2	1	2	X
	CO2	1	2	2	1
	CO3	1	2	1	X
	CO4	3	3	2	2
	CO5	3	2	2	1
	CO6	2	1	1	2
BOO501	**CO1**	3	2	3	2
	CO2	3	3	3	3
	CO3	2	2	2	3
	CO4	2	3	1	2
	CO5	3	2	1	2
ZOO501	**CO1**	2	2	2	3
	CO2	3	2	2	3
	CO3	2	3	2	3
	CO4	2	2	2	3
	CO5	3	3	2	3
	CO6	3	3	2	3
BSCEDU601	**CO1**	3	X	1	2
	CO2	3	X	2	3
	CO3	3	X	1	3
	CO4	3	X	2	3
BSCEDU602	**CO1**	3	X	1	2
	CO2	3	X	2	3
	CO3	3	X	1	3
	CO4	3	X	2	3
	CO5	2	3	3	1
	CO6	2	1	3	1
ENG601	**CO1**	2	X	X	X
	CO2	X	X	X	X
	CO3	2	X	2	X

	CO4	X	X	2	X
	CO5	X	X	2	X
PBC601	**CO1**	1	2	3	2
	CO2	2	1	1	1
	CO3	2	1	1	1
	CO4	1	3	2	2
	CO5	3	2	2	3
	CO6	1	1	1	2
HCP601	**CO1**	2	2	3	2
	CO2	2	2	1	2
	CO3	2	1	1	1
	CO4	2	3	2	2
MAT601	**CO1**	3	3	3	2
	CO2	3	2	3	2
	CO3	2	2	3	1
	CO4	2	3	2	2
	CO5	2	2	2	2
	CO6	2	2	2	2
CHM601A1	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1
CHM601A2	**CO1**	3	2	1	1
	CO2	3	2	1	1
	CO3	3	2	1	1
	CO4	3	2	1	1
	CO5	3	2	1	1
	CO6	3	2	1	1

CHM601A3	**CO1**	2	X	1	1
	CO2	2	X	1	1
	CO3	2	X	1	1
	CO4	2	X	1	1
	CO5	2	X	1	1
	CO6	2	X	1	1
PHY601A	**CO1**	3	3	X	1
	CO2	3	2	X	1
	CO3	3	2	X	1
	CO4	3	1	X	2
	CO5	3	2	1	2
	CO6	2	2	1	1
PHY601B	**CO1**	3	2	X	2
	CO2	3	2	X	2
	CO3	3	1	X	2
	CO4	3	2	X	2
	CO5	3	3	X	2
	CO6	3	2	X	2
PHY601C	**CO1**	2	1	2	X
	CO2	1	2	2	1
	CO3	1	X	1	X
	CO4	2	3	2	2
	CO5	3	2	2	1
	CO6	2	1	2	1
BOO601	**CO1**	3	2	3	2
	CO2	3	3	3	3
	CO3	1	2	2	3
	CO4	3	3	1	1
	CO5	2	2	1	2
	CO6	3	2	3	2

ZOO601	**CO1**	2	2	2	3
	CO2	2	3	2	3
	CO3	3	2	2	3
	CO4	2	2	2	3
	CO5	3	2	2	3
	CO6	3	3	3	3
BAEDU701	**CO1**	3	3	1	1
	CO2	3	2	1	1
	CO3	2	1	1	X
	CO4	2	3	1	2
	CO5	3	2	1	3
	CO6	2	3	1	2
BSCEDU702	**CO1**	3	X	1	1
	CO2	3	X	1	1
	CO3	2	1	1	X
	CO4	2	X	1	X
BSCEDU703	**CO1**	3	1	3	2
	CO2	3	2	2	X
	CO3	3	3	2	2
	CO4	3	X	1	3
	CO5	3	2	2	3
	CO6	3	1	1	1
BSCEDU704	**CO1**	3	1	3	2
	CO2	3	2	1	X
	CO3	3	1	2	1
	CO4	3	X	X	X
	CO5	3	1	2	3
	CO6	3	X	1	1
BSCEDU705	**CO1**	2	1	X	X
	CO2	2	1	X	X

	CO3	2	1	X	X
	CO4	2	1	X	X
	CO5	2	1	X	3
	CO6	2	3	X	3
TSCI706	**CO1**	3	2	1	1
	CO2	2	3	1	1
	CO3	1	1	X	X
	CO4	2	1	1	2
	CO5	1	X	X	X
TMAT707	**CO1**	2	3	X	1
	CO2	2	2	1	1
	CO3	3	1	X	X
	CO4	2	2	1	2
	CO5	1	X	1	X
TENG708	**CO1**	3	3	3	X
	CO2	3	3	3	X
	CO3	3	3	2	2
	CO4	3	3	2	X
	CO5	3	3	2	3