DEPARTMENT OF LANGUAGES

The Department of Languages at BAMKC, Garhshankar unveils its students the world of English, Punjabi and Hindi languages. It is one of the finest and vibrant Departments in the college. Earlier these three languages

Departments were working separately but in January 2021 Principal Dr. Baljit Singh Khehra amalgamated these Departments and united into one as he believes on Johan Wolfgang Von Goethe who once said:

"You can never understand one language until you understand at least two."

VISION

The Department of Languages at B.A.M Khalsa College helps students to build knowledge of the content and method of literary studies. Department of languages will impart academic excellence and empower the students of the college through the best level of education. It also inculcates ethical and moral values in students. The Department of Languages develops strong bonding between students and their mother tongue. All the teachers who are associated with the department work efficiently to achieve excellence in their respective area of study.

MISSION

- The department of languages aims at transforming the students into the rational human beings with an inquisitive bent of mind through literary, theoretical and linguistic teaching.
- Promotion of human rights and responsibilities.
- To unfold hidden talents of the students and enhance their competitive skills.
- Efforts are made to raise the intellectual level of the students through seminars, webinars, debate, poetry recitation competitions.
- The all-around development of students in languages including Punjabi, English, Hindi.
- Introduce the students to languages through culture and connect them with heritage.

OBJECTIVES

- The students get to know and understand about languages in a better way.
- The languages course program helps students to understand society.

- All round development of various aspects of students like physical, intellectual, mental, ethical, moral, social, aesthetic etc.
- To impart knowledge to the students about different forms of Punjabi, Hindi and English Literature.
- Develop knowledge and realization about the changing realities of life.

Programme run by department:

1. B.A. (Programme Code: BA)

Bachelor of Arts

Programme Outcomes (POs) of B.A.

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

PO1	Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate program of study.
PO2	Ability to express thoughts and ideas effectively in writing and orally, Communicate with others using appropriate media, confidently share one's views and express herself/himself, demonstrate the ability to listen carefully, read and write analytically, and present complex information clearly and concisely to different groups.
PO3	Capability to apply analytic thought to a body of knowledge, analyze and evaluate evidence, arguments, claims, beliefs based on empirical evidence, identify relevant assumptions or implications; formulate coherent arguments, critically evaluate practices, policies, and theories by following a scientific approach to knowledge development.
PO4	Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge, and apply one's learning to real-life situations.
PO5	Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others, analyze and synthesize data from a variety of sources, draw valid conclusions and support them with evidence and examples, and address opposing viewpoints.

PO6	A sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesizing, and articulating; Ability to recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyze, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.
PO7	Ability to work effectively and respectfully with diverse teams, facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team, spend more time working towards high-value goals and gain a balance between professional goals and personal time.
PO8	Ability to analyze interprets and draws conclusions from quantitative/qualitative data, and critically evaluate ideas, evidence, and experiences.
PO9	Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society
PO10	Capability to use ICT in a variety of learning situations, demonstrate an ability to access, evaluate, and use a variety of relevant information sources, and use appropriate software for analysis of data.
PO11	Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.
PO12	Possess knowledge of the values and beliefs of multiple cultures and a global perspective, capability to effectively engage in a multicultural society and interact respectfully with diverse groups.
PO13	Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification, or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights, appreciating environmental and sustainability issues, and adopting an objective, unbiased and truthful actions in all aspects of work.
PO14	Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people

	to the right destination, smoothly and efficiently.
PO15	Ability to acquire knowledge and skills, including "learning how to learn", that is necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social, and cultural objectives, and adapting to changing trades and demands of the workplace through knowledge/skill development/ reskilling.

Programme Specific Outcomes (PSOs)

PSO 1	The students will be able to acquire knowledge in the field of Social Sciences, Literatures and Humanities which make them sensitive and sensible enough to solve the problems related with mankind.
PSO 2	BA graduates will be acquainted with the social, economic, historical, geographical, political, ideological and philosophical tradition and thinking.
PSO 3	The program also empowers the graduates to appear for various competitive examinations or choose the Post Graduate Program of their choice.
PSO 4	BA program empowers the students to acquire the knowledge with human values framing the base to deal with various problems in the life with courage and humanity and also this program provides the base to be the responsible citizen.
PSO 5	This program enables the students (with limited range) to translate texts/scripts in three major languages (Punjabi, Hindi, English) and they will be ignited enough to act over for the solution of various issues prevailed in human life to make this world a better place than ever.

Course Outcomes (COs) of B.A.

Sem.	Course Name	Course Code	Course Outcome	
Sem.-I	**English Compulsory**	**ENG101**	**CO1**	Give an introductory knowledge of English language and critically appreciate literary texts.
			CO2	Acquire extensive knowledge of English as a language in its various textual forms which transform them to be creative, thoughtful, imaginative and effective communicators in a diverse and changing society
			CO3	Identify the grammatical structures by understanding Voice, Antonyms and translation

			CO4	Work effectively and respectfully with diverse teams, facilitate them in such a way that English learning becomes a pleasurable endeavor and they learn at self-pace.
			CO5	Examine the 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	Compose paragraph writingwhich improves their writing skills.
Sem.-I	**Punjabi Compulsory**	**PBC101**	**CO1**	Give an introductory Knowledge of Punjabi Language.
			CO2	Examine the various forms of modern poetry.
			CO3	To understand the definition and nature of Essay and make student capable how to write Essay.
			CO4	To develop Skill of précis writing.
			CO5	To make Student able to understand the grammar and its importance and identifying the types of sentences.
			CO6	To get practical knowledge of various aspects of Punjabi grammar.
Sem.-I	**History & Culture of Punjab**	**HCP101**	**CO1**	Describe the physical features of Punjab and its impact on History of Punjab.
			CO2	Evaluate various sources of Punjab History.
			CO3	Describe the extent, town planning, social economic and religious life of Harappan Civilization.
			CO4	Describe the Political, Social, Economic and Religious life of Vedic Age.
			CO5	Analyze the historical importance of Ramayana and Mahabharat.
			CO6	Evaluate the political condition on the eve of Alexander's invasion and impact of invasion on Social and Cultural life.
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	**Elective Hindi**	**HIN101**	**CO1**	Develop a bonding with the National Language of the Student.
			CO2	Knowledge of Hindi language helps them to think critically while studying hindi literature. They are able to relate pleasure of literature and real life.
			CO3	Understanding the role played by the poets of bhakti cult in literature and society. Use the literature to develop their social and moral sense in life.

			CO4	Understand the communication process and method.
			CO5	Inculcate moral and human qualities inside themselves.
			CO6	Develop knowledge of hindi linguistic and grammar.
Sem.-I	**Elective Punjabi**	**PBI101**	**CO1**	AnalyseAdhunik Punjabi Kavita from 1901-2000
			CO2	Explain the ekangiChedarshan.'
			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 1901-2000.
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	**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	**Political Science**	**POL101**	**CO1**	This paper is to introduce first semester undergraduate students to some of the basic aspects like scope of political science, its relationship with other Disciplines like sociology, economics and history.
			CO2	Students also familiar with various theories regarding state and its origin, like social contract theories, evolutionary and historical theory.
			CO3	Students also gain knowledge about different ideologies like liberal, Marxian and Gandhi an views.
			CO4	This paper also analyses the function of welfare state and various types of sovereignty.
			CO5	To acquaint with the theories, approaches, concepts and principles of political theory.

			CO6	To understand the various traditional and modern theories of political science
Sem.-I	**Environment Conservation**	**ENC101**	**CO1**	Understand about the scope and importance of Environment .
			CO2	To acquire knowledge about the ecosystem its various components . Introduction to various biogeochemical cycles of the environment.
			CO3	Learn about different types of natural resources and their uses to mankind, Various polices of their conservation .
			CO4	Acquire knowledge about various alternative sources of energy like solar energy , wind power , geothermal energy, dung energy and wood energy.
			CO5	Detailed understanding of forests types in India and the World. Learn about different forestry systems like farm forestry, community forestry , social forestry and agroforestry systems.
			CO6	To know about the various adulterants of food and various tests performed to find out the type of adulteration and understand about various indoor pollutants exist in our workplaces, homes, college , bus stand .
Sem.-I	**Physical Education**	**PED101**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-I	**Home Science**	**HMS101**	**CO1**	To Define the meaning and importance of home science, functions of home.
			CO2	To Understand Elements and principles of Art in interior decoration.
			CO3	To Infer meaning of health, hygiene, immunity and causes of spread of disease.
			CO4	To Enhance knowledge and apply Food hygiene in real scenario.
			CO5	To Apply Water purification at domestic level
			Practical	Students learn Floor decoration, Knowledge of color scheme.
Sem.-I	**Functional English**	**FNC101**	**CO1**	To familiarize them with the functioning of English - English sounds through listening in the Language Lab, enhancing communication skills and making them aware with IT tools.
			CO2	To achieve accuracy in oral production by encouraging the use of pronunciation dictionaries.
			CO3	To achieve an optimum level of intelligibility and fluency

				inspeech in group communication.
			CO4	To enhance their ability of communication in the spoken mode with accuracy and fluency for various functions
			CO 5	To mark stress and will become well versed with word stress and sentence stress.
			CO 6	To understand Intonation and its various patterns.
Sem.-I	**Mathematics: Paper A(Plane Geometry)**	**MAT101 A**	**CO1**	Solving 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.
			CO2	Learn about General equation of circle, tangents, normals, chord of contact, pole and polar, pair of tangents from a point and length of tangent
			CO3	Knowledge of equation of chord in terms of midpoint, radical axis, co-axial family of circles, limiting points.
			CO4	Understanding of General equation of a conic, tangents, normals, chord of contact, pole and polar, pair of tangents, diameter, Conjugate diameters of ellipse and hyperbola.
			CO 5	Exposure on special properties of parabola, ellipse and hyperbola, conjugate hyperbola, asymptotes of hyperbola, rectangular hyperbola.
Sem.-I	**Mathematics: Paper B (Calculus-I)**	**MAT101 B**	**CO1**	Understanding the concepts of real numbers, Limits and continuity.
			CO2	Solve Algebraic equations and inequalities involving the square root and Modulus function.
			CO3	Analyze functions and their graphs and learn to produce rigorous proofs of results that arise in the context of calculus, Geometric value theorems.
			CO4	Determine continuity at a point or an interval. and distinguish between the types of discontinuities at a point
			CO 5	Identify and Apply the intermediate value theorem, Mean value theorem and L' Hospital Rule.
			CO 6	Knowledge about Hyperbolic functions their differentiation .learn Successive differentiation and Leibnitz's theorem.
Sem.-I	**Mathematics: Paper C (Trigonometry and Matrices)**	**MAT101 C**	**CO1**	Understanding De Moivre theorem and apply it to find roots and powers of complex numbers
			CO2	Analyze function of complex variable and calculate summation of trigonometric series
			CO3	Differentiate hermitian and skew – hermitian matrices and compute rank of matix
			CO4	Discuss linear dependence and linear independence of vectors and solve linear equations using matrices
			CO 5	Calculate Eigen values of matrix and apply Cayley – Hamilton theorem to find inverse of matrix
Sem.-I	**Computer Science-A**	**CS101A**	**CO1**	Define basic computer hardware architecture.
			CO2	Discuss software applications.

	(Computer Fundamentals)		**CO3**	Use essential IT support skills including installing, configuring, securing and troubleshooting operating systems and hardware
			CO4	Understand file management.
			CO 5	Able to aware of RAM, ROM, COST, SIZE, CACHE and virtual memory.
			CO 6	Accomplish creating basic documents, presentations with their properties.
Sem.-I	**Computer Science-B (PC Software)**	**CS101B**	**CO1**	To introduce students with the basic concepts of the operating system, its functions and services.
			CO2	Use essential IT support skills including installing, configuring, securing and troubleshooting operating systems and hardware.
			CO3	Discuss such as Microsoft office applications like MS-Word, MS-Excel, MS-PowerPoint etc.
			CO4	Use file management techniques for file and directory/folder organization.
			CO 5	Able to aware of RAM, ROM, COST, SIZE, CACHE and virtual memory.
			CO 6	Accomplish creating basic documents, presentations with their properties.
Sem.-I	**Music**	**MUV101**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand core musicological concepts described in treatises of various time periods.
			CO3	To understand different Ragas, Jaties.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about Khayal.
			CO 6	To play Taals on Hands and Tabla
Sem.-II	**English Compulsory**	**ENG201**	**CO1**	Illustrate introductory knowledge of English language and critically recognise literary texts
			CO2	Understand the process of creativity and asses extensive knowledge of English as a language in its various textual forms and to become thoughtful, imaginative and effective communicators in a diverse and changing society
			CO3	Know of the different types of sentences and its structure and become acquainted with narration and representation
			CO4	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	To enable them to write and appreciate different types of prose.
Sem.-II	**Punjabi Compulsory**	**PBC201**	**CO1**	To get information of Punjabi language.
			CO2	Provide Knowledge of Punjabi short story and make student familiar with it.
			CO3	Also make student able to write any kind of notice.
			CO4	To make students able to understand the Punjabi idioms its importance and benefits.
			CO5	To provide practical knowledge of Punjabi language and vocabulary.
Sem.-II	**History & Culture of Punjab**	**HCP201**	**CO1**	Describe the social, economic and religious life under the Mauryan Empire.
			CO2	Evaluate the impact of Jainism and Buddhism on Punjab.
			CO3	Analyze impact of Kanishka's rule on Punjab and salient features of Gandhara school of Art.
			CO4	Describe the various cultural and scientific developments under Guptas and position of women under Mauryas, the Guptas and the Vardhan.
			CO5	Depiction of Punjab in various historical sources.
			CO6	Describe the Society and Culture on the eve of the Turkish invasion.
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	**Elective Hindi**	**HIN201**	**CO1**	Develop a bonding with the National Language of the Student.
			CO2	Knowledge of Hindi language helps them to think critically while studying hindi literature. They are able to relate pleasure of literature and real life.
			CO3	Understanding the role played by the poets of bhakti cult in literature and society. Use the literature to develop their social and moral sense in life.
			CO4	Understand the communication process and method.

			CO5	Inculcate moral and human qualities inside themselves.
			CO6	Develop knowledge of hindi linguistic and grammar.
Sem.-II	**Elective Punjabi**	**PBI201**	**CO1**	AnalyseAdhunik Punjabi Kavita from 1901-2000.
			CO2	Descibe Punjabi culture by reading novel Doaba.
			CO3	Understand history of Punjabi literature from 1901-2000.
			CO4	Comprehend Punjabi kaavshastar such as dhunisampardae and alankarsampardae.
			CO5	Define literature along with its nature, components and functions.
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	**Economics**	**ECO201**	**CO1**	Analyze the decisions taking by firms and households due to scarcity of resources.
			CO2	Describe the theory of demand and consumer behaviour.
			CO3	Describe the laws and various concepts of production and costs.
			CO4	Describe the functioning of each market structure.
			CO5	Analyze the price and output determination of different market structure.
			CO6	Explain the various theories of rent, interest and profit.
Sem.-II	**Political Science**	**POL201**	**CO1**	Explain the concept of democracy, its types and theories to understand the concept of development & various views relating to it, sustainable development and human rights.
			CO2	To learn 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	To analyse the meaning of organs of government and theory of separation of power.
			CO5	Explore the working of political system and their structure and infra-structure and various input-output function according almond and Powell.
			CO6	To learn the procedure of various social institutions and government institutions
Sem.-II	**Environment**	**ENC201**	**CO1**	To acquire knowledge about the physical and chemical

	Conservation			properties of soil , meaning of soil profile and its components.
			CO2	Learn about various techniques of testing soil sample , various methods to increase soil fertility and role of soil microorganisms in increasing soil fertility.
			CO3	Learn about various factors causing soil erosion, different types of soil pollutants and various control measures to control pollution .
			CO4	Understand about various chemicals, pesticides, fertilizers and manure acting as soil pollutants.
			CO5	Learn about global and biological water cycle ,overutilization of surface and ground water.
			CO6	Learn about various methods to treat waste water like green method, Root – zone technology etc.
Sem.-II	**Physical Education**	**PED201**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-II	**Home Science**	**HMS201**	**CO1**	To Define the meaning and importance of home science, functions of home.
			CO2	To Understand Elements and principles of Art in interior decoration.
			CO3	To Infer meaning of health, hygiene, immunity and causes of spread of disease.
			CO4	To Enhance knowledge and apply Food hygiene in real scenario.
			CO5	To Apply Water purification at domestic level
			Practical	Students learn Floor decoration, Knowledge of color scheme.
Sem.-II	**Functional English**	**FNC201**	**CO1**	To write and distinguish different types of paragraphs.
			CO2	To use specific formats of written discourse.
			CO3	To achieve an optimum level of intelligibility and fluency in written discourse.
			CO4	To write different kinds of letters.
			CO 5	To interpret information in any scheme, such as Dialogue to paragraphs, and vice versa
			CO 6	To develop analytical skill to write precis and Note Making.
Sem.-II	**Mathematics:**	**MAT201**	**CO1**	Acquire knowledge about concavity, convexity and points of inflection, multiple points, asymptote and Tracing of curves

	Paper A	**A**		(cartesian and parametric coordinates only)
			CO2	Derive Reduction formulae for some complex integrations and hence integrate functions of much higher degree which are applicable in real life situations.
			CO3	Learn to find curvature, evolute and involute, chord of curvature.
			CO4	Demonstrate understanding of common numerical methods of integration.
			CO 5	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 surface of revolution.
Sem.-II	**Mathematics: Paper B**	**MAT201 B**	**CO1**	Describe Euclid's algorithm and apply synthetic division to find the roots of polynomial
			CO2	State the relation between roots and coefficients
			CO3	Implement transformation of the equations to solve roots
			CO4	Explain and apply Descartes rule of signs
			CO 5	Solve cubic using Cardon's method and bi-quadratic using Descartes method & Ferrari's Method
			CO 6	Apply Newton's method of divisors to solve equations.
Sem.-II	**Mathematics: Paper C**	**MAT201 C**	**CO1**	Describe Euclid's algorithm and apply synthetic division to find the roots of polynomial
			CO2	State the relation between roots and coefficients
			CO3	Implement transformation of the equations to solve roots
			CO4	Explain and apply Descartes rule of signs
			CO 5	Solve cubic using Cardon's method and bi-quadratic using Descartes method & Ferrari's Method
			CO 6	Apply Newton's method of divisors to solve equations.
Sem.-II	**Computer Science-A**	**CS201A**	**CO1**	Apply the scheduling algorithms for the given problem
			CO2	Demonstrate the fundamental LINUX commands & system calls.
			CO3	Apply the process synchronous concept using message queue, shared memory, semaphore and Dekker's algorithm for the given situation.
			CO4	Experiment an algorithm to detect and avoid deadlock
			CO 5	Demonstrate the various operations of the file system.
			CO 6	Apply the various methods in memory allocation and page replacement algorithms.
Sem.-II	**Computer Science-B**	**CS201B**	**CO1**	To Define the problem.
			CO2	To Extend skill on problem solving by constructing algorithms.
			CO3	To Use the fundamentals of C programming in trivial problem

				solving.
			CO4	To Identify solution to a problem and apply control structures and user defined functions for solving the problem
			CO 5	To Demonstrate the use of Strings and string handling functions, structures, union.
			CO 6	Apply skill of identifying appropriate programming constructs for problem solving
Sem.-II	**Music**	**MUV201**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand core musicological concepts described in treatises of various time periods.
			CO3	To understand about Bhatkhande and ThaatPadati.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about VilambitKhayal
			CO 6	To play TaalsonTabla
Sem.-III	**English Compulsory**	**ENG301**	**CO1**	To critically appreciate literary texts.
			CO2	To 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	To master the skill of transformation of sentences and ability to use non-finiteverbs.
			CO4	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	To describe and mark punctuation, and expertise in Making Notes and enable them ICT tools.
Sem.-III	**Punjabi Compulsory**	**PBC301**	**CO1**	To provide knowledge of essay writing and analysis.
			CO2	To make understand the cultural identity of Punjabi literature.
			CO3	To make student capable to write a letters with every aspects of human life.
			CO4	To provide knowledge about the origin and development of Punjabi script.
			CO5	Examine the linguistic and make Students familiar with roots of Punjabi literature.
Sem.-III	**History & Culture of**	**HCP301**	**CO1**	Analyze the Society and Culture in Punjab during Turko-Afghan and Mughal Rule.

	Punjab		**CO2**	Describe the teachings of Sikh Gurus and development of Sikh institutions.
			CO3	Analyze the salient features of Bhakti and Sufi Movement.
			CO4	Evaluate the martyrdom of Guru ArjanDevji and Guru TeghBahadurji.
			CO5	Describe the New Policy of Guru HarGobindji.
			CO6	Describe foundation of KhalsaPanth and Post Khalsa activities of Guru Gobind Singh.
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	**Elective Hindi**	**HIN301**	**CO1**	Knowledge of Hindi language helps them to think critically while studying hindi literature. They are able to relate pleasure of literature and real life.
			CO2	Understanding the importance of Environment culture and social life. Understanding the relation between society and literature by hindi literature in past and present.
			CO3	Study the socio-culture and political background of adikal to ritikal.
			CO4	Use the literature to develop their social and moral sense in life.
			CO5	Evaluating the concept of hindi from past to present and

				making the society more closely through literature.
			CO6	Develop knowledge of hindi linguistic and grammar.
Sem.-III	**Elective Punjabi**	**PBI301**	**CO1**	Madhkali Punjabi KavAdhayan.
			CO2	Main Objective of Madhkali Punjabi Adhayan.
			CO3	Introduction to Punjabi Travelog and to provide knowledge for Travelog importance to students.
			CO4	Introduction to punjabiSahit da Ithas and to provide knowledge to GurmitKav and Bhagtikav
			CO5	To Provide knowledge of BhartiKavSashtar
			CO6	Introduction and importance of BhashaVigyan
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	**Economics**	**ECO301**	**CO1**	Appraise the effect of public expenditure on economy.
			CO2	Explain tax and non taxrevenue, 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	**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	**Environment Conservation**	**ENC301**	**CO1**	Learn about atmosphere ,its structure and learn about stratospheric ozone
			CO2	Understand about Air pollution, its sources and methods to control air pollution and about Air (prevention and control of pollution) Act, 1981.
			CO3	In this unit students will learn about green house effect and global warming and its causes and various gases causesgreen house effect.
			CO4	Understand and learn about stratospheric ozone depletion and Role of paddy burning, livestock and biomass burning in causing green house effect.
			CO5	To acquire knowledge about radioactive pollution and noise pollution its sources and methods to reduce this pollution, learn about various mineral resources and its mining and environmental effects of mining.
			CO6	Learn about green building concept, carbon sequestration, CDM(Clean development mechanism).
Sem.-III	**Physical Education**	**PED301**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-III	**Home Science**	**HMS301**	**CO1**	To Read the use and care of sewing machines.
			CO2	To Define Anthropometry and methods of developing a design.
			CO3	To Learn Textile fibers in terms of their manufacturing and properties.
			CO4	To Understand various dyeing.
			CO5	To Use Printing and finishing techniques.
			practical	Understand basic seams, stitches, embroidery and drafting
Sem.-III	**Functional English**	**FNC301**	**CO1**	To acquaint learners with the different mechanisms of radio broadcast.
			CO2	To train learners in Script writing for different genres of Radio

				broadcast
			CO3	To help learners build their best voice by acquainting them with the elements of voice and providing training in it.
			CO4	To help learners to identify their speech problems and overcome them.
			CO 5	To sensitize learners to body movements, demeanour and gestures involved in TV presentation.
			CO 6	To make learners good communicator.
Sem.-III	**Mathematics: Paper A** **(Advance Calculus-I)**	**MAT301 A**	**CO1**	Knowledge about Limit and continuity, Partial differentiation, implicit functions theorem.
			CO2	Understanding the Vector differentiation - gradient, divergence, curl and their applications.
			CO3	Learn Euler's theorem on homogeneous function, Taylor's theorem, Jacobian. Finding maxima, minima and saddle point of a function, Lagrange's multiplier method.
			CO4	To provide the student with the skills of vector calculus operations which are needed for further study in mathematics
			CO 5	Students will be able to apply the concept of Envelope and Evolutes on real life applications
Sem.-III	**Mathematics: Paper B** **(Differential Equations -I)**	**MAT301 B**	**CO1**	Verify Exact differential equation, define the geometrical meaning of differential equation
			CO2	Derive Orthogonal Trajectory and envelope of the differential equations
			CO3	Solve Linear differential equation with constant and variable coefficients
			CO4	Learn to find solution of Cauchy's and Legendre's equations
			CO 5	Use method of variation of parameter and reduction of order to solve differential equations
			CO 6	Solve simultaneous Differential equations
Sem.-III	**Mathematics: Paper C** **(Statics)**	**MAT301 C**	**CO1**	Knowledge about Motion of a particle, Newton's Laws of Motion, motion of a body along the smooth inclined plane.
			CO2	Understanding Simple harmonic motion, elastic string, curvilinear motion of a particle.
			CO3	Learn about Work, power and conservative field. Relative motion, linear momentum ,angular momentum, impulsive forces.
			CO4	Determine the dynamic response of the system to applied loadings, using Newton's law.
			CO 5	Apply the Principle of Work and Energy and the principle of impulse and momentum to mechanical systems.
Sem.-III	**Computer Science-A** **(Computer Organisation-**	**CS301A**	**CO1**	Describe the fundamental organization and Architecture of computer system.
			CO2	Learn about representation of Information through number systems like Binary, Decimal, Hexadecimal, Octal. Conversions.
			CO3	Knowledge about Basic Building Blocks, Microinstructions

	CS05)			Microprocessor Assembly Language and System Maintenance.
			CO4	Express their knowledge in various error correction and detection techniques
			CO 5	Distinguish the organization of various parts of a system memory hierarchy.
			CO 6	To identify the elements of modern instruction sets and their impact on processor design.
Sem.-III	**Computer Science-B** **(Object Oriented Programming using- C++)**	**CS301B**	**CO1**	To Understand how C++ improves C with Object Oriented features.
			CO2	To Describe the procedural and object oriented paradigm with concepts of data, objects, classes, functions and streams.
			CO3	To Classify inheritance with the understanding of early and late binding ,usage of exception handling , generic programming .
			CO4	To be able to program using C++ features such as composition of objects, operator overloading, inheritance ,polymorphism etc.
			CO 5	To apply the concepts in object oriented programming in terms of software reuse and managing complexity to solve real world problems.
			CO 6	To create different data structures and create /manipulate basic data files and developing applications for real world problems.
Sem.-III	**Music**	**MUV301**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand core musicological concepts described in treatises of various time periods.
			CO3	To understand and practice KanthSadhna.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about description and notation of Ragas and Taal(Jhaptala, Char Tala, etc.)
			CO 6	To acquire the ability to play Kehrva on Tabla
Sem.-IV	**English Compulsory**	**ENG401**	**CO1**	To critically appreciate literary texts.
			CO2	To acquire extensive knowledge of English as a language in its various textual forms and to become thoughtful, imaginative and effective communicators in a diverse and changing society.
			CO3	To learn the uses of various aspects of Grammar (using noun as verb and vice versa, etc.)
			CO4	To write reports on any given situation.
			CO5	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.
			CO6	To write effective paragraphs.
Sem.-IV	**Punjabi Compulsory**	**PBC401**	**CO1**	Familiar with Punjabi drama and prose and make its critical analysis.
			CO2	Make students capable to translate English to Punjabi.

			CO3	To provide knowledge of the Punjabi language and various dialects like Majhi, Malvai, Doabi and puadi.
			CO4	To give knowledge of grammar and dictionary words.
			CO5	To make student capable to identify the grammatical concepts and words of grammar.
Sem.-IV	**History & Culture of Punjab**	**HCP401**	**CO1**	To introduce the students to the history of the medieval in the later medieval period.
			CO2	Describe achievements of Banda Singh Bahadur and Sikh struggle for sovereignty from 1760 to 1765
			CO3	Evaluate Sikh polity in 18^{th} century
			CO4	Describe expansion of Maharaja Ranjit Singh's empire and salient features of his civil and military administration and Anglo-Sikh Relations.
			CO5	Analyze political development from 1839-1845
			CO6	Evaluate developments in literature, art and architecture and social life with special reference to position of women in the Punjab region.
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	**Elective Hindi**	**HIN401**	**CO1**	Knowledge of Hindi language helps them to think critically while studying Hindi literature. They are able to relate pleasure of literature and real life.
			CO2	Understanding the importance of Environment culture and social life. Understanding the relation between society and literature by

				Hindi literature in past and present.
			CO3	Study the socio-culture and political background of Adi-kaal toRiti-kaal.
			CO4	Use the literature to develop their social and moral sense in life.
			CO5	Evaluating the concept of Hindi from past to present and making the society more closely through literature.
			CO6	Develop knowledge of Hindi linguistic and grammar.
Sem.-IV	**Elective Punjabi**	**PBI401**	**CO1**	Introduction and importance of Madhkali Punjabi Kavita
			CO2	Main Objective of Madhkali Punjabi Poetry to increase the knowledge
			CO3	Introduction and importance of punjabi short story
			CO4	Introduction to punjabiSahit da Ithas and to provide knowledge to Sufi Kav and KissaKav
			CO5	To Provide knowledge of SahitAlochna
			CO6	Introduction and importance of UpbashaVigayan
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 of Freedom Movement andpartition of Punjab.
			CO6	Describe various developments from 1947 to1966 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	**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	**Environment Conservation**	**ENC401**	**CO1**	Learn about the sources and catergories of solid waste , plastic nuisance , incineration and refuse derived fuels and fly ash utilization.
			CO2	Understand about the MSW Handlin rules 2000, learn about composting and optimum conditions for composting.
			CO3	Understand about Disaster management : Pre- disaster phase, actual disaster phase, and post-disaster phase.
			CO4	To acquire knowledge about management of various natural disasters like floods, earthquakes, tsunami, landslides, drought , and tropical cyclones.
			CO5	Learn about the construction and working of biogas plants, its advantages and disadvantages. To get knowledge about verm-culture and vermicomposting and Waste water treatment.
			CO6	To get knowledge about organic farming, methods, soil management, weed management and control of pests, advantages of organic farming. Learn about different ways of reclamation of waste land.
Sem.-IV	**Physical Education**	**PED401**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-IV	**Home Science**	**HMS401**	**CO1**	Understand Elements and Principles of Design.
			CO2	Develop the knowledge about Care and Storage of garments.
			CO3	Study of fabric construction
			CO4	Understand different types of Yarns.
			CO5	Understand Bleaches and stain removing.
			practical	Students learn Tie and dye ,block printing and construction of garments

Sem.-IV	**Functional English**	**FNC401**	**CO1**	To acquaint learners with the lay-out, equipment and functioning of a T.V. station.
			CO2	To train learners in scriptwriting for different genres of T.V. Broadcast.
			CO3	To sensitize learners to body movements, demeanor and gestures involved in T.V. presentation.
			CO4	To provide further practice in previously covered features of broadcast presentation.
			CO 5	To familiarize learners with different genres of T.V. production with specific training imparted in script writing
			CO 6	To continue with all other features of Broadcast presentation.
Sem.-IV	**Mathematics: Paper A (Advance Calculus-II)**	**MAT401 A**	**CO1**	Knowledge about Sequence- bound of a sequence, convergent, divergent and oscillatory sequence.
			CO2	Learn about Series of non negative term- P- test , comparison test, Cauchy's integral test ,Cauchy's root test, ratio test, Raabe's test, logarithmic test ,Gauss Test. Alternating series
			CO3	Knowledge about Leibnitz's test, Reimann's rearrangement theorem
			CO4	Define, differentiate, and integrate functions represented as power series expansions, including Taylor series, and solve related problems.
			CO 5	Distinguish between the concepts of sequence and series, and determine limits of sequences and convergence and approximate sums of series.
Sem.-IV	**Mathematics: Paper B (Differential Equations-II)**	**MAT401 B**	**CO1**	Define Laplace transform ,Inverse Laplace transform and apply these to problems.
			CO2	Learn to find Series solution of differential equations power series method
			CO3	Derive the solutions of Bessel equations ,their recurrence relations and orthogonal properties
			CO4	Derive the solutions of Legendre's equations ,their recurrence relations and orthogonal properties
			CO 5	Form and solve Partial differential equations
Sem.-IV	**Mathematics: Paper C (Dynamics)**	**MAT401 C**	**CO1**	Knowledge about Motion of a particle, Newton's Laws of Motion, motion of a body along the smooth inclined plane.
			CO2	Understanding Simple harmonic motion, elastic string, curvilinear motion of a particle.
			CO3	Learn about Work, power and conservative field. Relative motion, linear momentum ,angular momentum, impulsive forces.
			CO4	Determine the dynamic response of the system to applied loadings,using Newton's law.
			CO 5	Apply the Principle of Work and Energy and the principle of impulse and momentum to mechanical systems.
Sem.-	**Computer**	**CS401A**	**CO1**	To Define basic function of DBMS.

IV	**Science-A** **(Database Concepts)**		**CO2**	To Understand database models & entity relationship models
			CO3	To Design and implement a database schema for a given problem domain
			CO4	To Apply the concept of normalization to reduce the tables and mapping of E-R diagrams to tables
			CO 5	To create algebraic queries by using the topic of relational algebra and calculus
			CO 6	To Identify the concurrency problems and learn the techniques to handle it
Sem.-IV	**Computer Science-B** **(Data Structures)**	**CS401B**	**CO1**	To gain knowledge of different concepts of Data Structure.
			CO2	To study the basics concepts of arrays and Stacks.
			CO3	To understand how to represent linked list in memory.
			CO4	To study the representation of Trees and Graphs.
			CO 5	To study the basics of Searching.
			CO 6	To understand the basics of Sorting.
Sem.-IV	**Music**	**MUV401**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand core musicological concepts described in treatises of various time periods.
			CO3	To understand verities of Gamak.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about description and notation of Ragas and Taal(Roopak, Tilwada etc.)
			CO 6	To acquire the ability to playEkTaal on Tabla, and also ability to play Harmonium with few Alankars.
Sem.-V	**English Compulsory**	**ENG501**	**CO1**	Critically analysis literary texts and appreciate prose and its structure in shaping it's meaning.
			CO2	Acquire extensive knowledge of English as a language in its various textual forms and become creative, thoughtful, imaginative and effective communicators in a diverse and changing society.
			CO3	Analyse structure, forms, rhyming schemes etc. and able to speak and write grammatically correct sentences.
			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 and also obtain a value orientation by means of poetry.
			CO5	Apply comprehend human actions and their consequences in life through various literary aspects of the text which capacitates them to enrich their literary, research and cultural values and also make them aware of self and society
			CO6	Think and communicate effectively in the current information intensive society and enable them to learn ICT tools.
Sem.-V	**Punjabi**	**PBC501**	**CO1**	To analysis the medieval poetry and provide knowledge to various aspects of it.

	Compulsory		**CO2**	To make student capable to write a essay on current affairs.
			CO3	Provide knowledge of the origin of script and their development.
			CO4	Define phrase management and discuss its types.
			CO5	Provide practical knowledge of linguistics.
Sem.-V	**History & Culture of Punjab**	**HCP501**	**CO1**	Evaluate the British administration after the annexation of Punjab from 1849-1858.Also describe agriculture, trade, and industry in Punjab during British Period.
			CO2	Describe the spread of Modern Education in Punjab.
			CO3	Describe the various Socio- Religious movements and causes responsible for Uprising of 1907.
			CO4	Describe the origin and activities of Gadar Movement.
			CO5	Analyze the circumstances leading to Gurdwara Reform Movement.
			CO6	Analyze response of Punjabis to national movement and circumstances leading to partition of India.
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 grammarand are able to recognize the literary terms related to Indian Literature.
Sem.-V	**Elective Hindi**	**HIN501**	**CO1**	Knowledge of Hindi language helps them to think critically while studying hindi literature. They are able to relate pleasure of literature and real life.
			CO2	Understanding the relation between society and literature by hindi literature in past and present.
			CO3	Inculcate moral and human values within themselves.
			CO4	Develop reading, writing and communication skills.
			CO5	The verbal and non-verbal skills of communication are developed.
			CO6	Get information about Alankar, Chhand in hindi literature.
Sem.-V	**Elective**	**PBI501**	**CO1**	Understanding and investigation of different types of medieval

	Punjabi			Punjabi poetry.
			CO2	To give abstract analysis and data about Punjabi drama.
			CO3	Information on the literary History of Punjabi KissaKav.
			CO4	Information on the literary History of vaarkav.
			CO5	Information on Indian poetics particularly about "riti and auchitya".
			CO6	Provide information on medieval and ancient poetry and literary forms of prose.
Sem.-V	**History**	**HIS501**	**CO1**	Understand the word Feudalism,its origin and decline in Europe.
			CO2	Analyze the causes and effects of Renaissance and Reformation in Europe.
			CO3	Describe the growth of Parliamentary Institution in England and Formation of USA.
			CO4	Evaluate the emergence of industrial revolution and rise of capitalism and mercantilism.
			CO5	Analyze the causes and results of French revolution and reforms of Napoleon.
			CO6	Describe the unification of Germany and Italy.
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	**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	**Environment Conservation**	**ENC501**	**CO1**	Understand about the various levels of biodiversity , various threat to biodiversity, learn about various hot spots of biodiversity .
			CO2	Various acts to protect biodiversity Environment protection act 1986, Forest conservation act, 1980, Water prevention and control of pollution act, 1974.
			CO3	Learn about in-situ and ex- situ conservation strategies and various causes of extinction of biodiversity.
			CO4	To acquire knowledge about various acts to conserve biodiversity (Wildlife protection act), 1972, Joint forest management .
			CO5	Learn about role of religion in environment protection, different possible measures to make aware localities about environmental hazards and its remedies.
			CO6	Learn about the cultivation methods of *Aloe vera, Calotropis, Acacia nilotica, Mentha ,Ricnus etc.*
Sem.-V	**Physical Education**	**PED501**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-V	**Home Science**	**HMS501**	**CO1**	To Outline the importance and principles of Food Preservation
			CO2	To Enhance Knowledge about concept and Principles of Meal planning
			CO3	To Discuss Therapeutic Diets
			CO4	To Explain Common childhood emotions, common behavioral problems and solve their remedies
			CO5	To Demonstrate Language Development Types of Play.
			Practical	To Do Planning and preparation of diet
				To Practice Preservation of pickles, jam , squash
Sem.-V	**Functional English**	**FNC501**	**CO1**	To generate awareness among learners of issues deserving reporting in print and to stimulate them to rebond environment in print.
			CO2	To familiarize learners with different aspects of print journalism, its formats, its avenues.
			CO3	To enable learners to write news stories from the stage of news gathering to editing to their final presentation.
			CO4	To familiarize learner with the lay-out, equipment and

				functioning of a newspaper/magazine production centre
			CO5	To enable leaner to acquire the art and skills of feature writing to encourage freelancing among them.
			CO6	To generate awareness among learner of the aspects of graphic arts in Print Journalism.
Sem.-V	**Mathematics: Paper A** **(Analysis-I)**	**MAT501 A**	**CO1**	Determine Convergence of improper integrals with discontinuities in their domain or infinite limits of integration.
			CO2	Knowledge about Countable and uncountable sets.
			CO3	Solving integral as a function of parameter.
			CO4	Acquire the information about the Beta, Gamma function and evaluate it in various problems.
			CO 5	Learn the theory of Riemann integral, mean value theorems and use theory in solving definite integrals arising in different fields of science and engineering.
			CO 6	Apply the fundamental theorem of calculus to evaluate definite integrals.
Sem.-V	**Mathematics: Paper B** **(Modern Algebra)**	**MAT501 B**	**CO1**	Understanding of Groups, Subgroups, Lagrange's Theorem.
			CO2	Learn about Normal subgroups and Quotient Groups, Homomorphisms, Isomorphism Theorems.
			CO3	Knowledge of Conjugate elements, Class equation, Permutation Groups, Alternating groups and its simplicity.
			CO4	Exposure on Rings, Integral domains, Subrings and Ideals, Quotient Rings, Prime and Maximal Ideals.
			CO 5	Brief discussion on Homomorphisms, Isomorphism Theorems, Polynomial rings.
Sem.-V	**Mathematics: Paper C** **(Probability Theory)**	**MAT501 C**	**CO1**	Describe the concept Probability, conditional probability, Bayes Theorem
			CO2	Demonstrate the concept of random variables, density function, cumulative distribution function, moments and moment generating function.
			CO3	Develop the knowledge about distributions based on discrete random variables and apply them in real world problems.
			CO4	Develop the knowledge about distributions based on continuous random variables and apply them in real world problems.
			CO 5	Explain concepts used in Bivariate Random Variable
Sem.-V	**Computer Science-A** **(Project Management)**	**CS501A**	**CO1**	Learn about how a project needs to be established, organized, coordinated ,controlled and evaluated.
			CO2	Know the fundamentals of report writing
			CO3	Students are trained to meet the requirements of the Industry.
			CO4	Exposure to a variety of research projects and activities in order to enrich their academic experience
			CO 5	Develop skills in presentation and discussion of research topics in a public forum.
			CO 6	Be aware of the ethical, social, and security issues of information systems.

Sem.-V	**Computer Science-B** **(Relational Database Management System)**	**CS501B**	**CO1**	To Define basic function of DBMS
			CO2	To Understand database models & entity relationship models
			CO3	To Design and implement a database schema for a given problem domain
			CO4	To Apply the concept of normalization to reduce the tables and mapping of E-R diagrams to tables
			CO 5	To create algebraic queries by using the topic of relational algebra and calculus
			CO 6	To Identify the concurrency problems and learn the techniques to handle it
Sem.-V	**Music**	**MUV501**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand core musicological concepts described in treatises of various time periods.
			CO3	To understand about time theory of ragas of Indian classical music and Ragangpadhati.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about description and notation of Ragas and Taal(JhumaraTaal, SulTala, etc.)
			CO 6	To acquire the ability to play Teevra and sing one Dharupad.
Sem.-VI	**English Compulsory**	**ENG601**	**CO1**	Empower the students to read and analyse prose and critically appreciate literary texts.
			CO2	Gain extensive knowledge of English as a language in its various textual forms like prose and poetry from a variety of cultures, languages and historic periods and become creative, thoughtful, imaginative and effective communicators in a diverse and changing society.
			CO3	Enhance students' ability to use grammatical conventions and polish their writing skills.
			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	Know of 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	Know the beauty of the coherence of Language and literature.
Sem.-VI	**Punjabi Compulsory**	**PBC601**	**CO1**	Study and analysis of Novel.
			CO2	To motivate students to write an essay on various topics like cultural, academic, sports and literary.
			CO3	Provide knowledge of various aspects of Gurmukhi Lippi.
			CO4	Provide knowledge on the basis of word formation and types about the semantic.
			CO5	Define sentences.
			CO6	Provide practical knowledge of various types of sentences.
Sem.-	**History &**	**HCP601**	**CO1**	Understand various diplomatic developments in Europe.

VI	**Culture of Punjab**		**CO2**	Evaluate the causes of First World War and Second World War.Also analyze the peace settlement after the wars.
			CO3	Analyze modernization of Japan.
			CO4	Describe how Russia's traditional monarchy was replaced with world's first communist state and explain rise of communism in China.
			CO5	Explain causes of economic depression and Roosevelt's New deal policy.
			CO6	Describe decline of U.S.S.R. and rise of Unipolar world.
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	**Elective Hindi**	**HIN601**	**CO1**	Knowledge of Hindi language helps them to think critically while studying hindi literature. They are able to relate pleasure of literature and real life.
			CO2	Understanding the relation between society and literature by hindi literature in past and present.
			CO3	Understanding the relation between society and literature by hindi literature in past and present.
			CO4	Develop reading, writing and communication skills .
			CO5	The verbal and non-verbal skills of communication are developed .
			CO6	Get information about Alankar, Chhand in hindi literature.
Sem.-VI	**Elective Punjabi**	**PBI601**	**CO1**	Study of Punjabi poetry of medieval and colonial period.
			CO2	Study of Essay in modern Punjabi prose.
			CO3	Literary History of Punjabi Sufi poetry.
			CO4	Fundamental Knowledge of western poetic theory.
			CO5	Aristotle`s theory of imitation , the method of imitation , the method of psychoanalysis and the study of Marxism.
			CO6	To provide knowledge on definition of Linguistic and its relationship with other Systems as Science, psychology, social science and anthropology.

Sem.-VI	**History**	**HIS601**	**CO1**	Analyze impact of migration, rehabilitation and resettlement after 1947.
			CO2	Evaluate demand for Punjabi Suba and Reorganization Act of 1966.
			CO3	Describe Political, economic and educational development in post 1966 period.
			CO4	Describe Bluestar operation and its impact on Punjab society.
			CO5	Evaluate Socio-Economic development in 1980's and social and political issues of Punjab region.
			CO6	Describe development of Punjabi literature by BhaiVir Singh, Shiv Kumar Batalvi, AmritaPritam.
Sem.-VI	**Economics**	**ECO601**	**CO1**	Explain the features and characteristics of the Indian Economy.
			CO2	Describe the performance and problems of Industrial development.
			CO3	Explain the Indian tax structure, external trade and balance of payments.
			CO4	Describe the objectives, strategy and performance of Indian planning.
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	**Environment Conservation**	**ENC601**	**CO1**	To acquire knowledge about current environmental issues like climate , change global warming , population explosion , rain water harvesting and methods to resolve these issues.
			CO2	Green revolution and its impacts on environment with special reference to Punjab, Tehri dam, Narmada project, Bhopal gas tragedy, River cleaning project of Sant B.S. Seechewal (Punjab).
			CO3	Get knowledge about the role of Non- Governmental organizations in environmental protection.
			CO4	Chipko movement , For a living ganga by WWF, Transformation DTC fleet to CNG driven transport, Earth hour, Green peace ,Nitrate pollution in Punjab
			CO5	Learn about role of various international and national agencies

				:UNEP,UNDP,WWF,MOEF,CPCBin environment conservation and management. Learn about CITES, UNFCC, Montreal protocol, Kyoto protocol, and Copenhagen summit.
			CO6	Application of RS and GIS in Environment, study about biostatistics : To find mean, mode , median , standard deviation , correlation and regression.
Sem.-VI	**Physical Education**	**PED601**	**CO1**	Develops in the students awareness of physical, mental and emotional health and its importance.
			CO2	Enhances the interest of the students in sports.
			CO3	Enables the students become better enlightened and fit citizens of the country.
			CO4	Get to know of the various intricacies and insight knowledge of various sports.
			CO5	Enhances the qualities of leadership and promotes the concept of national integration.
			CO6	Makes individuals and society more fit and a better place to live in.
Sem.-VI	**Home Science**	**HMS601**	**CO1**	To Outline the importance and principles of Food Preservation
			CO2	To Enhance Knowledge about concept and Principles of Meal planning
			CO3	To Discuss Therapeutic Diets
			CO4	To Explain Common childhood emotions, common behavioral problems and solve their remedies
			CO5	To Demonstrate Language Development Types of Play.
			CO6	To Do Planning and preparation of diet
Sem.-VI	**Functional English**	**FNC601**	**CO1**	To equip learners with language proficiency in Business/work situations particularly in spoken interaction.
			CO2	To make learners aware of the special features of format and style of informal communication through various modes.
			CO3	To equip learners with techniques of written communication in business situations.
			CO4	To expand vocabulary and develop reading comprehension of material related to business.
			CO 5	To boost communication skills.
			CO 6	To instill skills of public speaking.
Sem.-VI	**Mathematics: Paper A (Analysis-II)**	**MAT601 A**	**CO1**	Learn to using Double and triple integrals to find area and volume.
			CO2	Change to polar coordinates, change of variable to cylindrical and spherical coordinates.
			CO3	Distinguish between the concepts of sequence and series and determine limits of sequence and convergence and approximate sum of series.
			CO4	Define, differentiate and integrate functions represented as power series expansion and fourier series expansion including Taylor series and solve related problems.

			CO 5	Knowledge about vector integration - line, surface and volume integrals
Sem.-VI	**Mathematics: Paper B (Linear Algebra)**	**MAT601 B**	**CO1**	To learn definition and examples of Vector Spaces, Subspaces, Algebra of subspaces, Linear span.
			CO2	Knowledge of Linear dependence and independence of vectors, Basis and dimension of a vector space.
			CO3	Understanding of linear transformations, Rank and Nullity of a linear transformation, Vector space of linear transformations.
			CO4	Solving exercises on linear transformations and matrices, Change of basis, eigenvalues and eigenvectors.
			CO 5	Exposure on Cayley-Hamilton theorem, Diagonalizable operators and matrices. Minimal polynomial of a linear operator.
Sem.-VI	**Mathematics: Paper C (Numerical Analysis)**	**MAT601 C**	**CO1**	Explain methods to find solutions to linear and nonlinear equations using numerical methods.
			CO2	Knowledge about Interpolation and numerical differentiation.
			CO3	Solving algebraic eigenvalue problems.
			CO4	Understand the methods to solve Ordinary differential equations.
			CO 5	Develop the knowledge about methods for solving integration of functions.
Sem.-VI	**Computer Science-A (E-Commerce)**	**CS601A**	**CO1**	Have knowledge of e-commerce, its components, structure of e-commerce
			CO2	Acquire a good knowledge of e-commerce
			CO3	Understand the principles and practices of e-commerce
			CO4	Discuss the trends in e-commerce
			CO 5	Explain the economic consequences of e-commerce
			CO 6	Understand the processes of developing and implementing e-commerce
Sem.-VI	**Computer Science-B (Web Programming)**	**CS601B**	**CO1**	An overview of creating static web pages using HTML.
			CO2	Implement the concepts of built in functions in programming, control structures in programming.
			CO3	Read, write and execute PHP programs.
			CO4	Format and validate web pages.
			CO 5	Demonstrate the implementation of PHP into current HTML based websites.
			CO 6	Develop PHP programs using databases.
Sem.-VI	**Music**	**MUV601**	**CO1**	To identify the contributions of important musicians, composers of various time period.
			CO2	To understand the role of Akashvani/Doordarshan, Electronic medium towards the popularization of Indian Classic Music.
			CO3	To understand verities of Tana.
			CO4	To understand various musical terms.
			CO 5	To acquire knowledge about description and notation of Ragas and Taal (Deep Chandi, Dhanmar and Ada Char Taal)
			CO 6	To acquire the ability to play Adachartaal and ability to sing one Dhamar.

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

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
HIN101	**CO1**	2	3	2	1	2	1	X	1	2	2	2	2	1	2	2
	CO2	3	2	3	1	2	1	2	1	2	3	2	3	3	2	2
	CO3	3	2	2	1	1	X	1	X	1	2	2	3	3	2	3
	CO4	2	3	1	2	1	X	1	X	1	2	2	1	1	2	2
	CO5	1	2	2	1	1	1	X	X	1	2	2	1	1	2	2
	CO6	3	3	1	1	2	2	1	1	1	2	2	2	1	2	2
PBI101	**CO1**	2	2	2	1	2	X	X	1	1	2	2	1	2	1	2
	CO2	2	2	1	2	2	1	X	X	1	2	2	2	1	2	1
	CO3	3	3	2	X	1	1	X	1	1	2	2	1	1	2	2
	CO4	2	2	1	1	2	2	X	X	1	2	2	2	2	2	2
	CO5	2	2	2	X	2	1	1	X	1	2	2	2	2	1	2
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
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
POL101	**CO1**	3	3	3	3	3	3	1	2	3	1	2	3	2	1	1
	CO2	3	3	2	2	1	2	X	1	1`	1	2	3	3	1	1
	CO3	3	3	3	2	2	3	2	1	2	1	2	3	2	1	1
	CO4	3	3	3	3	3	2	2	1	2	1	2	2	2	2	1
	CO5	3	3	3	2	1	2	1	2	1	X	2	1	2	1	1
	CO6	3	3	2	1	1	1	2	3	X	2	1	2	1	1	X
ENC101	**CO1**	3	3	3	3	2	2	1	2	2	2	3	1	1	3	2
	CO2	3	2	3	3	3	2	2	2	2	2	1	2	2	3	2
	CO3	1	3	3	2	2	3	1	2	2	2	1	1	2	2	2
	CO4	2	1	2	2	3	2	3	2	2	1	1	1	1	2	3
	CO5	3	1	3	2	2	2	2	2	2	2	1	2	X	2	3
	CO6	X	2	2	2	1	2	1	3	2	2	1	1	2	3	3
PED101	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS10	**CO1**	1	1	1	2	X	1	2	1	1	2	1	2	2	1	2

1	**CO2**	1	2	1	2	1	1	2	1	1	3	1	2	1	1	2
	CO3	1	2	1	2	X	1	2	1	1	3	2	2	2	1	2
	CO4	1	2	1	2	X	1	2	1	1	3	1	1	1	1	2
	CO5	1	1	1	2	X	1	2	1	1	2	2	2	2	1	2
	Practical	1	1	1	2	1	1	2	1	1	3	2	3	1	1	2
FNC101	**CO1**	2	3	1	1	1	1	1	X	1	3	3	3	X	2	2
	CO2	2	3	1	1	1	1	1	X	1	2	2	2	X	1	2
	CO3	2	3	1	1	1	1	3	X	1	2	2	2	X	2	2
	CO4	2	3	1	1	1	1	1	X	1	2	2	2	X	1	2
	CO5	2	3	2	2	1	2	1	X	1	2	2	2	X	1	2
	CO6	2	3	2	2	1	2	1	X	1	2	2	2	X	1	2
MAT101A	**CO1**	1	3	2	2	1	2	3	3	X	1	2	X	2	2	2
	CO2	X	2	1	1	1	3	2	3	X	2	2	2	1	2	2
	CO3	1	3	X	X	X	2	3	3	1	1	2	X	1	1	2
	CO4	1	3	2	X	3	3	3	2	X	2	2	1	2	2	3
	CO5	1	3	2	1	X	2	1	2	1	X	2	1	1	3	1
MAT101B	**CO1**	3	1	2	3	1	X	1	X	1	X	2	1	2	2	2
	CO2	2	2	2	3	2	2	1	X	1	1	2	2	2	2	2
	CO3	3	3	3	3	2	3	2	2	2	3	3	2	2	3	1
	CO4	3	X	1	3	X	X	1	1	X	2	2	1	X	1	2
	CO5	3	X	2	3	1	1	2	1	1	1	3	1	2	2	3
MAT101C	**CO1**	2	X	3	2	2	1	X	X	X	X	2	1	2	X	X
	CO2	2	X	3	2	3	1	X	X	X	X	2	1	2	X	X

	CO3	2	X	3	2	3	1	X	X	X	X	2	1	2	X	X
	CO4	2	X	3	2	2	1	X	X	X	X	2	1	2	X	X
	CO5	2	X	2	2	2	1	X	X	X	X	2	1	2	X	X
CS101A	**CO1**	1	1	1	1	1	X	1	X	1	1	2	3	1	X	2
	CO2	1	X	1	2	1	1	1	X	1	1	2	3	2	X	2
	CO3	1	1	1	1	1	1	1	1	1	1	2	3	1	X	2
	CO4	1	1	1	X	1	1	1	1	1	1	2	2	2	X	2
	CO5	1	X	1	1	1	X	1	X	1	1	2	2	X	X	2
	CO6	1	X	1	1	1	X	1	X	1	1	2	2	2	X	2
CS101B	**CO1**	1	1	1	1	1	X	1	X	1	1	2	3	1	X	2
	CO2	1	X	1	2	1	1	1	X	1	1	2	3	2	X	2
	CO3	1	1	1	1	1	1	1	1	1	1	2	3	1	X	2
	CO4	1	1	1	X	1	1	1	1	1	1	2	2	2	X	2
	CO5	1	X	1	1	1	X	1	X	1	1	2	2	X	X	2
	CO6	1	X	1	1	1	X	1	X	1	1	2	2	2	X	2
MUV101	**CO1**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO2	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2
	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2
Semester II																
ENG201	**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	1	1	X	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	3	1	1	1	X	1	2	X	2	2	1	1
PBC201	**CO1**	3	3	1	1	1	1	1	1	2	2	2	2	2	2	3
	CO2	3	2	2	2	2	2	X	X	1	2	2	2	2	1	2
	CO3	2	2	1	1	1	X	1	X	1	2	2	1	X	X	2
	CO4	2	3	2	1	1	X	1	X	1	2	2	1	2	2	2
	CO5	2	3	1	1	1	2	1	1	1	2	2	2	2	1	2
HCP201	**CO1**	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
	CO2	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
	CO3	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
	CO4	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
	CO5	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
	CO6	2	1	2	X	2	1	X	X	2	X	2	2	2	1	1
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
HIN201	**CO1**	2	3	2	1	2	1	X	1	2	2	2	2	1	2	2
	CO2	3	2	3	1	2	1	2	1	2	3	2	3	3	2	2
	CO3	3	2	2	1	1	X	1	X	1	2	2	3	3	2	3

	CO4	2	3	1	2	1	X	1	X	1	2	2	1	1	2	2
	CO5	1	2	2	1	1	1	X	X	1	2	2	1	1	2	2
	CO6	3	3	1	1	2	2	1	1	1	2	2	2	1	2	2
PBI201	**CO1**	2	2	2	1	2	X	X	1	1	2	2	1	2	1	2
	CO2	2	2	1	2	2	1	X	X	1	2	2	2	1	2	1
	CO3	2	2	2	X	2	1	1	X	1	2	2	2	2	1	2
	CO4	2	1	2	1	2	2	X	X	1	2	2	2	2	2	2
	CO5	3	3	2	X	1	1	X	1	1	2	2	1	1	2	2
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
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
POL201	**CO1**	3	2	2	3	2	2	2	2	2	X	1	2	X	2	2
	CO2	1	X	1	2	2	2	2	1	1	X	2	2	1	1	1
	CO3	2	3	3	2	2	1	1	1	2	X	2	1	1	1	1
	CO4	3	3	3	2	2	2	2	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
ENC201	**CO1**	2	2	3	3	2	2	2	3	3	2	3	3	1	3	2
	CO2	3	2	2	3	3	2	2	2	2	2	1	2	2	2	1
	CO3	2	3	3	2	2	3	1	2	2	2	1	1	2	2	3
	CO4	2	1	2	1	2	2	3	3	2	1	1	1	1	2	3
	CO5	3	1	3	2	1	2	2	2	2	2	1	2	1	2	3
	CO6	1	2	1	2	1	2	1	3	2	2	1	1	2	3	2
PED201	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS201	**CO1**	1	2	1	2	1	1	2	1	2	2	1	2	2	1	2
	CO2	1	2	1	2	1	2	2	1	2	2	1	2	1	1	2
	CO3	1	3	1	2	1	1	2	1	2	2	2	2	1	1	2
	CO4	1	2	1	2	1	1	2	1	2	2	1	2	1	1	2
	CO5	1	1	1	2	1	1	2	1	2	2	2	2	2	1	2
	Practical	1	2	1	2	1	1	1	1	1	2	2	1	2	1	2
		1	2	1	2	1	2	2	2	1	2	2	1	2	1	2
FNC201	**CO1**	2	3	2	1	2	1	1	X	2	2	2	1	1	1	2
	CO2	2	3	2	1	2	1	1	X	2	2	2	2	1	1	2
	CO3	2	3	2	1	2	1	1	X	2	2	2	2	1	1	2

	CO4	2	3	2	1	2	1	1	X	2	2	2	2	1	1	2
	CO5	2	3	3	1	2	1	1	X	2	2	2	2	1	1	2
	CO6	2	3	2	1	2	1	1	X	2	2	2	2	1	1	2
MAT201A	**CO1**	3	X	2	3	2	X	1	1	X	X	2	1	2	2	2
	CO2	2	1	2	2	1	X	X	1	1	1	2	2	2	2	2
	CO3	1	X	3	3	1	X	2	X	1	2	2	X	2	2	2
	CO4	3	1	3	3	1	1	1	1	1	1	2	2	1	2	1
	CO5	2	X	2	3	2	1	1	1	2	1	3	2	2	2	3
MAT201B	**CO1**	3	X	1	2	2	1	X	X	X	X	1	1	1	1	X
	CO2	3	X	2	1	1	1	X	X	X	X	1	1	1	1	X
	CO3	3	X	2	1	1	1	X	X	X	X	1	2	1	1	X
	CO4	3	X	1	1	1	1	X	X	X	X	1	1	1	1	X
	CO5	3	X	2	2	2	1	X	X	X	X	1	2	1	1	X
	CO6	3	X	1	2	1	1	X	X	X	X	1	1	1	1	X
MAT201C	**CO1**	3	x	1	2	2	1	x	x	x	x	1	1	1	1	x
	CO2	3	x	2	1	1	1	x	x	x	x	1	1	1	1	x
	CO3	3	x	2	1	1	1	x	x	x	x	1	2	1	1	x
	CO4	3	x	1	1	1	1	x	x	x	x	1	1	1	1	x
	CO5	3	x	2	2	2	1	x	x	x	x	1	2	1	1	x
	CO6	3	x	1	2	1	1	x	x	x	x	1	1	1	1	x
CS201A	**CO1**	1	1	1	1	1	X	1	X	1	1	2	3	1	X	2
	CO2	1	X	1	2	1	1	1	X	1	1	2	3	2	X	2
	CO3	1	1	1	1	1	1	1	1	1	1	2	3	1	X	2
	CO4	1	1	1	X	1	1	1	1	1	1	2	2	2	X	2

	CO5	1	X	1	1	1	X	1	X	1	1	2	2	X	X	2
	CO6	1	X	1	1	1	X	1	X	1	1	2	2	2	X	2
CS201B	**CO1**	1	1	1	1	1	X	1	X	1	1	2	3	1	X	2
	CO2	1	X	1	2	1	1	1	X	1	1	2	3	2	X	2
	CO3	1	1	1	1	1	1	1	1	1	1	2	3	1	X	2
	CO4	1	1	1	X	1	1	1	1	1	1	2	2	2	X	2
	CO5	1	X	1	1	1	X	1	X	1	1	2	2	X	X	2
	CO6	1	X	1	1	1	X	1	X	1	1	2	2	2	X	2
MUV201	**CO1**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO2	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2
	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2
Semester III																
ENG301	**CO1**	3	3	3	1	2	2	X	X	2	X	X	3	2	X	2
	CO2	3	3	2	2	1	X	X	X	2	X	X	3	2	X	2
	CO3	3	3	X	3	X	X	X	X	X	2	X	X	X	X	X
	CO4	3	3	1	X	1	X	3	X	X	X	1	3	2	3	2
	CO5	3	3	3	X	2	2	X	X	2	X	X	3	2	X	2
	CO6	3	3	X	3	X	2	X	X	2	2	X	X	X	X	X
PBC301	**CO1**	1	2	1	3	1	X	2	X	3	2	3	2	3	1	1
	CO2	3	1	3	X	3	2	3	3	1	1	1	X	2	2	2
	CO3	2	3	X	2	1	1	X	1	2	3	2	3	1	X	X

	CO4	1	X	2	1	2	3	3	2	X	1	X	2	1	3	3
	CO5	X	2	3	2	X	2	1	3	2	X	3	1	X	2	2
	CO6	2	1	1	3	3	1	2	1	1	2	2	3	2	1	1
HCP301	**CO1**	2	1	3	X	2	X	X	X	2	X	2	2	X	1	1
	CO2	2	1	2	X	2	X	X	X	2	X	2	2	3	1	1
	CO3	2	1	3	X	2	X	X	X	2	X	2	2	3	1	1
	CO4	2	1	2	X	2	X	X	X	2	X	2	2	3	1	1
	CO5	2	1	2	X	2	X	X	X	2	X	2	2	3	1	1
	CO6	2	1	2	X	2	X	X	X	2	X	2	2	3	1	1
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
HIN301	**CO1**	2	2	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO2	2	2	1	2	2	1	1	1	1	2	2	2	2	1	2
	CO3	2	2	1	1	2	2	1	X	1	2	2	3	2	2	3
	CO4	2	2	1	1	1	1	1	1	2	2	1	2	2	3	3
	CO5	3	3	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO6	3	2	2	1	2	2	1	2	2	2	1	1	X	2	3
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
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
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
POL301	**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	3	2	1
	CO6	2	3	3	1	X	1	1	1	2	X	2	1	1	2	X
ENC301	**CO1**	3	2	2	2	1	3	1	2	1	3	1	2	2	1	3
	CO2	1	2	X	3	3	2	2	2	2	2	1	2	2	3	1
	CO3	2	2	3	2	2	X	1	1	2	2	1	1	2	2	2
	CO4	3	2	1	2	2	2	3	2	2	2	1	1	1	2	1

	CO5	3	2	3	2	2	2	2	2	2	2	1	2	X	2	3
	CO6	2	1	X	2	1	2	1	3	3	2	1	2	2	3	2
PED301	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS301	**CO1**	2	1	2	2	1	1	1	1	2	1	2	3	X	1	1
	CO2	1	X	1	1	2	1	1	1	1	1	3	1	1	1	1
	CO3	1	1	1	X	1	X	X	X	X	2	1	1	X	X	1
	CO4	1	1	2	1	X	X	1	1	X	1	2	X	1	1	2
	CO5	X	2	1	X	1	1	2	2	1	1	2	X	X	X	1
	practical	1	1	1	X	1	1	1	1	1	2	2	1	2	2	3
FNC301	**CO1**	2	3	1	1	1	1	2	X	2	3	3	2	1	2	2
	CO2	2	3	1	1	1	1	2	X	2	3	2	2	1	2	2
	CO3	2	3	1	1	1	1	2	X	2	3	2	2	1	2	2
	CO4	2	3	1	1	1	1	2	X	2	3	2	2	1	1	2
	CO5	2	3	2	2	1	1	2	X	2	2	2	2	1	1	2
	CO6	2	3	2	2	1	1	2	X	2	3	2	2	1	1	2
MAT301A	**CO1**	3	1	2	3	1	X	X	1	X	X	2	X	3	1	2
	CO2	3	X	3	3	2	1	2	3	2	X	2	2	X	1	3
	CO3	2	1	2	2	2	1	3	X	X	X	2	1	1	2	3

	CO4	3	1	3	3	1	X	2	1	1	1	2	2	3	3	3
	CO5	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
MAT301B	**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
MAT301C	**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
CS301A	**CO1**	X	X	X	X	X	X	X	X	X	3	X	X	X	X	X
	CO2	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO3	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO4	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO5	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO6	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X
CS301B	**CO1**	X	X	X	X	X	X	X	X	X	3	X	X	X	X	X
	CO2	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO3	X	X	X	X	X	2	X	X	X	2	X	X	X	X	X
	CO4	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO5	X	X	X	X	X	X	X	X	X	2	X	X	X	1	X
MUV30	**CO1**	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X

1	**CO2**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2
	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2
Semester IV																
ENG401	**CO1**	3	3	3	2	2	2	1	1	2	2	1	2	1	X	2
	CO2	3	3	2	2	1	1	1	1	2	2	1	2	1	1	2
	CO3	3	3	3	2	2	1	1	1	2	2	1	2	1	X	2
	CO4	3	3	2	2	1	1	1	1	2	2	1	2	1	X	2
	CO5	3	3	1	2	2	X	3	1	2	2	3	2	1	3	2
	CO6	3	3	3	2	2	1	1	1	2	2	1	2	1	X	2
PBC401	**CO1**	1	1	2	3	2	3	1	2	1	3	2	1	2	3	3
	CO2	2	3	1	X	1	X	2	3	2	X	3	X	3	1	1
	CO3	3	X	3	1	3	2	1	1	3	2	X	3	X	2	2
	CO4	X	2	1	2	2	1	3	X	2	1	2	1	1	X	X
	CO5	2	1	X	2	1	3	X	2	1	3	1	2	3	1	1
	CO6	1	3	2	3	X	1	3	1	X	1	3	1	2	3	3
HCP401	**CO1**	2	1	1	X	1	X	X	X	2	X	2	2	X	1	1
	CO2	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO3	2	1	2	X	1	X	X	X	2	X	2	2	1	1	1
	CO4	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO5	2	1	2	X	2	X	X	X	2	X	2	2	1	1	1
	CO6	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1

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
HIN401	**CO1**	2	2	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO2	2	2	1	2	2	1	1	1	1	2	2	2	2	1	2
	CO3	2	2	1	1	2	2	1	X	1	2	2	3	2	2	3
	CO4	2	2	1	1	1	1	1	1	2	2	1	2	2	3	3
	CO5	3	3	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO6	3	2	2	1	2	2	1	2	2	2	1	1	X	2	3
PBI401	**CO1**	3	2	3	2	2	1	X	X	1	2	2	2	2	2	3
	CO2	1	2	X	X	1	X	X	X	2	2	2	1	1	1	2
	CO3	3	3	2	1	2	1	1	1	1	2	2	2	2	2	3
	CO4	3	3	2	1	1	1	X	1	1	3	2	2	X	1	2
	CO5	2	2	2	X	1	1	X	1	1	2	2	2	1	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
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
POL401	**CO1**	3	3	3	2	1	1	X	2	1	X	2	2	2	X	1
	CO2	3	3	3	2	1	2	1	1	X	X	1	1	2	1	X
	CO3	3	3	3	1	1	2	1	X	X	X	1	1	2	2	1
	CO4	3	3	3	2	1	1	X	1	2	X	1	2	X	2	X
	CO5	3	3	3	1	1	2	1	1	1	X	X	1	2	2	1
	CO6	2	3	3	2	1	2	1	1	1	X	1	1	2	3	X
ENC401	**CO1**	1	2	2	2	1	3	1	3	3	3	3	2	2	1	3
	CO2	1	2	2	3	3	2	2	2	2	2	3	2	2	3	1
	CO3	1	2	3	2	2	2	1	1	2	2	1	3	2	3	2
	CO4	3	2	1	2	2	2	3	3	2	2	3	1	1	2	1
	CO5	3	2	3	2	2	3	2	2	2	2	1	2	X	2	3
	CO6	2	1	2	2	1	2	1	3	3	2	1	2	2	3	2
PED401	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS40	**CO1**	2	1	1	2	1	1	2	1	1	2	1	2	2	2	2

1	**CO2**	2	X	1	1	1	1	1	2	X	1	1	2	1	1	2
	CO3	X	1	1	2	1	1	2	X	X	3	2	2	2	2	2
	CO4	1	1	1	1	X	1	2	X	X	2	1	1	1	1	2
	CO5	X	X	1	2	1	1	2	1	1	2	2	2	2	1	2
FNC401	**CO1**	2	3	2	1	2	X	1	X	2	2	2	x	1	1	2
	CO2	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO3	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO4	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO5	2	3	3	1	2	X	1	X	2	2	2	2	1	1	2
	CO6	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
MAT401A	**CO1**	3	1	2	3	1	X	X	1	X	X	2	X	3	1	2
	CO2	3	X	3	3	2	1	2	3	2	X	2	2	X	1	3
	CO3	2	1	2	2	2	1	3	X	X	X	2	1	1	2	3
	CO4	3	1	3	3	1	X	2	1	1	1	2	2	3	3	3
	CO5	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
MAT401B	**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
MAT401C	**CO1**	3	1	2	3	1	X	X	1	X	X	2	X	3	1	2
	CO2	3	X	3	3	2	1	2	3	2	X	2	2	X	1	3
	CO3	2	1	2	2	2	1	3	X	X	X	2	1	1	2	3
	CO4	3	1	3	3	1	X	2	1	1	1	2	2	3	3	3

	CO5	3	2	2	2	X	X	1	X	X	X	3	2	1	2	2
CS401A	**CO1**	X	X	X	X	X	X	X	X	X	3	X	X	X	X	X
	CO2	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO3	X	X	X	X	X	2	X	X	X	2	X	X	X	X	X
	CO4	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO5	X	X	X	X	X	X	X	X	X	2	X	X	X	1	X
	CO6	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X
CS401B	**CO1**	X	X	X	X	X	X	X	X	X	3	X	X	X	X	X
	CO2	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO3	X	X	X	X	X	2	X	X	X	2	X	X	X	X	X
	CO4	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X
	CO5	X	X	X	X	X	X	X	X	X	2	X	X	X	1	X
	CO6	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X
MUV401	**CO1**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO2	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2
	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2
Semester V																
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	1	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	1	1	1	1	X	1	2	2	2	12
PBC501	**CO1**	2	3	2	2	2	2	1	X	2	2	2	3	3	2	2
	CO2	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO3	3	2	2	1	1	1	1	1	1	2	2	1	1	1	2
	CO4	2	3	3	1	1	1	1	1	1	2	2	2	1	1	2
	CO5	3	2	2	1	1	1	1	1	1	2	2	1	1	1	2
HCP501	**CO1**	2	1	1	X	1	X	X	X	2	X	2	2	X	1	1
	CO2	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO3	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO4	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO5	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO6	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
ENO501	**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
HIN501	**CO1**	2	2	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO2	2	2	1	1	2	2	1	X	1	2	2	3	2	2	3
	CO3	2	2	1	1	1	1	1	1	2	2	1	2	2	3	3
	CO4	1	3	1	1	1	X	X	X	1	2	2	2	2	2	2
	CO5	2	2	1	X	X	X	1	X	1	2	2	1	2	2	2

	CO6	3	2	2	1	1	1	X	X	1	2	2	2	1	1	2
PBI501	**CO1**	3	2	2	1	2	1	1	X	2	2	2	2	3	2	2
	CO2	2	1	2	2	2	2	2	X	1	1	1	2	2	2	2
	CO3	2	2	2	2	2	2	1	1	2	1	2	2	2	1	2
	CO4	2	2	2	2	2	2	1	X	2	2	2	1	1	1	2
	CO5	2	2	2	1	1	1	1	X	2	1	2	2	2	2	2
HIS501	**CO1**	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO2	3	2	3	2	3	1	1	3	2	1	2	2	2	2	2
	CO3	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO4	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO5	3	2	3	2	3	1	1	3	2	1	2	2	1	2	2
	CO6	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
ECO501	**CO1**	1	X	1	1	X	X	X	X	X	X	1	X	X	X	2
	CO2	1	X	2	3	2	X	X	1	1	X	1	1	X	X	1
	CO3	2	X	1	X	1	X	X	X	2	1	2	1	X	X	2
	CO4	2	1	3	2	1	X	X	1	1	X	1	X	X	X	2
	CO5	1	X	1	1	X	X	X	X	X	X	1	X	X	X	2
	CO6	1	X	2	3	2	X	X	1	1	X	1	1	X	X	1
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	3	2	2	1	2	1	2	X	2	1	2	2	1
	CO4	3	3	3	2	2	1	2	2	1	X	1	X	2	2	2
	CO5	3	3	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
ENC501	**CO1**	2	2	1	3	3	3	2	3	1	3	1	2	3	1	2
	CO2	3	2	2	2	1	3	3	2	2	2	2	2	2	3	3
	CO3	2	3	3	2	X	3	1	1	2	2	2	1	2	2	3
	CO4	2	2	1	2	2	2	3	2	2	2	2	1	1	2	2
	CO5	3	3	3	3	2	2	X	2	2	2	3	2	3	2	1
	CO6	3	X	2	2	3	2	2	2	3	3	2	3	1	3	1
PED501	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS501	**CO1**	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO2	3	2	3	2	3	1	1	3	2	1	2	2	2	2	2
	CO3	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO4	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
	CO5	3	2	3	2	3	1	1	3	2	1	2	2	1	2	2
	CO6	3	2	2	2	2	1	1	2	2	1	2	2	1	2	2
FNC501	**CO1**	2	1	1	1	1	1	2	X	2	3	3	2	1	1	2
	CO2	2	1	1	1	1	1	2	X	2	3	2	2	1	1	2
	CO3	2	1	1	1	1	1	2	X	2	3	2	2	1	1	2
	CO4	2	1	1	1	1	1	2	X	2	3	2	2	1	1	2
	CO5	2	1	1	2	1	1	2	X	2	3	2	2	1	1	2

	CO6	2	1	1	2	1	1	2	X	2	3	2	2	1	1	2
MAT501A	**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
MAT501B	**CO1**	3	1	3	3	2	X	1	X	1	1	2	2	2	2	3
	CO2	3	1	3	3	2	X	1	1	2	3	2	1	1	2	3
	CO3	2	X	2	3	3	1	1	X	1	2	3	X	3	2	2
	CO4	3	X	3	3	3	1	1	X	1	3	3	X	3	2	3
	CO5	3	1	2	3	1	1	2	2	1	1	2	3	3	3	3
	CO6	3	1	3	3	2	X	1	X	1	1	2	2	2	2	3
MAT501C	**CO1**	3	1	2	3	2	1	2	1	3	X	2	1	X	2	2
	CO2	3	1	2	3	2	2	1	2	2	X	1	1	X	1	2
	CO3	3	1	2	3	3	3	1	2	2	X	2	1	X	1	2
	CO4	3	1	2	3	3	3	1	2	2	X	2	1	X	1	2
	CO5	3	1	1	3	2	2	1	2	1	X	1	1	X	1	2
CS501A	**CO1**	2	2	1	X	1	X	1	X	X	2	1	1	1	X	X
	CO2	X	2	1	X	X	X	X	X	X	1	1	X	X	X	X
	CO3	X	2	X	X	X	X	X	X	2	2	X	X	1	X	X
	CO4	X	2	X	2	X	X	X	X	1	1	1	X	X	1	X
	CO5	X	X	X	X	X	X	X	2	X	1	1	X	X	X	X
	CO6	X	X	X	X	X	X	X	2	2	1	1	X	X	1	X

CS501B	**CO1**	1	X	X	X	1	X	1	X	X	X	X	X	X	X	X
	CO2	1	X	1	X	X	X	X	X	X	X	X	X	X	X	X
	CO3	1	X	1	X	X	X	X	X	1	X	X	X	X	X	X
	CO4	1	X	1	2	X	X	X	X	1	1	1	X	X	1	X
	CO5	1	X	1	X	X	X	X	X	X	1	1	X	X	X	X
	CO6	1	X	1	X	X	X	X	X	X	X	X	X	X	1	X
MUV501	**CO1**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO2	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2
	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2
Semester VI																
ENG601	**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	1	1	1	X	1	2	2	1	1
PBC601	**CO1**	2	2	2	1	2	1	X	1	1	1	2	2	2	1	2
	CO2	2	2	2	2	2	2	2	1	2	1	2	2	2	1	2
	CO3	2	2	1	X	2	X	X	1	1	2	1	2	1	2	2
	CO4	1	1	2	X	2	X	X	2	2	1	1	1	2	1	1
	CO5	2	1	2	1	1	1	X	1	2	X	1	1	2	1	1

	CO6	2	2	1	X	2	X	X	1	1	2	1	2	1	2	2
HCP601	**CO1**	2	1	1	X	2	X	X	X	2	X	2	2	X	1	1
	CO2	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO3	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO4	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO5	2	1	1	X	1	X	X	X	2	X	2	2	1	1	1
	CO6	2	1	1	X	1	X	X	X	2	X	2	2	1	1	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
HIN601	**CO1**	2	2	2	2	2	1	1	X	1	2	2	2	3	2	3
	CO2	2	2	1	1	2	2	1	X	1	2	2	3	2	2	3
	CO3	2	2	1	1	1	1	1	1	2	2	1	2	2	3	3
	CO4	1	3	1	1	1	X	X	X	1	2	2	2	2	2	2
	CO5	2	2	1	X	X	X	1	X	1	2	2	1	2	2	2
	CO6	3	2	2	1	1	1	X	X	1	2	2	2	1	1	2
PBI601	**CO1**	2	2	1	1	1	1	1	X	1	1	2	2	2	1	2
	CO2	2	2	2	1	1	1	1	1	2	2	2	1	2	2	2
	CO3	2	1	2	1	1	1	2	X	1	1	2	2	2	2	2
	CO4	3	1	2	1	1	1	1	X	1	1	1	2	2	1	2
	CO5	3	1	2	1	1	1	1	X	1	1	1	2	2	1	2

	CO6	2	1	2	1	2	2	1	1	1	2	2	2	2	2	3
HIS601	**CO1**	3	2	3	2	2	1	1	2	2	1	2	2	X	2	2
	CO2	3	2	3	2	3	1	1	3	2	1	2	2	X	2	2
	CO3	3	2	3	2	3	1	1	2	2	1	2	2	X	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
ECO601	**CO1**	1	X	1	1	X	X	X	X	X	X	1	X	X	X	2
	CO2	1	X	2	3	2	X	X	1	1	X	1	1	X	X	1
	CO3	2	X	1	X	1	X	X	X	2	1	2	1	X	X	2
	CO4	2	1	3	2	1	X	X	1	1	X	1	X	X	X	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	2	2	2	1	X	X	1	2	1	1	2
	CO5	3	3	3	1	2	1	2	2	X	X	1	2	1	1	2
	CO6	2	3	3	1	2	1	2	2	1	X	X	1	2	1	1
ENC601	**CO1**	3	2	1	3	2	3	2	1	1	3	1	2	3	1	2
	CO2	1	2	2	2	1	3	3	2	2	2	2	3	2	3	3
	CO3	2	3	3	2	2	3	1	1	2	2	2	1	2	2	3
	CO4	1	2	1	2	2	2	3	3	2	2	2	1	1	2	2
	CO5	3	3	3	3	2	2	3	2	2	2	3	2	3	2	1
	CO6	3	2	2	2	3	2	2	2	3	3	2	3	2	3	2
PED601	**CO1**	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3

	CO2	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO3	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO4	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO5	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
	CO6	3	X	2	X	X	X	3	X	X	X	3	3	3	X	3
HMS601	**CO1**	2	2	1	2	1	1	2	1	2	2	1	2	2	1	2
	CO2	2	2	2	2	1	2	2	1	2	1	1	1	1	1	2
	CO3	2	3	2	2	1	1	1	1	1	2	2	1	1	1	2
	CO4	2	2	1	2	1	1	2	1	2	1	1	2	1	1	2
	CO5	2	1	1	2	1	1	2	1	2	2	2	2	2	1	2
FNC601	**CO1**	2	3	2	1	2	X	1	X	2	2	2	x	1	1	2
	CO2	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO3	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO4	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
	CO5	2	3	3	1	2	X	1	X	2	2	2	2	1	1	2
	CO6	2	3	2	1	2	X	1	X	2	2	2	2	1	1	2
MAT601A	**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
MAT601B	**CO1**	3	1	2	2	X	1	3	1	2	X	1	1	2	1	1
	CO2	3	X	2	3	1	X	1	1	X	X	3	1	2	1	2
	CO3	3	2	2	3	1	X	2	1	2	1	3	X	2	2	2

	CO4	2	1	3	3	2	2	2	X	1	1	2	X	2	1	2
	CO5	3	X	3	2	2	1	2	1	2	3	3	X	2	2	3
MAT601C	**CO1**	3	1	2	2	1	2	1	3	1	2	X	X	X	1	3
	CO2	3	1	2	2	2	3	1	3	1	2	X	1	X	1	3
	CO3	3	1	2	1	X	2	1	3	1	2	X	X	X	X	3
	CO4	3	1	2	2	1	1	1	3	1	2	X	X	X	X	3
	CO5	3	1	2	3	2	3	1	3	1	2	X	1	X	1	3
CS601A	**CO1**	1	X	X	1	X	X	1	X	X	1	X	X	X	X	X
	CO2	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
	CO3	1	X	X	1	X	X	X	X	1	1	X	X	X	X	X
	CO4	1	X	X	1	X	X	X	X	1	1	X	X	X	X	X
	CO5	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
	CO6	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
CS601B	**CO1**	1	X	X	1	X	X	1	X	X	1	X	X	X	X	X
	CO2	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
	CO3	1	X	X	1	X	X	X	X	1	1	X	X	X	X	X
	CO4	1	X	X	1	X	X	X	X	1	1	X	X	X	X	X
	CO5	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
	CO6	1	X	X	1	X	X	X	X	X	1	X	X	X	X	X
MUV601	**CO1**	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO2	3	3	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO3	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO4	3	1	1	X	X	1	1	X	2	1	2	2	1	1	2
	CO5	3	1	X	X	X	1	1	X	2	1	2	2	1	1	2

	CO6	3	1	2	X	2	2	2	1	3	1	2	2	1	1	2

Mapping of Course Outcomes (CO) with Programme Specific Outcomes (PSO)

College code	Course Out-comes	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
ENG101	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
PBC101	**CO1**	3	3	3	2	2
	CO2	3	3	2	3	2
	CO3	2	3	3	2	2
	CO4	1	1	3	1	2
	CO5	1	1	2	1	X
HCP101	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO101	**CO1**	2	1	1	1	1
	CO2	1	1	1	X	1
	CO3	1	X	2	1	1

	CO4	1	X	2	X	X
	CO5	1	X	2	X	X
	CO6	1	X	2	X	X
HIN101	**CO1**	2	2	2	1	1
	CO2	2	3	2	2	2
	CO3	2	3	2	2	2
	CO4	1	1	2	X	1
	CO5	2	2	2	2	2
	CO6	2	2	2	2	2
PBI101	**CO1**	2	2	1	2	2
	CO2	2	2	1	2	2
	CO3	1	1	X	1	1
	CO4	2	2	1	2	2
	CO5	2	2	1	2	2
HIS101	**CO1**	3	3	3	3	2
	CO2	3	3	3	3	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	2	2
	CO6	3	3	3	2	2
ECO101	**CO1**	3	3	3	2	X
	CO2	3	3	2	1	X
	CO3	3	3	3	2	X
	CO4	3	3	3	3	X
	CO5	3	2	2	3	X
	CO6	3	2	2	2	X
POL101	**CO1**	3	3	2	3	2

	CO2	3	3	2	3	2
	CO3	3	3	3	3	2
	CO4	3	3	2	3	2
	CO5	3	2	2	2	2
	CO6	3	2	3	3	2
ENC101	**CO1**	3	X	1	2	3
	CO2	2	X	2	1	3
	CO3	1	1	2	1	1
	CO4	1	1	3	1	1
	CO5	3	1	2	1	1
	CO6	1	1	2	1	2
PED101	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X
	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS101	**CO1**	1	X	2	3	X
	CO2	X	X	2	2	X
	CO3	X	X	1	1	X
	CO4	X	X	1	1	X
	CO5	X	X	X	1	X
FNC101	**CO1**	3	X	2	2	1
	CO2	2	X	2	2	1
	CO3	2	X	2	2	1
	CO4	2	X	2	2	1
	CO5	2	X	2	2	1

	CO6	2	X	2	2	1
MAT101A	**CO1**	3	2	3	2	1
	CO2	2	2	2	1	3
	CO3	2	3	1	2	2
	CO4	1	2	1	3	X
	CO5	2	1	X	2	X
MAT101B	**CO1**	2	1	2	X	2
	CO2	1	2	2	1	2
	CO3	1	2	1	X	2
	CO4	3	3	2	2	2
	CO5	3	2	2	1	1
MAT101C	**CO1**	3	2	2	X	2
	CO2	3	3	2	1	X
	CO3	3	2	2	1	X
	CO4	3	3	2	1	1
	CO5	3	3	2	2	X
CS101A	**CO1**	1	X	2	X	1
	CO2	1	X	2	X	1
	CO3	1	X	2	X	1
	CO4	1	X	1	X	1
	CO5	1	X	X	X	1
	CO6	1	X	2	X	1
CS101B	**CO1**	1	X	2	X	1
	CO2	1	X	2	X	1
	CO3	1	X	2	X	1
	CO4	1	X	1	X	1
	CO5	1	X	X	X	1
	CO6	1	X	2	X	1
MUV101	**CO1**	1	1	1	1	X

	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2
ENG201	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
PBC201	**CO1**	3	3	3	3	2
	CO2	2	3	2	3	1
	CO3	X	1	2	X	X
	CO4	2	3	3	2	2
	CO5	2	3	2	2	2
HCP201	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO201	**CO1**	2	1	1	1	1
	CO2	1	1	1	X	1
	CO3	1	X	2	1	1
	CO4	1	X	2	X	X
	CO5	1	X	2	X	X

	CO6	1	X	2	X	X
HIN201	**CO1**	2	3	3	2	2
	CO2	2	3	1	2	2
	CO3	1	1	1	1	2
	CO4	1	2	2	X	X
	CO5	2	3	1	2	2
	CO6	2	3	1	2	2
PBI201	**CO1**	2	2	1	2	2
	CO2	2	2	1	2	2
	CO3	2	2	1	2	2
	CO4	2	2	1	2	2
	CO5	2	2	1	2	2
HIS201	**CO1**	3	3	3	2	2
	CO2	3	3	3	2	2
	CO3	3	3	3	2	2
	CO4	3	3	3	1	2
	CO5	3	3	3	3	2
	CO6	3	3	3	X	X
ECO201	**CO1**	3	1	2	1	X
	CO2	3	1	2	1	X
	CO3	3	1	2	1	X
	CO4	3	1	2	1	X
	CO5	3	1	2	1	X
	CO6	3	1	2	1	X
POL201	**CO1**	2	2	3	3	2
	CO2	3	3	2	2	2
	CO3	2	2	3	3	3

	CO4	2	3	2	2	3
	CO5	3	3	3	2	3
	CO6	2	2	2	2	2
ENC201	**CO1**	2	2	1	2	3
	CO2	2	2	2	1	3
	CO3	1	1	2	1	1
	CO4	3	1	3	1	1
	CO5	3	1	2	1	1
	CO6	1	1	2	1	2
PED201	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X
	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS201	**CO1**	1	X	2	2	X
	CO2	1	X	2	3	X
	CO3	1	X	2	2	X
	CO4	1	X	3	1	X
	CO5	1	X	2	2	X
FNC201	**CO1**	2	X	2	1	1
	CO2	2	X	2	1	1
	CO3	2	X	2	1	1
	CO4	2	X	2	1	1
	CO5	2	X	2	1	1
	CO6	2	X	2	1	1
MAT201A	**CO1**	2	1	2	X	2

	CO2	1	2	2	1	2
	CO3	1	2	1	X	2
	CO4	3	3	2	2	2
	CO5	3	2	2	1	1
MAT201B	**CO1**	3	1	2	X	X
	CO2	3	1	2	1	X
	CO3	3	1	2	1	X
	CO4	3	1	2	X	X
	CO5	3	1	2	1	X
	CO6	3	X	2	X	X
MAT201C	**CO1**	3	1	2	x	x
	CO2	3	1	2	1	x
	CO3	3	1	2	1	x
	CO4	3	1	2	x	x
	CO5	3	1	2	1	x
	CO6	3	x	2	x	x
CS201A	**CO1**	1	X	2	X	1
	CO2	1	X	2	X	1
	CO3	1	X	2	X	1
	CO4	1	X	1	X	1
	CO5	1	X	X	X	1
	CO6	1	X	2	X	1
CS201B	**CO1**	1	X	2	X	1
	CO2	1	X	2	X	1
	CO3	1	X	2	X	1
	CO4	1	X	1	X	1
	CO5	1	X	X	X	1
	CO6	1	X	2	X	1

MUV201	**CO1**	1	1	1	1	X
	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2
ENG301	**CO1**	2	1	2	2	3
	CO2	2	1	2	2	3
	CO3	2	X	2	1	2
	CO4	2	2	2	1	2
	CO5	2	1	2	1	2
	CO6	2	X	2	1	1
PBC301	**CO1**	2	3	3	2	2
	CO2	2	3	1	2	2
	CO3	1	1	1	1	2
	CO4	1	2	2	X	X
	CO5	2	3	1	2	2
HCP301	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO301	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3

HIN301	**CO1**	3	3	2	2	2
	CO2	3	3	1	2	2
	CO3	2	2	2	2	2
	CO4	2	2	1	2	2
	CO5	2	2	2	3	2
	CO6	1	1	2	1	1
PBI301	**CO1**	1	3	2	1	3
	CO2	2	1	1	3	1
	CO3	3	2	3	2	2
	CO4	2	3	2	3	3
	CO5	3	1	1	2	1
	CO 6	1	2	3	1	2
HIS301	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	3	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	2	2
ECO301	**CO1**	3	3	3	2	X
	CO2	2	2	2	1	X
	CO3	2	2	3	2	X
	CO4	1	3	3	3	X
	CO5	3	2	2	3	X
	CO6	1	1	1	1	X
POL301	**CO1**	1	2	3	2	3
	CO2	3	3	2	3	2
	CO3	3	2	3	2	3
	CO4	3	2	2	3	2
	CO5	2	3	3	2	3
	CO6	2	3	2	3	3

ENC301	**CO1**	3	3	1	2	3
	CO2	2	2	2	1	3
	CO3	2	3	2	2	1
	CO4	2	3	2	1	1
	CO5	3	3	2	3	1
	CO6	3	3	2	1	2
PED301	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X
	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS301	**CO1**	X	X	2	1	X
	CO2	1	X	3	2	X
	CO3	1	X	2	2	X
	CO4	1	X	2	1	X
	CO5	1	X	2	2	X
FNC301	**CO1**	3	X	2	2	1
	CO2	2	X	2	2	1
	CO3	2	X	2	2	1
	CO4	2	X	2	2	1
	CO5	2	X	2	2	1
	CO6	2	X	2	2	1
MAT301A	**CO1**	3	2	3	1	2
	CO2	3	3	2	3	2
	CO3	2	1	2	1	3
	CO4	3	2	2	2	1
	CO5	1	2	1	X	2
MAT301B	**CO1**	3	3	3	1	3

	CO2	3	2	2	1	2
	CO3	3	2	3	2	1
	CO4	2	3	3	3	3
	CO5	2	2	2	3	2
MAT301C	**CO1**	3	3	3	1	3
	CO2	3	2	2	1	2
	CO3	3	2	3	2	1
	CO4	2	3	3	3	3
	CO5	2	2	2	3	2
CS301A	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	X
	CO3	X	X	X	X	X
	CO4	X	X	X	X	X
	CO5	X	X	X	X	X
	CO6	X	X	X	X	X
CS301B	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	X
	CO3	X	X	X	1	X
	CO4	X	X	X	2	X
	CO5	X	X	X	X	X
	CO6	X	X	X	X	X
MUV301	**CO1**	1	1	1	1	X
	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2
ENG401	**CO1**	2	1	2	2	3
	CO2	2	1	2	2	3

	CO3	2	X	2	1	2
	CO4	2	X	2	1	2
	CO5	2	1	2	1	2
	CO6	2	X	2	1	2
PBC401	**CO1**	3	3	2	2	2
	CO2	X	1	1	1	1
	CO3	2	2	2	1	2
	CO4	X	1	1	X	X
	CO5	2	1	1	X	1
HCP401	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO401	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
HIN401	**CO1**	3	3	2	2	2
	CO2	3	3	1	2	2
	CO3	2	2	2	2	2
	CO4	2	2	1	2	2
	CO5	2	2	2	3	2
	CO6	1	1	2	1	1
PBI401	**CO1**	3	2	1	3	2
	CO2	1	1	3	2	1

	CO3	2	3	2	1	3
	CO4	3	1	3	2	1
	CO5	1	2	1	3	2
	CO6	2	3	2	1	3
HIS401	**CO1**	3	3	3	3	2
	CO2	3	3	3	2	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ECO401	**CO1**	3	1	2	1	X
	CO2	3	1	2	1	X
	CO3	3	1	2	1	X
	CO4	3	1	2	1	X
	CO5	3	1	2	1	X
	CO6	3	1	2	1	X
POL401	**CO1**	3	2	2	2	3
	CO2	3	2	2	3	2
	CO3	3	2	2	2	3
	CO4	2	3	3	3	2
	CO5	2	3	3	2	2
	CO6	3	3	3	2	2
ENC401	**CO1**	2	3	1	2	3
	CO2	2	2	2	1	3
	CO3	3	3	2	2	1
	CO4	2	1	2	1	1
	CO5	3	3	2	3	1
	CO6	3	1	2	1	2
PED401	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X

	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS401	**CO1**	1	X	1	1	X
	CO2	1	X	2	1	X
	CO3	1	X	1	2	X
	CO4	X	X	2	1	X
	CO5	X	X	1	1	X
FNC401	**CO1**	2	X	2	2	1
	CO2	2	X	2	2	2
	CO3	2	X	2	2	1
	CO4	2	X	2	2	1
	CO5	2	X	2	2	1
	CO6	2	X	2	2	1
MAT401A	**CO1**	3	2	2	X	2
	CO2	2	2	3	1	2
	CO3	3	2	2	X	2
	CO4	2	2	2	1	3
	CO5	3	3	2	2	1
MAT401B	**CO1**	3	2	2	X	2
	CO2	2	2	3	1	2
	CO3	3	2	2	X	2
	CO4	2	2	2	1	3
	CO5	3	3	2	2	1
MAT401C	**CO1**	3	2	2	X	2
	CO2	2	2	3	1	2
	CO3	3	2	2	X	2

	CO4	2	2	2	1	3
	CO5	3	3	2	2	1
CS401A	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	X
	CO3	X	X	X	1	X
	CO4	X	X	X	2	X
	CO5	X	X	X	X	X
	CO6	X	X	X	X	X
CS401B	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	X
	CO3	X	X	X	1	X
	CO4	X	X	X	2	X
	CO5	X	X	X	X	X
	CO6	X	X	X	X	X
MUV401	**CO1**	1	1	1	1	X
	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2
ENG501	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
PBC501	**CO1**	3	3	1	2	2
	CO2	1	1	2	1	1
	CO3	X	2	2	1	1
	CO4	1	1	1	2	1

	CO5	X	2	2	1	1
HCP501	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO501	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	x	2
	CO6	3	3	3	3	3
HIN501	**CO1**	3	3	2	2	2
	CO2	2	2	2	2	2
	CO3	2	2	1	2	2
	CO4	1	1	2	1	1
	CO5	1	1	2	1	1
	CO6	X	X	1	X	X
PBI501	**CO1**	2	2	1	2	2
	CO2	2	2	1	2	2
	CO3	1	1	1	2	2
	CO4	1	1	X	1	1
	CO5	2	2	1	2	2
	CO6	2	2	1	2	2
HIS501	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2

	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ECO501	**CO1**	1	1	X	X	X
	CO2	1	1	2	3	2
	CO3	1	2	1	X	X
	CO4	X	1	1	1	2
	CO5	1	1	X	X	X
	CO6	1	1	2	3	X
POL501	**CO1**	3	3	2	2	2
	CO2	3	2	2	3	2
	CO3	3	3	3	2	3
	CO4	2	2	3	3	2
	CO5	3	3	2	3	3
	CO6	3	2	2	2	3
ENC501	**CO1**	1	2	3	2	3
	CO2	2	2	2	1	3
	CO3	3	2	3	2	2
	CO4	2	2	2	2	1
	CO5	2	2	2	3	2
	CO6	1	1	2	1	2
PED501	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X
	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS501	**CO1**	1	X	1	1	X
	CO2	1	X	2	2	X
	CO3	1	1	1	1	X
	CO4	1	X	1	1	X

	CO5	1	X	1	1	X
FNC501	**CO1**	3	X	2	2	1
	CO2	2	X	2	2	1
	CO3	2	X	2	2	1
	CO4	2	X	2	2	1
	CO5	2	X	2	2	1
	CO6	2	X	2	2	1
MAT501A	**CO1**	3	3	2	X	3
	CO2	3	1	2	2	1
	CO3	2	2	1	1	2
	CO4	3	2	1	1	2
	CO5	2	2	2	2	2
	CO 6	3	3	2	1	1
MAT501B	**CO1**	2	3	2	2	2
	CO2	2	2	3	1	2
	CO3	3	2	3	2	3
	CO4	3	3	3	2	3
	CO5	2	2	2	2	2
MAT501C	**CO1**	3	2	2	2	X
	CO2	3	2	3	1	X
	CO3	3	2	3	1	X
	CO4	3	2	3	1	X
	CO5	2	1	2	X	X
CS501A	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	1
	CO3	X	X	X	X	1

	CO4	1	1	1	1	1
	CO5	X	X	X	2	X
	CO6	1	1	X	X	X
CS501B	**CO1**	X	X	X	X	X
	CO2	X	X	X	X	1
	CO3	X	X	X	X	1
	CO4	1	1	1	1	1
	CO5	X	X	X	2	X
	CO6	1	1	X	X	X
MUV501	**CO1**	1	1	1	1	X
	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2
ENG601	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
PBC601	**CO1**	2	3	1	2	2
	CO2	X	2	3	1	1
	CO3	X	X	2	X	2
	CO4	X	X	1	X	2

	CO5	1	1	2	1	2
	CO6	X	X	1	1	1
HCP601	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2
	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ENO601	**CO1**	3	3	3	3	3
	CO2	3	3	3	3	3
	CO3	3	3	2	3	3
	CO4	3	3	3	3	3
	CO5	3	3	3	X	2
	CO6	3	3	3	3	3
HIN601	**CO1**	3	3	2	2	2
	CO2	2	2	2	2	2
	CO3	2	2	1	2	2
	CO4	1	1	2	1	1
	CO5	1	1	2	1	1
	CO6	X	X	1	X	X
PBI601	**CO1**	2	2	1	2	2
	CO2	1	1	1	1	1
	CO3	1	2	1	2	2
	CO4	X	X	X	1	1
	CO5	1	1	X	1	1
	CO6	1	1	2	1	X
HIS601	**CO1**	3	3	3	1	2
	CO2	3	3	3	1	2
	CO3	3	3	3	1	2
	CO4	3	3	3	1	2

	CO5	3	3	3	1	2
	CO6	3	3	3	1	2
ECO601	**CO1**	1	1	X	X	X
	CO2	1	1	2	3	1
	CO3	1	2	1	X	X
	CO4	X	1	1	1	X
POL601	**CO1**	3	2	2	3	3
	CO2	3	2	3	2	2
	CO3	2	2	3	2	3
	CO4	3	3	2	3	3
	CO5	2	3	3	3	3
	CO6	2	3	2	3	2
ENC601	**CO1**	2	2		2	3
	CO2	2	2	3	1	3
	CO3	2	2	3	2	2
	CO4	2	2	1	2	2
	CO5	2	2	2	3	2
	CO6	1	1	2	1	2
PED601	**CO1**	3	2	X	3	X
	CO2	3	2	X	3	X
	CO3	3	2	X	3	X
	CO4	3	2	X	3	X
	CO5	3	2	X	3	X
	CO6	3	2	X	3	X
HMS601	**CO1**	1	X	1	1	X
	CO2	1	X	2	2	X
	CO3	1	1	1	1	X
	CO4	1	X	1	1	X
	CO5	1	X	1	1	X
FNC601	**CO1**	2	X	2	2	1

	CO2	2	X	2	2	2
	CO3	2	X	2	2	1
	CO4	2	X	2	2	1
	CO5	2	X	2	2	1
	CO6	2	X	2	2	1
MAT601A	**CO1**	3	3	3	2	3
	CO2	3	2	3	2	3
	CO3	2	2	3	1	2
	CO4	2	3	2	2	2
	CO5	2	2	2	2	2
MAT601B	**CO1**	2	2	2	3	2
	CO2	3	3	3	1	3
	CO3	3	2	2	1	2
	CO4	2	3	3	3	3
	CO5	3	2	3	2	1
MAT601C	**CO1**	2	1	3	1	X
	CO2	2	1	3	1	X
	CO3	2	1	3	1	X
	CO4	2	1	3	1	X
	CO5	2	1	3	1	X
CS601A	**CO1**	1	X	X	1	X
	CO2	1	X	X	1	X
	CO3	1	X	X	1	X
	CO4	1	X	X	1	X
	CO5	1	X	X	1	X

	CO6	1	X	X	1	X
CS601B	**CO1**	1	X	X	1	X
	CO2	1	X	X	1	X
	CO3	1	X	X	1	X
	CO4	1	X	X	1	X
	CO5	1	X	X	1	X
	CO6	1	X	X	1	X
MUV601	**CO1**	1	1	1	1	X
	CO2	1	1	1	1	X
	CO3	3	1	1	1	X
	CO4	1	1	1	1	X
	CO5	1	1	1	1	X
	CO6	3	1	3	1	2