

# DEPARTMENT OF ASSAMESE

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcome (CO) under NAAC  
Course Outcome (CO) of Assamese Elective (Pass)

SL NO	PAPER CODE	NAME OF THE COURSE	OUTCOMES
1	ASMHCC-101	History Of Assamese Literature-I	This course is intended to give an outline to the history of the Assamese literature. In this course students will know the history of Assamese literature of Ancient and Medieval period. Students will also understand the characteristics of Assamese literature in that time.
2	ASMHCC-102	History of Assamese Language and script	This course is intended to give an outline to the history of Assamese language and script. Students will also understand the development of Assamese Language and Script.
3	ASMHCC-201	History of Assamese Literature-II	This course aims to get students acquainted with the knowledge of modern Assamese literature and modern literary terms. Students will also understand the characteristics of Assamese literature in modern time.
4	ASMHCC-202	Language Varieties and Assamese Language	This course aims to get students enlightened with the various languages of the world and their classification. They also know about the Assamese languages stands in this language family.
5	ASMHCC-301	Cultural Behavior of the Assamese	This course aims to get students acquainted with various aspects of folk life and culture. This course aims to get students enlightened with the knowledge of Assamese Cultural behavior.
6	ASMHCC-302	Functional Grammar of Assamese	With this course students will gain knowledge about the Phonological, morphological characteristics of Assamese language.
7	ASMHCC-303	Literary Criticism: East and West	This course aims to get students acquainted with varied categories and techniques of literature. They will also gain the knowledge about the various literary movements and literary terms as well.
8	ASMHCC-401	Introduction to the	This course aims to get students acquainted with the

		Linguistics	knowledge of Linguistics. They will also get the concept of Phonology, Morphology etc.
9	<b>ASMHCC-402</b>	Selected Texts: Poetry and Plays	The main aim of the course is to make students familiar with the Poetry and Plays. They also go through various selected Assamese poetry and plays.
10	<b>ASMHCC-403</b>	Literary Movements and Assamese Literature	This paper will enable students to have a broad understanding of some important texts on literary criticism and literary theory and also enlightens the students on the various budes in literary interpretation. The paper endows them with knowledge while reading texts across genres. Students will also understand the effects of such movements in Assamese literature.
11	<b>ASMHCC-501</b>	Folk and Performing Arts	This course aims to get students acquainted with various aspects of folk life and culture. Students will learn about the various performing arts performed in Assam.
12	<b>ASMHCC-502</b>	Selected Text: Novels and Short Stories	The main aim of the course is to make students familiar with the Novels and Short Stories. They also go through various selected Assamese Novels and Short Stories and able to know the trends and characteristics of Assamese Novels and Short Stories.
13	<b>ASMDSE(H+P)-501</b>	Study of a Important Author	This paper aims to make the students critically analyze various perspectives in the literary writings of a particular writer and understand the characteristics of his/her writings.
14	<b>ASMDSEH-502</b>	Pali-Prakrit-Apabhramsha Language, Literature and Grammar	The main aim of the course is to make students familiar with the development of Assamese Language from its beginning. Students also understand the characteristics of Pali, Prakrit and Apabhramsha Language and the various literature of that period.
15	<b>ASMHCC-601</b>	Assamese Prose	This course aims to get students acquainted with the development of Assamese prose from starting to present time and also acquire the knowledge of various characteristics of Assamese prose.
16	<b>ASMHCC-602</b>	Comparative Indian Literature	This paper will encourage and acquaint the students with World through the study of selected texts. It basically provides knowledge about the different literatures of the world with the help of some important texts that surpasses cultural barriers.
17	<b>ASMDSE(H+P)-601</b>	Study of an Important Text	This course aims to get students acquainted with the literature of a particular time. After completion of this course students will understands the culture,

			society, language etc of that time.
18	<b>ASMDSEH-602</b>	Field Study/Dissertation	Through field study students will understand the society, culture, political status of a particular tribe or a particular area. Students will also understand the day to day life of that tribe or that area.
19	<b>ASMAEC-101</b>	Assamese Communicative Language as	After completion of the course students shall be able to learn regarding the various innovative ways of using Assamese language in verbal and non-verbal communications. This course will enable the students to develop their speaking, reading and understanding skills. The course attempts to develop the writing skills of the students and makes them think about the relation between language and literature.
20	<b>ASMSEC-301</b>	Language and its use in Computer	Through this course students learn how to use a particular language in computer and understand how to use Assamese language in computer. Apart from theoretical knowledge they also gain the practical knowledge in this course.
21	<b>ASMSEC-401</b>	Art of Translation	This course aims to get students acquainted with the translation theory and practice. Students get familiar about the various translation works of the Assamese language.
22	<b>ASMSEC-501</b>	Essay Writing	The main aim of the course is to make students familiar with the essay writing process. Students will know how to write an essay and what are the important steps to follow in creative essay writing.
23	<b>ASMSEC-601</b>	Assamese Play and Stage	The main aim of the course is to make students familiar with the Plays as a performing art and understand the importance of stage in plays. Students also gain the knowledge about the historical background of Assamese Play and stages in Assam.
24	<b>ASMDSCP-101</b>	History of Assamese Language	This course is intended to give an outline to the history of Assamese language and script and also understand the development of Assamese Language.
25	<b>ASMDSCP-201</b>	History Of Assamese Literature	This course is intended to give an outline to the history of the Assamese literature of Ancient and Medieval period. Students will also understand the characteristics of Assamese literature in that time.
26	<b>ASMDSCP-301</b>	Assamese Folk Culture	This course aims to get students acquainted with various aspects of folk life and culture. This course aims to get students enlightened with the knowledge of Assamese Cultural behavior.
27	<b>ASMDSCP-401</b>	Special Author	This paper aims to make the students critically analyze various perspectives in the literary writings

			of a particular writer. Students will go through the various literary works of that writer and understand the characteristics of his/her writings.
28	<b>ASMGEH-101</b>	History of Assamese Language	This course is intended to give an outline to the history of Assamese language and script. Students will also understand the development of Assamese Language.
29	<b>ASMGEH-201</b>	History Of Assamese Literature	This course is intended to give an outline to the history of the Assamese literature. In this course students will know the history of Assamese literature of Ancient and Medieval period. Students will also understand the characteristics of Assamese literature in that time.
30	<b>ASMGEH-301</b>	Assamese Folk Culture	This course aims to get students acquainted with various aspects of folk life and culture. This course aims to get students enlightened with the knowledge of Assamese Cultural behavior.
31	<b>ASMGEH-401</b>	Special Author	This paper aims to make the students critically analyze various perspectives in the literary writings of a particular writer. Students will go through the various literary works of that writer and understand the characteristics of his/her writings.
32	<b>ASMGEH-501</b>	History of Assamese Language	This course is intended to give an outline to the history of Assamese language and script. Students will also understand the development of Assamese Language.
33	<b>ASMGEH-601</b>	History Of Assamese Literature	This course is intended to give an outline to the history of the Assamese literature. In this course students will know the history of Ancient and Medieval period. Students will also understand the characteristics of Assamese literature in that time.
34	<b>ASMLAN-301</b>	Assamese Poetry and Drama	The main aim of the course is to make students familiar with the Poetry and Plays. They also go through various selected Assamese poetry and plays.
35	<b>ASMLAN-401</b>	Assamese Novel and Short Stories	The main aim of the course is to make students familiar with the Novels and Short Stories through various selected Assamese Novels and Short Stories. Thus students will know the trends and characteristics of Assamese Novels and Short Stories.

# DEPARTMENT OF BODO

DIPHU GOVERNMENT COLLEGE  
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## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcome (CO) under NAAC  
Course Outcome (CO) of Bodo Elective (Pass)

SL. NO.	COURSE CODE	COURSE TITLE	COURSE OUTCOME
1.	BODDSC - 101	History and development of Bodo literature.	This course intends to trace the history of Bodo literature starting from the origin. In this paper how the Bodo literature is developed through various phases is discussed thoroughly. Apart from these, this paper puts emphasis on discussing the evaluation of Bodo literature that started with the ancient stone inscriptions found in different places of Assam with an intention to study the present status of Bodo literature.
2.	BODAEC-101	Bodo as Communicative Language	After completion of the course students shall be able to learn regarding the various innovative ways of using Bodo language in verbal and non-verbal communications. This course will enable the students to develop their speaking, reading and understanding skills. The course attempts to develop the writing skills of the students and makes them think about the relation between language and literature.
3.	BODDSC - 201	History of Bodo language and Structure.	This course intends to trace the history of Bodo language and its scripts starting from the origin. In this paper, how Bodo is derived from the original Indo-Mongoloid language and developed through various phases discussed thoroughly. The significant prose of the Chronicles and the Proto – TB is also discussed to know the history of Bodo language.
4.	BODDSC-301	Western and Bodo literary criticism.	This course offers a glimpse in to the existing old literary terms, critical theories and points of view that are commonly used in the west to classify, analyze, interpret and write the history of works of literature.
5.	BODLAN-301	Selected texts: Poetry and Plays.	This course intends to introduce the students to poetry and play in general and Bodo poetry and play in particular. It is designed to have a glimpse of Bodo plays and poem that represent medieval, modern and contemporary period.
6.	BODSEC-	Language in advertisement.	This course is created for students interested in marketing and advertising to understand the motive power of the words they use and to train them employing more effectively. The lessons emphasis the fact that whiles the visual content and design has a

	301		huge impact on the consumer, it is the language that makes it possible to identify a product and remember it.
7.	BODDSC - 401	Cultural behaviour of Bodo community.	This course aims to impart the knowledge of social and cultural history of Bodo. This course covers the following areas: the geographical locations, origin, early history, social fabric and the state of economy, culture and civilization of the Bodo from ancient period to contemporary period.
8.	BODLAN-401	Selected texts: Novel and short stories	The novel and short stories are to major genres of modern times, expressing the regional nuances, keeping intact the essence of national literature as well. The novel and short stories inevitably, participate in the construction of the modern thinking of the nation and brings various cultures closer. The objective of the paper is to introduce the influence of European thoughts during modern times, impact of print media and modern education, the emergence of new forms in Bodo. The selected novel and short stories are to be studied to understand the vividness and vibrancy in modern literature.
9.	BODSEC-401	Editing and compiling.	The aim of the course is to equipped the students with the basic knowledge of the essential elements of editing, drafting, proof reading, captioning and preparation of print copy through the use of computer, besides acquitting them with the background information on reputed publications, journals, magazines, periodicals, publishing house and their contribution to society.
10.	BODDSE - 501	Understanding the self.	The aim of this paper is to give information to the students about knowledge of self capabilities, character, feelings and motivation. Through this study students can gain knowledge the power of influence outcome, helps become better decision and give more self confidence.
11.	BODSEC-501	Art of translation.	The aim of the course is to enable the students to understand the process and nuances of translation from one language to another to not only develop their skills of translation but also to create an interest to read great translated works in other languages, so that they have a wider perspective of world literature.
12.	BODGE-501	History and development of Bodo literature.	This course intends to trace the history of Bodo literature starting from the origin. In this paper how the Bodo literature is developed through various phases is discussed thoroughly. Apart from these, this paper puts emphasis on discussing the evaluation of Bodo literature that started with the ancient stone inscriptions found in different places of Assam with an intention to study the present status of Bodo literature.
13.	BODDSE - 601	Folk and performing art.	This course intends to introduce the students to folk and performing art in general and to Bodo folk and performing arts. Apart from this paper puts emphasis on discussing the evaluation and influence in the society of Bodo folk and performing arts from ancient period to contemporary period.

14.	BODSEC-601	Language of printing and publishing.	The aim of the course is to equipped the students with the basic knowledge of the essential elements of printing and publishing, captioning and preparation of print copy through the use of computer, besides acquitting them with the background information on reputed publications, journals, magazines, periodicals, publishing house and their contribution to society.
15.	BODGE-601	History of Bodo language and Structure.	This course intends to trace the history of Bodo language and its scripts starting from the origin. In this paper, how Bodo is derived from the original Indo-Mongoloid language and developed through various phases discussed thoroughly. The significant prose of the Chronicles and the Proto – TB is also discussed to know the history of Bodo language.

# DEPARTMENT OF BOTANY

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## PROGRAM/COURSE OUTCOME

### Programme Specific Outcome (PSO) and Course Outcome (CO)

Name of the Programmes : B.Sc.(Honours) in Botany

B.Sc.(General) in Botany

Duration of the Programme : 3 Years split into 6 semesters

Design and Implementation : Assam university, Silchar

Year : 2018-2019

### Programme Outcome (PO) of Botany:

On completion of programme students will be specifically able to

**PO1-Scientific Knowledge:** Identify and classify the plants by using the key characters and the fundamental process of plants.

**PO2.Practical skills:** Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They become competent enough in various analytical and technical skills related to plant sciences.

**PO3. Modern tool usage:** Apply appropriate techniques, resources, and instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations.

**PO4. Intellectual skills – able to:** The student completing the course is able to identify various life forms of plants, design and execute experiments related to basic studies on evolution, ecology, developmental biology, physiology, biochemistry, plant interactions with microbes, morphology, anatomy, reproduction, genetics, microbiology, molecular biology, recombinant DNA technology

**PO5. Problem analysis:** Students will be familiarized with the use of bioinformatics tools and databases and in the application of statistics to biological data.



**PO6. Conduct investigations of complex problems:**The student completing the course is capable to perform short research projects using various tools and techniques in plant sciences and develop scientific temperament and research attitude.

**Course Outcome (CO) of Botany (Honours) :**

Sl.No	Course Code	Course Description	Course Outcome
1	BOTHCC – 101T	Algae and Microbiology	In this paper students will learn about the basic introduction to Microbial world, Morphological and Anatomical structures of Virus, Bacteria and Algae.
2	BOTHCC - 102T	Biomolecules and Cell Biology	On Completion of the paper, the students will be able to learn about the types and significance of Bio-molecules, Bioenergetics and Enzymes, Cells and its organelles and Cell division.
3	BOTHCC – 103L	Algae and Microbiology	Students will be able to classify and learn about the reproduction and life cycles of algae. And can also learn in detail the structures of Bacteria and can Perform the practical experiments viz. gram staining of bacteria.
4	BOTHCC - 104L	Biomolecules and Cell Biology	Students will be able to explain about the structures, functions and composition of cell and their organelles besides learning about the cell division. The students will learn to perform the micro-chemical tests to demonstrate various components.
5	BOTHCC – 201T	Mycology and Phytopathology	Students will have an idea about the characteristic features, life-cycle and classification of Fungi and also about the use of Fungal organisms for their valuable products.
6	BOTHCC – 202T	Archegoniate	This course will make the students able to know about morphological, anatomical and developmental patterns in the Bryophytes, Pteridophytes and Gymnosperm.
7	BOTHCC – 203L	Mycology and Phytopathology	Understand clearly the practical knowledge of the structure, composition classification, and nomenclature of fungi and lichen.
8	BOTHCC – 204L	Archegoniate	Students will be able to identify Bryophytes, Pteridophytes and Gymnosperms morphologically and can

			learn about their anatomical structure from its transverse section.
9	BOTHCC – 301T	Anatomy of Angiosperm	From this paper, students will learn about the introduction and scope of Plant Anatomy, Tissues, Apical meristem, Vascular cambium in root and its adaptive and protective systems.
10	BOTHCC – 302T	Economic Botany	On conclusion of the paper, the students will know about the origin of cultivated plants, Cereals, legumes, spices and also the source of sugars, starches, beverages, oils, fats and fibres.
11	BOTHCC – 303T	Genetics	Students will know about the history of Genetics, Extra chromosomal inheritance, Linkage, Crossing over and Chromosomal mapping etc.
12	BOTHCC – 304L	Anatomy of Angiosperm	Students can understand the morphology and anatomical structures of Bryophytes, Pteridophytes and Gymnosperms in details. And in the field trip they can identify the specimens and their habitat.
13	BOTHCC – 305L	Economic Botany	Identify the economically important local plants and their useful parts. Recognize the binomial, family and useful part of major economic crops of India.
14	BOTHCC – 306L	Genetics	Comprehend the interaction of genes and multiple alleles. Analyze and solve problems in gene inheritance.
15	EDUSEC – 301T	Biofertilizers	From this course the students will learn about the general account of microbial uses of bio fertilizers and organic farming.
16	BOTHCC – 401T	Molecular Biology	In this paper students will learn about Nucleic acid, replication of DNA, Central Dogma, Genetic Code, Transcription, Processing, modification of RNA and translation.
17	BOTHCC – 402T	Plant Ecology and Phytogeography	From this paper the students will learn about the introduction of Plant Ecology, soil, water, biotic and abiotic interactions, population Ecology and Ecosystem and Phyto geography.

18	BOTHCC – 403T	Plant Systematics	From this paper the students will learn about the significance of plant systematic, taxonomic hierarchy and Botanical nomenclature, system of classification, biometrics etc.
19	BOTHCC – 404L	Molecular Biology	Learners will be able to prepare media for growth of <i>E.coli</i> and can demonstrate the DNA extraction of plants and describe the structure of Nucleic acids.
20	BOTHCC – 405L	Plant Ecology and Phytogeography	Students will have a knowledge on instruments used to measure microclimatic variables such as Soil thermometer, maximum and minimum thermometer, anemometer, psychrometer/hygrometer, rain gauge and lux meter. Field visit to familiarise students with ecology of different sites.
21	BOTHCC – 406L	Plant Systematics	Identify plants with flora and taxonomic keys from their vegetative and floral characters of the angiosperm families according to Bentham & Hooker's system of classification. Learn to prepare a herbarium. Understand and can practice ICN rules in plant nomenclature.
22	BOTSEC – 401T	Herbal Technology	On completion of the course the students will learn about the scope and history of Herbal medicine, Pharmacognosy, Phytochemistry, Analytical pharmacognosy and micro propagation of medicinal plants.
23	BOTHCC – 501TT	Reproductive Biology of Angiosperm	Here students will know about the reproductive development, Anther and Pollen Biology, Ovule, Pollination and fertilization etc.
24	BOTHCC – 502T	Plant Physiology	On completion of the course, students will be able to learn and understand about mineral nutrition, growth and developmental processes in plants.
25	BOTHCC – 503L	Reproductive Biology of Angiosperm	Students can perform fresh and acetolyzedpollen grain experiment and can show its ornamentation and aperture. They will learn about the development of dicot embryo and can dissect the developing

			seeds for embryos at various developmental stages.
26	BOTHCC – 504L	Plant Physiology	Student will understand the phenomenon of Adsorption, and Imbibitions. Student will also understand the effect of light on seed germination. Students can demonstrate suction due to transpiration, Fruit ripening/Rooting from cuttings, Bolting/Avena coleptile bioassay experiment.
27	BOTDSE – 501T	Analytical Techniques in Plant Science	From this paper the students will learn about various imaging and related techniques, cell fractionation and Radioisotopes, Spectrometry and Chromatography etc.
28	BOTDSE – 502T	Stress Biology	From this paper the students will learn about defining Plant stress, various environmental factors of Plant stress, stress sensing mechanism of plants etc.
29	BOTDSE- 503L	Analytical Techniques in Plant Science	Students will learn on Blotting techniques: Southern, Northern and Western, DNA fingerprinting, DNA sequencing and PCR. Students will learn to separate Amino-acids, sugars and chloroplast pigments by paper chromatography, thin layer chromatography and column chromatography respectively.
30	BOTDSE – 504L	Stress Biology	Students will learn about the Zymographic analysis of peroxidase and superoxide dismutase activity. Students Will be able to perform quantitative estimation and zymographic analysis of catalase and glutathione reductase.
31	BOTSEC – 501	Ethnobotany	Here the students will learn about the methodology of Ethnobotany, important medicinal plants, role of Ethnobotany in modern medicine, Ethnobotany and legal aspects.
32	BOTHCC – 601T	Plant Metabolism	On completion of the course the students will be familiar with various physiological aspects involved in the plant development and also the role of enzymes and its mechanism in Photosynthesis, respiration, Nitrogen and Lipid metabolism
33	BOTHCC – 602T	Plant Biotechnology	From this paper the students will learn about Plant tissue culture, Recombinant

			DNA technology, Gene cloning, methods of gene transfer and application of Biotechnology.
32	BOTHCC – 603L	Plant Metabolism	Students will learn to separate photosynthetic pigments and will learn about the effect of f carbon dioxide and light intensity on the rate of photosynthesis. Students will be able to demonstrate the absorption spectrum of photosynthetic pigments.
33	BOTHCC – 604L	Plant Biotechnology	Students will be able to demonstrate in vitro sterilization and inoculation methods using leaf and nodal explants of plants and can isolate protoplasts. They will be able to construct restriction map of circular and linear DNA from the data provided.
34	BOTDSE – 601T	Industrial and Environmental Microbiology	On completion of the course the students will learn about Microbial production of Industrial products, Bioreactors, Fermentation processes, Microbial enzymes of industrial interest, Microbial flora of water, microbes in agriculture and remediation of contaminated soils.
35	BOTDSE – 602T	Biostatistics	From this paper the students will learn about Biostatistics, collection of data, measures of central tendency, correlation and statistical inference.
36	BOTDSE – 603L	Industrial and Environmental Microbiology	Students will learn about the Principles and functioning of instruments in microbiology laboratory and will learn a Hand on experiment sterilization techniques and preparation of culture media.
37	BOTDSE – 604L	Biostatistics	Students will be able to apply the scientific method to questions in botany by formulating testable hypotheses, collecting data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses.
38	BOTSEC – 601T	Mushroom Culture	On completion of the course the student will learn about the introduction, history, nutritional and medicinal value of edible mushroom, cultivation technology, mushroom bed preparation, storage, nutrition and food preparation from mushroom.

**Course Outcome (CO) of Botany (General) :**

Sl.No	Course Code	Course Description	Course Outcome
1	BOTDSC– 101T/ GE –	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	On completion of the course the students will learn about the diversity and characteristics of Microbes, Algae, Fungi and Archegoniate.
2	BOTDSC- 102L/GE	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	Student can classify and identify the Algal and fungal genus and specimen included. Student can make micro preparation of the material of Pteridophyta and bryophytes and identify them anatomically. Students can make the bacterial slide by Gram staining techniques.
3	BOTDSC- 201T/ GE –	Plant Ecology and Taxonomy	From this paper the students will learn about the significance of plant systematic, taxonomic hierarchy and Botanical nomenclature, system of classification, biometrics etc.
4	BOTDSC- 202L/GE	Plant Ecology and Taxonomy	Students will have a knowledge on instruments used to measure microclimatic variables such as Soil thermometer, maximum and minimum thermometer, anemometer, psychrometer /hygrometer, rain gauge and lux meter. Students will learn about the vegetative and floral characters of the Brassicaceae families.
5	BOTDSC – 301T/ GE	Plant Anatomy and Embryology	On completion of the course, students will be able to learn and understand about meristematic, permanent tissue, Secondary growth, structural organization of flowers and pollination.
6	BOTDSC- 302L/GE	Plant Anatomy and Embryology	Students will be learned about the tissue system, types of ovules, Pollination types and seed dispersal mechanisms.
7	BOTDSC – 401T/ GE –	Plant Physiology and Metabolism	On completion of the course, students will be able to learn and

			understand about mineral nutrition, growth and developmental processes in plants.
8	BOTDSC-402L/GE	Plant Physiology and Metabolism	Students will be able to determine the osmotic potential of plant cell sap and the effect of two environmental factors (light and wind) on transpiration. They will be also able to demonstrate experiments on Bolting, Effect of auxins on rooting, Suction due to transpiration, R.Q. and Respiration in roots.
9	BOTDSE – 501T	Analytical Techniques in Plant Science	From this paper the students will learn about various imaging and related techniques, cell fractionation and Radioisotopes, Spectrometry and Chromatography etc.
10	BOTDSE-502L	Analytical Techniques in Plant Science	Students will learn on Blotting techniques: Southern, Northern and Western, DNA fingerprinting, DNA sequencing and PCR. Students will learn to separate Amino-acids, sugars and chloroplast pigments by paper chromatography, thin layer chromatography and column chromatography respectively.
11	BOTDSE – 601T	Industrial and Environmental Microbiology	On completion of the course the students will learn about Microbial production of Industrial products, Bioreactors, Fermentation processes, Microbial enzymes of industrial interest, Microbial flora of water, microbes in agriculture and remediation of contaminated soils.
12	BOTDSE-602L	Industrial and Environmental Microbiology	Students will learn about the Principles and functioning of instruments in microbiology laboratory and will learn a Hand on experiment sterilization techniques and preparation of culture media.

# DEPARTMENT OF CHEMISTRY

DIPHU GOVERNMENT COLLEGE  
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## PROGRAM/COURSE OUTCOME

Sl. No.	Paper Code	Name of the Course	Outcomes
1	CHMHCC101	Inorganic Chemistry-I Atomic Structure & Chemical Bonding	This course aims to acquaint the students with the structure of atom, theories of chemical bonding, concept of Nanomaterials, compounds of noble gases, oxide and oxoacids of halogens, compounds of nitrogen family, manufacture types of cement and preparation and uses of some common fertilizers.
2	CHMHCC102	Physical Chemistry –I States of Matter and Ionic Equilibrium	This course intends to provide the concept of gaseous state & solid state, thermodynamics, phase equilibrium of one & two component system and probability.
3	CHMHCC101 Lab	Inorganic Chemistry-I Practical	This course intends to provide the idea of titrimetric analysis and Oxidation-Reduction Titrimetry.
4	CHMHCC102 Lab	Physical Chemistry –I Practical	The course familiarizes the students with the determination of transition temperature of the given substance by thermometric method and to determine the surface tension of glycerol/acetic acid/aniline solutions at different concentrations and construction of graph.
5	CHMHCC201	Organic Chemistry –I Hydrocarbons and Stereochemistry	This course aims to get students enlightened the bonding in organic compounds, basic concepts of reaction mechanism & reactive intermediates, Synthesis & reactivity of aliphatic and aromatic halogen compounds, alcohols and ethers.
6	CHMHCC202	Physical Chemistry –II Chemical Thermodynamics and its	Objective of this course is to provide insight on Chemical Thermodynamics, their mathematical expressions and applications.



		Applications	
7	CHMHCC201 Lab	Organic Chemistry-I Practical	The main aim of the course is to familiarize students with purification of binary mixtures and chromatographic separation (Thin layer chromatography & Paper chromatographic separation).
8	CHMHCC202 Lab	Physical Chemistry-II Practical	This paper will enable students to have a broad understanding of viscosity, pH, refractive index and molecular mass
9	CHMHCC301	Inorganic Chemistry-II s-, p- block Elements and Metallurgy	The main aim of the course is to make students familiar with the chemistry of s-, p- block Elements, Noble gases, inorganic polymers and Metallurgy.
10	CHMHCC302	Organic Chemistry – II Halogen and Oxygen Containing Functional Groups	This paper will encourage and acquaint the students with the synthesis and properties of organic compounds containing Halogen and Oxygen Containing Functional Groups.
11	CHMHCC303	Physical Chemistry-III Phase Equilibria and Chemical Kinetics	Objective of this course is to emphasize in details on Phase Equilibria, Chemical Kinetics, catalysis and Surface chemistry.
12	CHMHCC301 Lab	Inorganic Chemistry-II Practical	After completion of the course students shall be able to learn about Iodo-/ iodimetric titrations and inorganic preparations.
13	CHMHCC302 Lab	Organic Chemistry – II Practical	After completion of the course students shall be able to learn about functional group detection and organic preparations.
14	CHMHCC303 Lab	Physical Chemistry-III Practical	The main aim of the course is to make students familiar with the equilibrium constant and kinetics of chemical reactions.
15	CHMHCC401	Inorganic Chemistry-III Coordination Chemistry and its Applications	This course intends to provide in-depth discussion on Coordination Chemistry and its Applications, extended to Biological systems.
16	CHMHCC402	Organic Chemistry-III Heterocyclic Chemistry	The main objective of this course is to provide knowledge on the preparation and properties of different classes of heterocyclic organic compounds. Emphases are given to heterocyclic compounds of both synthetic and natural origin.
17	CHMHCC403	Physical Chemistry-IV Electrochemistry	Objective of this course is to provide knowledge on Electrochemistry, various laws governing electrochemical processes and their applications.

18	CHMHCC401 Lab	Inorganic Chemistry-III Practical	This paper will encourage and acquaint the students with the gravimetric analysis and inorganic preparations.
19	CHMHCC402 Lab	Organic Chemistry-III Practical	This paper will encourage and acquaint the students with the qualitative organic analysis.
20	CHMHCC403 Lab	Physical Chemistry-IV Practical	After completion of the course students shall be able to learn about pH metric titration, Conductometric titration, Potentiometric titration and redox titrations.
21	CHMHCC501	Organic Chemistry-IV Biomolecules	The main objective of this course is to provide knowledge on the selected types of naturally occurring organic compounds, their synthesis, physiological importance and pharmaceutical applications.
22	CHMHCC502	Physical Chemistry-V Quantum Chemistry & Spectroscopy	The objective of this course is to provide knowledge on Quantum Chemistry & Molecular Spectroscopy and Photochemistry.
23	CHMHCC501 Lab	Organic Chemistry-IV Practical	This paper will encourage and acquaint the students with the organic synthesis and organic quantitative analysis.
24	CHMHCC502 Lab	Physical Chemistry-V Practical	This course intends to provide in-depth study of Lambert-Beer's law and kinetics of chemical reactions.
25	CHMHCC601	Inorganic Chemistry-IV Organometallic Chemistry	The objective of this course is to emphasize on the basic knowledge on Organometallic compounds, their chemistry, application in catalysis and inorganic reaction mechanisms.
26	CHMHCC602	Organic Chemistry –V Spectroscopy, Carbohydrates, Dyes and Polymers.	The objective of this course is to impart knowledge on Application of Spectroscopy (UV-Vis, IR and NMR), Carbohydrates, Dyes and Polymers (with preparation and applications).
27	CHMHCC601 Lab	Inorganic Chemistry-IV Practical	In this paper, emphasis is given to understand the chemistry of different reactions involved in qualitative inorganic analysis.
28	CHMHCC602 Lab	Organic Chemistry – V Practical	This course will encourage the students to understand IR and NMR spectra of simple organic compounds. It also deals with the Extraction of caffeine from tea leaves.
29	CHMDSE501	Analytical Methods in Chemistry	The objective of this course is to provide knowledge on UV-Visible and IR Spectrometry, Flame Atomic Absorption

			and Emission Spectrometry, Thermal and electro-analytical methods of analysis, solvent extraction and chromatographic separation techniques. After completion of the course students shall be able to learn about the different analytical methods in chemistry.
30	CHMDSE502	Green Chemistry	This paper aims to acquaint the students with the twelve principles of green chemistry and designing a chemical synthesis.
31	CHMDSE501 Lab	Practical	The objective of this course is to impart knowledge analytical methods to understand the different physico-chemical properties of the substances.
32	CHMDSE502 Lab	Practical	In this paper, emphasis is given to understand the green reactions, safer chemicals and green synthesis.
33	CHMDSE601	Inorganic Materials of Industrial Importance	The objective of this course is to provide knowledge on glass, ceramics, cement, fertilizers, coating materials, alloys and batteries.
34	CHMDSE602	Dissertation	The main objective of the dissertation/project work is to serve as an evaluation tool to assess a student's mastery of their chosen field of study. It demonstrates their ability to conduct independent research, critically analyze information, apply theoretical frameworks, and present coherent arguments.
35	CHMDSE601 Lab	Practical	After completion of the course students will be able to synthesize fertilizers and alloys.
36	CHMSEC301	Analytical Clinical Biochemistry	This paper aims to acquaint the students with the carbohydrates, proteins, enzymes, lipids, hormones, blood, urine and different diseases.
37	CHMSEC401	Fuel Chemistry	In this course, emphasis is given to understand the coal, petrochemical, petroleum products and lubricants.
38	CHMDSC/GE 101	Atomic Structure, Bonding, General Organic Chemistry and Aliphatic Hydrocarbons	After completion of the course students will be able to understand the structure of atom, compounds of noble gases, bonding in inorganic molecules, stereochemistry of organic molecules, and aliphatic and aromatic hydrocarbons.
39	CHMDSC/GE	Practical	The objective of this course is to provide

	101 Lab		knowledge on inorganic estimation, element detection and chromatographic separation (Thin layer chromatography and paper chromatography).
40	CHMDSC/GE 201	Chemical Energetics, Equilibria and Functional Organic Chemistry	The main aim of the course is to make students familiar with the laws of thermodynamics and chemical equilibrium along with the different class organic compounds.
41	CHMDSC/GE 201 Lab	Practical	After completion of the course students will be able to understand ionic equilibrium, organic synthesis and purification.
42	CHMDSC/GE 301	Solutions, Phase Equilibrium, Conductance, Electrochemistry and Functional Group Organic Chemistry-II	The objective of this course is to provide knowledge on solutions, phase equilibrium, Conductance, electrochemistry and functional groups. After completion of the course students will be able to understand Carbohydrates, Amino Acids, Peptides and Proteins.
43	CHMDSC/GE 301 Lab	Practical	This course aims to acquaint the students with the phase equilibrium, Conductance, electrochemistry and functional groups.
44	CHMDSC/GE 401	Transition metals, Coordination Chemistry, States of Matter and Chemical Kinetics	The objective of this course is to acquaint the students with transition metals, coordination chemistry, states of matter and chemical kinetics.
45	CHMDSC/GE 401 Lab	Practical	This course intends to provide the concept of inorganic semi-micro qualitative analysis (two anions and two cations and excluding insoluble salts). It also provides knowledge on surface tension measurement, viscosity measurement and chemical kinetics.
46	CHMSEC501	Chemistry of Cosmetic and Perfumes	The objective of the course is to provide knowledge on the composition and preparation of cosmetics and perfumes.
47	CHMSEC601	Pesticide Chemistry	The main aim of the course is to make students familiar with the formulation, activity and uses of pesticides.

# **DEPARTMENT OF COMMERCE**

**DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM**

## **PROGRAM/COURSE OUTCOME**

### **B.Com PSOs:**

PSO1: To equip the students with skills in reading, writing, comprehension and communication as also to use electronic media for business communication.

PSO2: To acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.

PSO3: To provide basic knowledge about the organization and management of a business enterprise.

PSO4: To impart basic knowledge of the important business legislation.

PSO5: To familiarize students with the applications of mathematics and statistical techniques in business decision-making.

PSO6: To impart basic knowledge of the provisions of the Companies Act 2013.

PSO7: To provide basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961

PSO8: To enable the student to become familiar with the mechanism for conducting business transactions through electronic means.

PSO9: To enable the students to acquire the basic knowledge of the corporate accounting and to learn the techniques of preparing the financial statement.

PSO10: To acquaint the students with basic concepts used in cost accounting, various methods involved in cost ascertainment and cost accounting book keeping systems.

PSO11: To orient the learner towards entrepreneurship as a career option and creative thinking and behavior.

PSO12: To acquaint students with the techniques and principles to manage human resource of an organization.

PSO13: To provide basic knowledge of concepts, principles, tools and techniques of marketing.

PSO14: To provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards.

PSO15: To familiarize the students with the principles and practices of financial management.

PSO16: To provide computer skills and knowledge for commerce students and to enhance the student understands of usefulness of information technology tools for business operations.

PSO17: To acquaint the students with the concepts of microeconomics dealing with consumer behavior.

PSO18: To provide Basic Knowledge of corporate tax planning and its impact on decision-making.

PSO19: To impart knowledge about the basic principles of the banking and insurance.

PSO20: To impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.

PSO21: To familiarize the students with the concepts, importance and dynamics of international business and India's involvement with global business.

PSO22: To familiarize the students with the activities in a modern office.

PSO23: To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

PSO24: to familiarize the students with of their rights as consumer, the social framework of consumer rights and legal framework of protecting consumer rights.

PSO25: To familiarize the students with the fundamentals of personal selling and the selling process.

PSO26: To enable the student to grasp the major economic problems in India and their solutions.

### COURSE OUTCOME

SL. NO.	PAPER CODE/ COURSE CODE	NAME OF THE COURSE	COURSE OUTCOME
1	BCH-1.1	Business Communication	This course aims to refine the language and speaking skills of students. It enhances the interpretation of messages and power point presentations of projects are taught. Students with splendid presentation abilities are more likely to land high profile jobs.
2	BCH-1.2	Financial Accounting	This course is intended to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.
3	BCH-1.3	Business Law	This course aim to impart basic knowledge of the important business legislation along with relevant case law
4	BCH-1.4	Micro Economics	The objective of the course is to acquaint the students with the concepts of microeconomics dealing with consumer behavior
5	BCH-2.1	Environmental Studies	The aim of this paper is to make student understand and explore the interconnected nature of services the environment provides.
6	BCH-2.2	Corporate Accounting	This course is intended to acquire the conceptual knowledge of the corporate accounting and to

			learn the techniques of preparing the financial statements.
7	BCH-2.3	Corporate Laws	The objective of the course is to impart basic knowledge of the provisions of the Companies Act 2013 and the Depositories Act, 1996. Case studies involving issues in corporate laws are required to be discussed.
8	BCH-2.4	Macro Economics	The course aims at providing the student with knowledge of basic concepts of the macro economics. The modern tools of macro-economic analysis are discussed and the policy framework is elaborated, including the open economy.
9	BCH-3.1	Human Resource Management	The objective of the course is to acquaint students with the techniques and principles to manage human resource of an organization.
10	BCH-3.2	Income Tax Law and Practice	To provide basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961 and the relevant Rules.
11	BCH-3.3	Management Principles and Applications	The objective of the course is to provide the student with an understanding of basic management concepts, principles and practices.
12	BCH-3.4	Business Statistics	The objective of the course is to familiarizes students with the basic statistical tools used for managerial decision-making.
13	BCH-3.5	E-Commerce	To enable the student to become familiar with the mechanism for conducting business transactions through electronic means
14	BCH-4.1	Cost Accounting	To acquaint the students with basic concepts used in cost accounting, various methods involved in cost ascertainment and cost accounting book keeping systems.
15	BCH-4.2	Business Mathematics	The objective of this course is to familiarize the students with the basic mathematical tools, with an emphasis on applications to business and economic situations.
16	BCH-4.3	Computer Applications in Business	To provide computer skills and knowledge for commerce students and to enhance the student understands of usefulness of information technology tools for business operations.
17	BCH-4.4	Indian Economy	This course seeks to enable the student to grasp the major economic problems in India and their solution.
18	BCH-4.5	Entrepreneurship	The purpose of the paper is to orient the learner toward entrepreneurship as a career option and creative thinking and behavior.
19	BCH-5.1	Principles of Marketing	The objective of this course is to provide basic

			knowledge of concepts, principles, tools and techniques of marketing.
20	BCH-5.2	Fundamentals of Financial Management	To familiarize the students with the principles and practices of financial management.
21	BCH-5.3	DSE-1 (Management Accounting)	To impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.
22	BCH-5.4	DSE-2(Financial Markets, Institutions and Financial Services)	To provide the student a basic knowledge of financial markets and institutions and to familiarize them with major financial services in India.
23	BCH-6.1	Auditing and Corporate Governance	To provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards and to give an overview of the principles of Corporate Governance and Corporate Social Responsibility.
24	BCH-6.2	Indirect Tax Law	To provide conceptual knowledge on GST and its application and impact of GST on Custom duty.
25	BCH-6.3	DSE-3 Fundamentals of Investment	To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.
26	BCH-6.4	Industrial Relation and Labour Laws	To enable the students to learn the concepts of industrial relations including trade unions, collective bargaining, discipline and various labour enactments.
27	AECC 1-101	Business Communication	This course aims to refine the language and speaking skills of students. It enhances the interpretation of messages and power point presentations of projects are taught. Students with splendid presentation abilities are more likely to land high profile jobs.
28	DSC 1 -101	Financial Accounting	This course is intended to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.
29	DSC1-101	Financial Accounting (P)	To make students learn the application of Tally ERP9.
30	DSC II-101	Business Organisation and Management	The course aims to provide basic knowledge to the students about the organization and management of a business enterprise.
31	AECC 2-201	Environmental Studies	The aim of this paper is to make student understand and explore the interconnected nature of services the environment provides.



32	L-II	General English	The course's goal is to use poetry, short tales, essays and one-act plays to teach students about life's realities and duties as well as impart life lessons. Consequently improving the students' writing, comprehension and knowledge in English.
33	DSC III-201	Business Law	This course aim to impart basic knowledge of the important business legislation along with relevant case law.
34	DSC IV-201	Business Mathematics and Statistics	The students will comprehend the basics of data science and data analysis like averages and forecasting techniques. To help students perceive statistical applications of Time Series and Index Numbers. The learners will understand the Time Series and Index Numbers in management decisions.
35	DSC V-301	Company Law	The course aims to impart basic knowledge of the provisions of Companies Act, 2013.
36	DSC VI-302	Income Tax Law and Practice	To provide basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961 and the relevant Rules.
37	DSC VI-303	Practical on Income Tax Law and Practice	The course aims to make students acquaint with preparation and e-filing of income tax returns.
38	SEC I -301	E-Commerce	To enable the student to become familiar with the mechanism for conducting business transactions through electronic means
39	SEC 302	Practical on E-Commerce	The course aims to make students familiar with the online commercial transactions and web designing.
40	DSC VII-401	Corporate Accounting	This course is intended to acquire the conceptual knowledge of the corporate accounting and to learn the techniques of preparing the financial statements.
41	DSC VIII-402	Cost Accounting	To acquaint the students with basic concepts used in cost accounting, various methods involved in cost ascertainment and cost accounting book keeping systems.
42	SEC II-401	Entrepreneurship	The purpose of the paper is to orient the learner toward entrepreneurship as a career option and creative thinking and behavior.
43	DSC I-501	Principles of Marketing	The objective of this course is to provide basic knowledge of concepts, principles, tools and techniques of marketing.
44	DSC II-502	Fundamentals of Financial Management	To familiarize the students with the principles and practices of financial management
45	SEC III-501	Computer Applications	To provide computer skills and knowledge for

		in Business	commerce students and to enhance the student understands of usefulness of information technology tools for business operations.
46	SEC III-502	Practical on Computer Applications in Business	To makes students familiar with the use of MS-Office in different aspects.
47	GE I-501	Principles of Micro Economics	After the completion of the course the students will be able to understand the basic principles of Micro-economic theory. The students will be able to think like an economist and able to analyse and relate the concepts of micro-economic to the real life situation.
48	DSE III-601	Management Accounting	To impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.
49	DSE IV-602	Fundamentals of Investment	To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.
50	SEC IV-601	Personal Selling and Salesmanship	The purpose of this course is no familiarize the students with the fundamentals of personal selling.
52	GE II-601	Indian Economy	After the completion of the course the students will be able to grasp the major economic problems in the Indian economy and their solutions. The students will also be able to understand about the modern tools of analysis and the policy framework.

# DEPARTMENT OF ECONOMICS

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Economic (Honours):

SL. NO.	COURSE CODE	CORSE DESCRIPTION	COURSE OUTCOME
1	ECOHCC 101T	Introductory Microeconomics	This course intends to explore the students to the basic principles of microeconomic theory. The emphasis is on thinking like an economist and the course will illustrate how microeconomic concepts can be related to analyze real-life situations.
2	ECOHCC 102T	Mathematical Methods for Economics-I	The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. The students will be able to illustrate the method of applying mathematical techniques to economic theory in general.
3	ECOHCC 201	Introductory Macroeconomics	This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. The students will be able to learn preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, GDP, money, inflation, and the balance of payments.
4	ECOHCC 202	Mathematical Methods for Economics-II	In this course the students will be able to learn particular economic models by illustrating the method of applying mathematical techniques to economic theory in general.
5	ECOHCC 301	Intermediate Microeconomics – I	The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. The students will learn the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.
6	ECOHCC 302	Intermediate Macroeconomics – I	This course introduces the students to formal modeling of a macro economy in terms of analytical tools. It discusses various alternative theories of output and

			employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy
7	ECOHCC-303	Statistical Methods For Economics	To give students an introduction to statistics and types of data collection, tabulation, analysis and interpretation.
8	ECOSEC-301	Data Analysis	This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analyzed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyze data.
9	ECOHCC-401	Intermediate Microeconomics – II	This course is a sequel to Intermediate Microeconomics. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.
10	ECOHCC-402	Intermediate Macroeconomics – II	This course is a sequel to Intermediate Macroeconomics. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro foundations to the various aggregative concepts used in the previous course.
11	ECOHCC-403	Introductory Econometrics	The students will learn the introduction to basic econometric concepts and techniques that covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. They will learn the consequences of and tests for misspecification of regression models.
12	ECOSEC-401	Understanding the Economic Survey and Union Budget	The course seeks to familiarize the students with basic concepts related to some contemporary economic issues. Its aim is to equip the students with sufficient knowledge and skills so as to understand media discussions, and to critically analyze contemporary issues that figure in high-profile government documents, in particular the Economic Survey and the Union Budget. .
13	ECOHCC-501	Indian Economy – I	The course helps to develop analytical frameworks, reviews major trends in economic indicators and policy debates in India in the post -Independence period with particular emphasis on paradigm shifts and turning points.
14	ECOHCC-	Development	The students intend to learn the discussion of

	502	Economics – I	alternative concepts of development and their justification that will help to aggregate models of growth and cross - national comparisons of the growth experience and evaluate the models. The axiomatic basis for inequality measurement used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.
15	ECODSE – 501	Environmental Economics/ Money and Financial Markets	The students will learn to focus on economic causes of environmental problems. Economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.
16	ECODSE – 502	Public Economics	The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures.
17	ECOHCC-601	Indian Economy – II	This course examines sector specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence.
18	ECOHCC-602	Development Economics – II	This second module of the economic development sequence helps students to conceptualize the basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is

			studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and /increased international dependence on the process of development.
19	ECODSE – 601	Applied Econometrics	The aim of this course is to provide a foundation in applied econometric analysis and develop skills required for empirical research in economics. Topics include specification and selection of regression models, dynamic econometric models, advanced methods in regression analysis and panel data models. Since the emphasis is on application of methods, this course requires understanding of econometric software and computing skills.
20	ECODSE – 602	International Economics/ Dissertation	This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

Couse Outcome (CO) of Economic (General):

Sl. No.	Course Code	Corse Description	Course Outcome
1	ECODSC/GE – 101	Principles of Microeconomics – I	This course intends students to expose them to the basic principles in Microeconomic Theory and illustrate with applications.
2	ECODSC/GE – 201	Principles of Microeconomics – II	This is a sequel to Principles of Microeconomics–I covered in the first semester and the objective of the course is the same as in Principles of Microeconomics I.
3	ECODSC/GE -301	Principles of Macroeconomics – I	This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments. The course also discusses various theories of determining GDP in the short run.

4	ECOSEC - 301	Data Analysis	This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data.
5	ECODSC/GE - 401	Principles of Macroeconomics – II	This is a sequel to Principles of Macroeconomics–I. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.
6	ECOSEC – 401	Understanding the Economic Survey and Union Budget	The course seeks to familiarize the students with basic concepts related to some contemporary economic issues. Its aim is to equip the students with sufficient knowledge and skills so as to understand media discussions, and to critically analyze contemporary issues that figure in high-profile government documents, in particular the Economic Survey and the Union Budget. Such capability is necessary to understand government policies and also to increase people’s participation in economic decision-making. The emphasis in the course will be on conceptual understanding, not data.
7	ECODSE – 501	Economic Development and Policy in India - I	This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period.
8	ECOGE -501	Principles of Microeconomics – I	This course intends to expose the student to the basic principles in Microeconomic Theory and illustrate with applications.
9	ECOSEC - 501	Entrepreneurship and Small Business Development	Entrepreneurship and small business development are areas that are constantly evolving, requiring creative minds that are willing to play with considerable levels of risk. This course shall teach how to turn a model or idea into a profitable product or service. Small business management and operations courses offer greater career flexibility to those studying business.
10	ECODSE – 601	Economic Development and Policy in India - II	Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy–I, this course examines sector-specific trends in key indicators and their implications in the post Independence period.
11	ECOGE -601	Principles of	This is a sequel to Principles of Microeconomics–I

		Microeconomics – II	covered in the fifth semester and the objective of the course is the same as in Principles of Microeconomics I.
12	ECOSEC – 601	Insurance Market and its Products	This course provides the student with the basics needed to operate in the insurance market with special reference to India. Fundamentals of life as well as property and liability insurance will be included. Enterprise risk management for corporations, financial risk management, overview of employee benefits, and strategic policies to mitigate risk will also be covered.



# **DEPARTMENT OF EDUCATION**

**DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM**

## **PROGRAM/COURSE OUTCOME**

### **Programme Specific Outcome (PSO) and Course Outcome (CO)**

Name of the Programmes : B.A.(Honours) in Education

B.A.(General) in Education

Duration of the Programme : 3 Years split into 6 semesters

Design and Implementation : Assam university, Silchar

### **Programme Specific Outcome (PSO) of Education :**

1. Students are expected to acquire and understand very specific knowledge in the field of education. The course will provide basic knowledge on education and its principles, ideas and impact on life.
2. The course provides knowledge on history of education in India. They would understand the past and present scenario of education in India. Further, they will be able to forecast future necessity, changes and development through the knowledge of different policies and programmes set by the government.
2. Students will be able to understand educational psychology, its impact on different stages of life, different theories of learning, intelligence and personality.
3. The course provides knowledge on philosophical and sociological foundations of education.
4. The course helps to understand the basic concept of environmental education and its importance in protecting environment, educational organisation and administration, yoga and life skill.
5. The course helps students to familiarize with educational technology, recent trends and issues of education, comparative education, research and statistics, educational technology.
6. The course has a practical paper on psychological experiment and test which can provide them practical knowledge on different psychological aspects.

### Course Outcome (CO) of Education (Honours):

Sl. No	Course Code	Course Description	Course Outcome
1	EDUHCC – 101T	Principles and Practices of Education	This course has been designed to make learners acquaint with concept, nature, principles, theories of education, curriculum, teaching etc.
2	EDUHCC -102T	Psychological Development of the learner	This course would provide basic knowledge on human growth and development at different stages of life.
3	EDUHCC – 201T	Educational Psychology	This course has been prepared to make learners understand the basics of educational psychology, learning, motivation etc.
4	EDUHCC – 202T	Philosophy of Education	This course has been designed to understand the meaning, aims, functions and role of educational philosophy.
5	EDUHCC – 301T	Sociology of Education	This course has been designed to enable the undergraduate students to acquaint themselves with the nature of society, culture and sociological foundations of education
6	EDUHCC – 302T	Educational Technology	With this course the learners were enabled to understand the concept of educational technology, classroom communication, aids and models of teaching etc.
7	EDUHCC – 303T	Educational Management	This course has been designed to focus on educational planning, management, administration and educational finance.
8	EDUSEC – 301T	Yoga and Life Skill education	This course has been designed to make the learners to understand the concept of holistic health, importance of yoga and art of living.
9	EDUHCC – 401T	History and Contemporary System of Education in India	This has made learners to get acquainted with education in India in ancient and medieval period and development of education in post Independence period
10	EDUHCC – 402T	Measurement and Evaluation in Education	It has been prepared to develop understanding the concepts of measurement and evaluation in the field of education.
11	EDUHCC – 403T	Curriculum Development	This paper could help students to acquire knowledge on the foundations of curriculum, curriculum planning, curriculum design, curriculum evaluation etc.
12	EDUSEC – 401T	Application of ICT in Education	From this paper the learners learnt the use of ICT in teaching, learning, Administration and

			Evaluation.
13	EDUHCC – 501TT	Elements of Research and Statistics in Education	This paper equipped students with basic knowledge and understanding of research and statistics in education
14	EDUHCC – 502T	Guidance and Counseling	This paper developed in learner concept, importance and various tools and techniques of guidance and counseling.
15	EDUDSE – 501T	Teaching Learning Methods and Pedagogy	This course has been designed to make learners understand the concept of pedagogy, teaching, principle and theories of teaching etc
16	EDUDSE – 502T	Trends and Issues in Education	This course has been designed to acquire knowledge of emerging issues and trends in education.
17	EDUSEC – 501	Application of Teaching-Learning Skill in Classroom	This course focused on understanding the skills of teaching-learning process, teaching devices and their application in the classroom.
19	EDUHCC – 601T	Environmental Education	This course has been framed to introduce learners to environment, ecosystem and sustainable development and environmental education.
20	EDUHCC – 602P	Psychological Practical and Project Work	This course has been prepared to acquaint learners with concrete practical and scientific experiences on various psychological experiments and tests in laboratory setting and their implications in the field of education.
21	EDUDSE – 601T	Comparative Education	This course has been designed to make learners understand comparative educational systems and teacher education system of different nations – India, USA, USSR and UK.
22	EDUDSE – 602T	Teacher Education	This course has focused on acquainting the learners with teacher education and its development at different levels in India.
23	EDUSEC – 601	Leadership and Organizational Skill	This course has been designed to make students understand leadership, its various skills, communication skills, group behaviour etc.

**Course Outcome (CO) of Education (General):**

Sl. No	Course Code	Course Description	Course Outcome
1	EDUDSC– 101/ GE – 101/ GE – 501	Principles of Education	This course has been designed to acquaint learners with basic concept, aims, principles and theories of education, curriculum and teaching.
2	EDUDSC-201/ GE – 201/ GE – 601	Foundation of Educational Psychology	This course has been framed to provide learners basic knowledge on psychological foundation of education.
3	EDUDSC - 301/ GE – 301	Theories and Ideas of Philosophy in Education	This course focused on enabling learners to understand educational philosophy, its theories and ideas, the impact of Indian philosophy and Western philosophy on education.
4	EDUDSC - 401/ GE – 401	Education and Society	This course has been designed to enable students to acquaint with the nature of society, sociological foundations of education, social change, social mobility etc.
5	EDUDSE – 501	History and Contemporary System of Education in India	This course has been framed to make learners acquire knowledge on history of Indian education during ancient, medieval post Independence period.
6	EDUDSE – 601	Trends and issues in Education	This course focus on enabling students to acquire knowledge in emerging issues and trends in adult education, lifelong learning, population education, peace, human rights etc.

# DEPARTMENT OF ENGLISH

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC  
Course Outcome (CO) of English:

Sl. No.	Course Code	Course Description	Course Outcomes
1	ENG-C-I	British Poetry and Drama: 14th to 17th Century	This paper will familiarize the students with the two major genres in British Literature from the 14th to the 17th centuries – poetry and drama, apart from familiarizing them with the contexts that creates such literatures. It will also enable the students to understand the larger contexts of the Renaissance, the Elizabethan Age and its predictions for certain kinds of literary activities and its implications in literary studies. Further it is envisaged to explore the British Society, culture and politics of the given period and appreciate role of drama in reflecting the contemporary issues.
2	ENG-C-2	Indian Writing in English	The purpose of this course is to familiarise the students with the emergence and growth of Indian Writing in English. This paper shall engage the students with the issues of politics of language and gender, nationalism and modernity that relates to pre and post-Independence India that has laid its seed for the emergence of Indian English Literature. It prepares the students to learn the literary forms of the novel, poetry and drama by Indian English Writers that has been placed against the Indian historical and cultural contexts. The paper will open up the rich and diverse output Indian Writing in English for the students.
3	DSC- I/ GE- I (101)	British Literature I (The Elizabethan Period to the Eighteen Century)	This course is designed to expose the students to the History, Poetry, Drama and Novels of English Literature from Elizabethan period to Eighteen Century. After completing the course, the students will be able to appreciate the poetry, drama and novels at a deeper level.
4	ENGL I (101)	English as a Language Subject (2)	This paper lays foundation of English language grammar for the students. After the completion of the course they shall be able to create complete sentences and use a rich vocabulary in articulating ideas in English language. The short stories and essays incorporated in the course shall enable the students to learn about the effective ways of using vocabulary and techniques of writing under such genres

5	AECC- I	English Communication	After completion of the course students shall be able to learn regarding the various innovative ways of using English language in verbal and non-verbal communications. This course will enable the students to develop their speaking, reading and understanding skills. The course attempts to develop the writing skills of the students and makes them think about the relation between language and literature.
6	ENG-C-3	British Poetry and Drama: 17th and 18th Centuries	This paper will familiarize the students with British literature in the 17th and 18th centuries. The selected texts will encourage the students to look at the economic, political and social changes in Britain during this period. It will also enable the students to learn about the possible impacts of the literature on society.
7	ENG-C-4	American Literature	This paper will enable the students to learn about the history of America based on societal and cultural contexts. The texts those have been included in the paper makes the students aware of the developmental growth of the American society and its changes from beginning to modernism to post-modernism.
8	DSC2/GE-(201)	British Literature II (The Romantics and the Victorians)	This course is designed to expose the students to the History, Poetry and Novels of English Literature of the Romantic and the Victorian Period. It also makes the students learn critically as to how to place the text against the context in pursuance to the social, political, economic scenario of the period.
9	ENGL II (201)	English as a Language Subject	This paper exposes the students to the romantic poetry and to understand the creative uses of language in poetry. To introduce the students to the basics of short story and essays and to familiarize them with different types of short stories and essays in English.
10	ENG-C-5	British Literature: 18th Century	This paper will familiarize the students with British literature in the 18th century, an age in which reason and rationality dominated resulting in the upsurge of some of the best novels and works of non-fictional prose and poetry in the English language. This period also saw some of the best women writers coming up and representing the age in their genres of writing.
11	ENG-C-6	European Classical Literature	This paper introduces students to a selection of Classical Literatures of Europe in English translation. This paper acquaints the students with the Aristotelian focus on the essentials of poetry and the emergence of poetic drama, Horace's creative exercise on art of poetry and theory of impersonality. The rich cultural discourse is shown vividly through the divergent compositions by Sophocles and Plautus. The paper acquaints the students with the founding texts of the European canon.

12	ENG-C-7	Women's Writing	The paper seeks to acquaint the students with the works of women writers from different cultures and nations in various genres - poetry, novels, short stories, and the autobiographical nature of some of the texts. It makes them critically aware of the issues relating to the workings of patriarchy, issues of gender, and relations of desire and power.
13	DSC3/GE-(301)	British Literature III (The Twentieth Century)	This course is designed to expose the students to the History, Poetry, Drama and Novels of English Literature of the Twentieth Century.
14	Alternative English-(301)	Alternative English-I	This paper aims to make the students critically analyze various perspectives in poetry aided by an understanding of the basic elements in poetry. Through the inclusion of drama it helps to revive the students' interest in the drama form and to familiarize students with different kinds of theatre and the varied techniques used to develop students' theatrical skills and make them aware of drama script.
15	SEC- I	Creative Writing	This paper helps the students to acquire the latest writing trends in language study. This paper also enables the students to learn and articulate the art, craft and mode of creative writing, thereby preparing them to write for media and publication.
16	ENG-C-8	British Romantic Literature	The paper aims at acquainting the students with the Romantic period and some of its representative writers. The students will be able to sample some seminal works of the Romantic age which gave expression to the key ideas of the period such as return to nature, subjectivity, desire for personal freedom and the defiance of classicism-imposed restrictions on poetic form.
17	ENG-C-9	British Literature: 19th Century	This paper seeks to introduce the students to the exploits of the 19th century British Literature in prose, especially fiction and cultural criticism. It also includes samples of Victorian poetry. It will familiarize the students the trends from Austen to Rossetti that represents a remarkable literary development through the various ranges of works dealing with the social concerns of the period.
18	ENG-C-10	Indian Classical Literature	This paper introduces students to a selection of Classical Literatures of India in English translation. This paper seeks to create awareness among the students of the rich and diverse literary and aesthetic culture of ancient India through the genres like drama, poetry, the epic narrative and short fictional fables. This paper will enable the students to learn about the rich cultural and literary history of ancient India and to disseminate the possibility of cultural exchange.
19	DSC- 4/GE- (401)	Indian English Literature	This course is designed to expose the students to the Poetry, Drama and Novels of Indian English Literature

20	Alternative English- (401)	Alternative English- II	This paper aims to make the students critically analyze various perspectives in poetry aided by an understanding of the basic elements in poetry. Through the inclusion of drama it helps to revive the students' interest in the drama form and to familiarize students with different kinds of theatre and the varied techniques used to develop students' theatrical skills and make them aware of drama script.
21	SEC- 2	Soft Skills	This paper provides the students with a variety of challenging and interesting activities that focus on a set of ten interlinked soft skills-listening, teamwork, emotional intelligence, assertiveness, learning to learn, problem solving, attending interviews, adaptability, non-verbal communication and written communication. Soft skills are attributes that enables the students to engage in meaningful interactions with others. Since most jobs require teamwork, it's important to possess soft skills to enhance one's employability and achieve the dream job.
22	ENG-C-11	British Literature: The Early 20th Century	The paper aims at acquainting the students with the literature of Britain in the early 20th century, focusing on the modernist canon in poetry, novel, and literary criticism. It familiarizes the students with the literary canons such poetic drama, drama of ideas, psychological novels, and stream of consciousness novels.
23	ENG-C-12	Modern European Drama	This paper shall acquaint the students with the various innovations in dramatic techniques such as absurd dramas, existential dramas, realistic dramas that had evolved from the different locations in Europe. The students shall learn to critically examine the literary texts based on the different dramatic devices and techniques.
24	GE- (501)	British Literature I (The Elizabethan Period to the Eighteen Century)	This course is designed to expose the students to the History, Poetry, Drama and Novels of English Literature from Elizabethan period to Eighteen Century.
25	DSE- (4)	Modern Indian Writing in English Translation	This course is designed to introduce various texts from Indian writings in English Translation
26	DSE-2	British Literature: Post World War II	This paper acquaints the students to modernism in arts and literature. It also highlights the ethos of postmodernism through some selected poetic and fictional works of modern times.
27	SEC- 3	Business Communication	This paper acquaints the students to the essentials of Business Communication, various writing skills in business concerns.



28	ENG-C-13	Post Colonial Literatures	This paper acquaints the students to postcolonial literature that acted as a response to European colonialism in Asia, Africa, Middle East, and the Pacific. This paper includes some of the novels, short stories and poems from postcolonial literatures across the world that showcases the diverse colonial effects pertaining to the diverse regional and cultural differences as well as common and shared experiences of the postcolonial condition.
29	ENG-C-14	Popular Literature	This paper seeks to introduce the students to genres such as children's literature, detective fiction and campus fiction, which have a "mass" appeal, and can help us gain a better understanding of the popular and folk roots of literature. CO- To provide knowledge about the contemporary literature which is a reflection of present social changes and trends and the use of folk roots of literature. This paper will enable the students to understand the nature of —Popular literature as a genre and the critical ideas underpinning the theorization of popular literature as well as how it has moved from the margins to earn for itself a fairly important place in the literary and critical consciousness.
30	GE- (601)	British Literature II (The Romantics and the Victorians)	This course is designed to expose the students to the History, Poetry and Novels of English Literature of the Romantic and the Victorian Period.
31	DSE-3	Literary Criticism	This paper will enable students to have a broad understanding of some important texts on literary criticism and literary theory. This paper will also and enlighten the students on the various budes in literary interpretations and critical approaches so as to endow them with knowledge while reading texts across genres
32	DSE-4	World Literatures	This paper will encourage and acquaint the students with World Literatures in English Translation through the study of selected texts. The thought is to make the students read beyond the classical European canon by counting significant literary texts from other major regions/countries written in languages other than English, but made available to the readers in English translation. It basically provides knowledge about the different literatures of the world with the help of some important texts that surpasses cultural barriers.

33	SEC- 4	Technical Writing	<p>This paper teaches the students how to write clearer technical documentation. This course teaches the fundamentals of technical writing. The students will learn how to use terminology—including abbreviations and acronyms. Distinguish active voice from passive voice. Convert passive voice sentences to active voice. Identify three ways in which active voice is superior to passive voice. Develop at least three strategies to make sentences clearer and more engaging. Develop at least four strategies to shorten sentences. Understand the difference between bulleted lists and numbered lists. Create helpful lists. Create effective lead sentences for paragraphs. Focus each paragraph on a single topic. State key points at the start of each document. Identify your target audience. Determine what your target audience already knows and what your target audience needs to learn. Understand the curse of knowledge. Identify and revise idioms. State your document's scope (goals) and audience. Break long topics into appropriate sections. Use commas, parentheses, colons, dashes, and semicolons properly. Develop beginner competency in Markdown. It takes years of focused practice to become a great engineer or a great technical writer. This course will improve your technical writing but will not instantly transform you into a great technical writer.</p>
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# DEPARTMENT OF GEOGRAPHY

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Geography:

Sl. No.	Course Code	Course Description	Course Outcome
1	GEOHCC-101	Geomorphology	The course will provide an understanding of the conceptual and dynamic aspects of landform development. Students will also learn the relevance of applied aspects of geomorphology.
2	GEOHCC-102	Cartographic Techniques (p)	To give the students to the discipline of cartography, map projections, slope analysis and surveying method using theodolite.
3	GEOHCC-201	Human Geography	Students will learn how human, physical and environmental components of the world interact, familiarized with economic processes such as globalization, trade and their impact on economic, cultural and social activities. Able to understand population dynamics and world migration.
4	GEOHCC-202	Thematic Cartography (P)	Students will understand maps and their importance, types and uses. Comprehend map scales and their implications for measurement. And also apply thematic mapping techniques to represent thematic information.
5	GEOHCC-301	Climatology	On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate system, climatic variability and change.
6	GEOHCC-302	Statistical Methods in Geography (p)	Students will be able to understand the significance of statistical methods in geography, practical use of different sampling types, measures of dispersion, correlation.
7	GEOHCC-303	Geography of India	Students will learn the differences in terms of varied physiography of India, understand the demographic components and settlement structure in India and to study the economy and various type of resources in India.

8	GEOSEC-301	Remote sensing (p)	To give an introduction to the students regarding remote sensing, satellite remote sensing, image processing, satellite image interpretation and application of remote sensing.
9	GEOHCC-401	Economic Geography	Students will be acquainted with the concept of economic activity and factors affecting locations and understand the evolution of various types of economic activities. Able to analyze factors of location of agriculture and industries.
10	GEOHCC-402	Environmental Geography	The students will learn the importance of conserving biodiversity to maintain ecological balance as well as national and international concerns on various environmental issues.
11	GEOHCC-403	Field and Research Methodology (p)	To give an introduction to the students regarding field work in geography, defining field and identifying case study, field techniques, use of field tools and designing of field report.
12	GEOSEC-401	Geographical Information System (p)	To give an introduction to the students regarding GIS, GPS, GIS data structure, GIS data analysis and application of GIS.
13	GEOHCC-501	Regional Planning and Development	The students will be able to identify the different types of regions, regional planning and planning processes and also learn about regional development planning and multi-regional planning.
14	GEOHCC-502	Remote sensing and Geographical Information System (p)	To introduce the students to remote sensing and GIS, aerial photography and satellite remote sensing. Acquainted with GIS data structures, image processing, interpretation and application of remote sensing and GIS.
15	GEODSE-501	Population Geography	Understand human population as an element of geographical study, know the world's population composition, and recognize the factors of population growth and their determinants. Able to find out the relationship between population and earth's natural resources.
16	GEODSE-502	Agricultural geography	Students will be able to conceptualize the various agricultural regions with respect to climate and will be able to critically examine the issues concerned of agricultural activities at global and Indian context.
17	GEOHCC-601	Evolution of Geographical Thought	The learning outcome of this course would be to comprehend, correlate and connect geographical ideas and concepts with historical as well as contemporary context.
18	GEOHCC-602	Disaster Management Based Project	To introduce the students to project work, field based case studies, preparation of disaster preparedness plan and the writing of project report.

		Work (p)	
19	GEODSE-601	Political Geography	Students will understand the elements of political geography; learn the concept of nation, state and geopolitical theories. Understand the different dimensions of electoral geography and resource conflicts.
20	GEODSE-602	Social Geography	The course will develop students' capability of interpretation, analysis and evaluation of social issues through geographical dimension.
21	GEOGE-101	Physical Geography	To give an introduction to the students regarding physical geography, atmosphere, lithosphere, fluvial cycle of erosion and hydrosphere.
22	GEOGE-201	Human Geography	Students will learn how human, physical and environmental components of the world interact, familiarized with economic processes such as globalization, trade and their impact on economic, cultural and social activities. Able to understand population dynamics and world migration.
23	GEOGE-301	General Cartography (p)	To give an introduction to the students regarding maps, map scale, map projection and representation of data.
24	GEOGE-401	Environmental Geography	The students will learn the importance of conserving biodiversity to maintain ecological balance as well as national and international concerns on various environmental issues.
25	GEODSC-101	Physical Geography	To give an introduction to the students regarding physical geography, atmosphere, lithosphere, fluvial cycle of erosion and hydrosphere.
26	GEODSC-201	Human Geography	Students will learn how human, physical and environmental components of the world interact, familiarized with economic processes such as globalization, trade and their impact on economic, cultural and social activities. Able to understand population dynamics and world migration.
27	GEODSC-301	General Cartography (p)	To give an introduction to the students regarding maps, map scale, map projection and representation of data.
28	GEODSC-401	Environmental Geography	The students will learn the importance of conserving biodiversity to maintain ecological balance as well as national and international concerns on various environmental issues.
29	GEOGE-501	Physical Geography	To give an introduction to the students regarding physical geography, atmosphere, lithosphere, fluvial cycle of erosion and hydrosphere.
30	GEOGE-601	Human Geography	Students will learn how human, physical and environmental components of the world interact, familiarized with economic processes such as globalization, trade and their impact on economic,

			cultural and social activities. Able to understand population dynamics and world migration.
31	GEOUSE-501	Population Geography	Understand human population as an element of geographical study, know the world's population composition, and recognize the factors of population growth and their determinants. Able to find out the relationship between population and earth's natural resources.
32	GEOUSE-601	Political Geography	Students will understand the elements of political geography; learn the concept of nation, state and geopolitical theories. Understand the different dimensions of electoral geography and resource conflicts.
33	GEOSEC-301	Regional Planning and Development	The students will be able to identify the different types of regions, regional planning and planning processes and also learn about regional development planning and multi-regional planning.
34	GEOSEC-401	Remote sensing and GPS based Project Report	To introduce the students to remote sensing and GIS, aerial photography and satellite remote sensing. Acquainted with GIS data structures, image processing, interpretation and application of remote sensing and GIS.
35	GEOSEC-501	Cartography (p)	To give an introduction to the students regarding maps, map scale, map projection and representation of data.
36	GEOSEC-601	Field Techniques and Survey Based Project Report (p)	To give an introduction to the students regarding field work in geographical studies, defining field and identification of case study, field techniques, questionnaires and designing field reports.

**DEPARTMENT OF HISTORY**  
**DIPHU GOVERNMENT COLLEGE**  
**DIPHU, KARBI ANGLONG, ASSAM**

**PROGRAM/COURSE OUTCOME**

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of History:

Sl. No.	Course Code	Course Description	Course Outcome
1	HISHCC - 101T	History of India I (upto Vedic Period)	The course is designed to understand the trajectory of prehistory in India's past and transition to proto-history from prehistory along with their characteristic features. The course also analyses the various stages of evolution of human cultures and the belief systems in the proto- history period.
2	HISHCC - 102T	Social Formations and Cultural Patterns of the Ancient World	The Course aims to introduce significant developments in world history that have shaped the complexity of human existence. To begin with, it offers a historical survey of human evolution. It details the transition from the hunting-gathering subsistence pattern to a more advanced adaptations to a sedentary farming economy
3	HISHCC - 201T	History of India II (300 BCE to 750 CE)	This course explores the transition from proto-historical to early medieval phase highlighting major changes that shaped the character of the Indian civilization. the course tries to trace the emergence of state system from tribal stage to 'early-state' stage and at the same time seeks to underline the important developments in the arena of economy, society and culture
3	HISHCC - 202T	Social Formations and Cultural Patterns of the Medieval World	Social Formations and Cultural Patterns of the Medieval World The Course seeks to develop a historical understanding of the major developments in some parts of the Ancient and Medieval world. The Course provides a scope for understanding the subject of slavery in its varied dimensions in the Ancient world.
4	HISHCC - 301T	History of India III (c. 750 to 1206)	This course is designed to make students trace the patterns of change and continuities in the economic,

			political, social and cultural aspects of life during the 'early medieval period' (c. A.D. 750 – A.D. 1206) of Indian history.
5	HISHCC - 302T	Rise of Modern West -I	The paper familiarizes the student with important transitions and transformations in the economy, polity, and socio-cultural life from late medieval period to 1600 in various parts of Europe. The course also analyses the significant historical shifts and events and the resultant effects on the civilizations of Europe in the period.
6	HISHCC - 303T	History of India IV (c.1206-1550)	The course provides a basic understanding of the political, economic and socio-cultural processes of the time especially with reference to Rajputs, Vijayanagar state and the Delhi Sultanate. Students will also be able to analyse the regional variations, socio- cultural set up of the period.
7	SEC- I	Archaeology & Museology	The aim of this course is to make students familiar with the structure and functioning of archaeology and museums with a view to reconstruct history and the preservation and display of its manuscripts, art objects and heritage.
8	HISHCC - 401T	Rise of Modern West -II	The paper will trace the development of socio-economic and technological forces which went into the making of the Industrial Revolution in late 18th century Britain.
9	HISHCC - 402T	History of India-V (c. 1550-1605)	The course provides a basic understanding of major developments and foundations of a variety of administrative and political setup in India between c.1550-1605. The course also highlights the inter relationships between the economy, culture and religious practices of the period.
10	HISHCC - 403T	History of India-V (1605-1750)	This course is designed to reconstruct the linkages of the history of India under the Mughal Rule. As a whole, this course will enable them to relate to the socio-economic and religious orientation of the people of Medieval period in India.
11	SEC- 2	Evolution of Indian Culture	The course aims to provide an overview of the various forms of the subcontinent's popular cultural practices, expressed through oral, visual and other mediums. Exploring the interface between various forms of popular culture and their historical evolution.
12	HISHCC - 501T	History of Modern Europe (1780-1939)	This course provides a critical overview of the political developments that occurred in Europe in the period between 1780 to 1939. It shall also trace the patterns and outcomes of social upheaval



			throughout Europe in the first half of 19th century.
13	HISHCC - 502T	History of India- VII (1750-1857)	The course draws the circumstances leading to the consolidation of colonial rule over India and their consequences. The course also highlights the popular uprisings among the tribal, peasant and common people against the British policies.
14	DSE – 501	History of China (1839- 1982)	The course highlights the transformation of China from an imperial power into a modern nation taking its place among a constellation of world powers. This transition has been studied in the context of the impact of a specific form of western imperialism on China and the country's numerous internal fissures and contradictions. This course seeks to focus on a range of responses to the tumultuous changes taking place: various strands of reform, popular movements, and revolutionary struggles
15	DSE – 502	Historiography	The course gives an overview of evaluation of evidence both primary and secondary sources as a means of forming and supporting a written or oral argument about a historical topic or question.
16	HISHCC - 601T	History of India - VIII (1857-1950)	This paper deals with the broad socioeconomic and political trends in colonial India from the latter half of the 19th century. It also critically analyses the various trends in the national liberation movement and other aspects of politics which were foundational for the modern Indian state.
17	HISHCC - 602T	History of Modern Europe- II (1780 – 1939)	This paper gives a historical overview of the development of nationalities and nation-states in the 19th and 20th centuries. The course is focuses on the democratic and socialist foundations modern Europe, historical development of working class movements, socialist upsurge and the economic forces of the two wars and the other ideological shifts of Europe in the period
18	DSE – 601	History of Assam (1228- 1826)	To identify the major stages of developments in the political, social and cultural history of Assam during the medieval times. This course will enable the student to explain the history of Assam from the 13th century to the occupation of Assam by the English East India Company in the first quarter of the 19th century.
19	DSE – 602	History of Assam (1826- 1947)	The course provides the foundation and expansion of colonial rule in Assam. Students will also be able to situate the development of nationalism in Assam and its role in India's freedom struggle. The course would enable the students to analyse the main

			currents of the political and socio-economic developments in Assam during the colonial period.
20	HISGEC/DSC 101T/ GE501T	History of India from the Earliest Times upto 300 CE	To promote an understanding of the process of change and development through which human societies have evolved to their present stage of development.
21	HISGEC/DSC 201T/ GE601T	History of India from C.300 to 1206	This course is focuses on the emergence and structure of state system in North India in the early period. The course also highlights the patterns of change and continuities in the economic, political, social and cultural aspects of life during the 'early medieval period of Indian history.
22	ISGEC301T/ HISDSC301T	History of India from C. 1206 to 1707	The course provides a basic understanding of the political, economic and socio-cultural processes of the time especially with reference to Rajput polities, Gujarat sultanate, Vijayanagar state as well as the Delhi Sultanate.
23	SEC- 30I	Archaeology & Museology	The aim of this course is to make students familiar with the structure and functioning of archaeology and museums with a view to reconstruct history and the preservation and display of its manuscripts, art objects and heritage
24	HISGEC - 401T/ HISDSC401T	History of India from 1707 to 1950	The course discusses the processes by which the British East India Company transformed itself into a state and gradually consolidated its position over a vast expanse. Apart from the evolution of colonial institutions of governance and developing forms of colonial exploitation, the course also highlights the interface between Company Raj and indigenous elite on various social issues.
25	SEC - 401	Evolution of Indian Culture	The course aims to provide an overview of the various forms of the subcontinent's popular cultural practices, expressed through oral, visual and other mediums. Exploring the interface between various forms of popular culture and their historical evolution.
26	HISDSE- 501	History of Europe (1789-1914)	This course provides a critical overview of the French Revolution, and acquaint the students with the repercussions of the revolution, both within and beyond France. It also traces the patterns and outcomes of social upheaval throughout Europe in the first half of 19th century.
27	SEC- 501	Historical Tourism in India	This paper highlights the tourism in India with special reference to the historical monuments, cultural and ecological elements and places of the north east India as tourist and heritage sites of the

			nation. Students will be able to relate to the growing vocation of tourism as an industry and the applicability of historical knowledge for its growth.
28	HISDSE- 601	History of China (1839-1982)	The course highlights the transformation of China from an imperial power into a modern nation taking its place among a constellation of world powers. This transition has been studied in the context of the impact of a specific form of western imperialism on China and the country's numerous internal fissures and contradictions.
29	SEC- 601	History of Tea Industry in Assam	The course gives an overview of the development of tea plantation in Assam during the colonial period. The course also highlights the immigration of labourers in Assam from mainland India.

# DEPARTMENT OF MATHEMATICS

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Mathematics:

Sl.No	Course Code	Name of the Course	Course Outcome
1	MTMHCC-101	CALCULUS	Compute limits, derivatives, and integrals. Analyze functions using limits, derivatives, and integrals. Recognize the appropriate tools of calculus to solve applied problems
2	MTMHCC-101 LAB	CALCULUS PRACTICAL	<b>Evaluate the behaviors and graphs of functions</b>
3	MTMHCC-102	HIGHER ALGEBRA	<b>Evaluate and simplify expressions that contain both real numbers and variables</b>
4	MTMHCC-201	REAL ANALYSIS	Real analysis is an area of analysis that studies concepts such as sequences and their limits, continuity, differentiation, integration and sequences of functions.
5	MTMHCC-202	DIFFERENTIAL EQUATIONS	To provide students with an introduction to the theory of ordinary differential equations through applications, methods of solution, and numerical approximations.
6	MTMHCC-202 LAB	DIFFERENTIAL EQUATIONS PRACTICAL	On successful completion of this course students will be able to: understand that physical systems can be described by differential equations. understand the practical importance of solving differential equations. understand the differences between initial value and boundary value problems (IVPs and BVPs)

7	MTMHCC-301	THEORY OF REAL FUNCTIONS	The primary Learning Outcome of this course is Quantitative Reasoning, which is to understand and apply mathematical concepts, analyze and interpret various types and properties of Real Functions.
8	MTMHCC-302	GROUP THEORY	Determine whether a group is cyclic or abelian. Determine whether a given subset is a subgroup, including using Lagrange's theorem. Be able to define and compute with cyclic groups, the additive group mod n, the multiplicative group mod p, the symmetric group, the dihedral group.
9	MTMHCC-303	PDE & SYSTEMS OF ODE	The primary learning outcome for this course is efficiently solving partial differential equations of first and second order, and systems of ode. Students will also be able to find approximate solutions to some first order ode.
10	MTMHCC-303 LAB	PDE & SYSTEMS OF ODE PRACTICAL	formulate physical problems as PDEs using conservation laws. understand analogies between mathematical descriptions of different (wave) phenomena in physics and engineering. classify PDEs, apply analytical methods, and physically interpret the solutions.
11	MTMHCC-401	NUMERICAL METHODS	Demonstrate understanding of common numerical methods and how they are used to obtain approximate solutions to otherwise intractable mathematical problems. Apply numerical methods to obtain approximate solutions to mathematical problems.
12	MTMHCC-401 LAB	NUMERICAL METHODS PRACTICAL	Demonstrate understanding of common numerical methods and how they are used to obtain approximate solutions to otherwise intractable mathematical problems. Apply numerical methods to obtain approximate solutions to mathematical problems.
13	MTMHCC-402	RIEMANN INTEGRATIONS AND SERIES OF FUNCTIONS	To understand the integration of bounded functions on a closed and bounded interval and its extension to the cases where either the interval of integration is infinite, or the integrand has infinite limits at a finite number of points on the interval

			of integration.
14	MTMHCC-403	RING THEORY	(a) describe the fundamental concepts in ring theory such as of the ideals, quotient rings, integral domains, and fields; (b) demonstrate the concepts of vector spaces, subspaces, bases, dimension and their properties with examples; (c) identify matrices with linear transformations;
15	MTMHCC-501	TOPOLOGY	Demonstrate an understanding of the concepts of metric spaces and topological spaces, and their role in mathematics. Demonstrate familiarity with a range of examples of these structures.
16	MTMHCC-502	MULTIVARIATE CALCULUS	In Multivariable Calculus, students will build on the knowledge and skills for mathematics in AP Calculus BC, which provides a foundation in derivatives, integrals, limits, approximation, application, and modeling along with connections among representations of functions.
17	MTMHCC-601	COMPLEX ANALYSIS	Upon completing the course, students will be able to: Students will be equipped with the understanding of the fundamental concepts of complex variable theory and skill of contour integration to evaluate complicated real integrals via residue calculus.
18	MTMHCC-602	LINEAR ALGEBRA	Students will demonstrate competence with the basic ideas of linear algebra including concepts of linear systems, independence, theory of matrices, linear transformations, bases and dimension, eigenvalues, eigenvectors and diagonalization.
19	MTMDSE-501(I)	NUMBER THEORY	The students should have a good understanding of the proofs of the main theorems. Should be able to argue by induction and by contradiction. Should be comfortable with divisibility proofs that use a number of different means, including induction, congruences, and divisibility tests.
20	MTMDSE-501(II)	PROBABILITY AND	The main objective of this course is

		STATISTICS	to provide students with the foundations of probabilistic and statistical analysis mostly used in varied applications in engineering and science like disease modeling, climate prediction and computer networks etc.
21	MTMDSE-501(III)	MECHANICS	<ul style="list-style-type: none"> <li>• Understand the force systems and draw free body diagram to analyze rigid body equilibrium</li> <li>• Comprehend the principles of Coulomb friction and solve engineering mechanics problems associated with frictional force</li> <li>• Compute the centroid, first moment and second moment of an area</li> <li>• Understand the concept of motion of particles and rigid bodies.</li> </ul>
22	MTMDSE-502(I)	ANALYTICAL GEOMETRY	<p>define matrices and some special matrices, determinants of square matrices and (if there exists) evaluate inverse of matrices.</p> <p>define the notion of matrix.</p> <p>define some special matrices like square, diagonal and triangular matrices.</p> <p>define minor and cofactors of square matrices.</p>
23	MTMDSE-502(II)	INDUSTRIAL MATHEMATICS	On completion of this course, the student will be able to: Formulate <i>mathematical</i> and computational approaches for <i>industrial</i> problems.
24	MTMDSE-502(III)	BOOLEAN ALGEBRA AND AUTOMATA THEORY	<p>Use truth tables and laws of identity, distributive, commutative, and domination.</p> <p>Simplify and prove boolean expressions.</p> <p>Compute sum of products and product of sum expansions.</p> <p>Convert boolean expressions to logic gates and vice-versa.</p>

25	MTMDSE-601(I)	LINEAR PROGRAMMING	Linear programming (LP), also called linear optimization, is a method to achieve the best outcome (such as maximum profit or lowest cost) in a mathematical model whose requirements and objective are represented by linear relationships.
26	MTMDSE-601(II)	BIOMATHEMATICS	The mission of the Biomathematics major is to educate students in the foundations of biology and applied mathematics, and to provide students with opportunities to conduct scientific research which addresses biologically driven questions by utilizing appropriate mathematical and computational theory.
27	MTMDSE-601(II)	OBJECT ORIENTED PROGRAMMING IN C++	To understand the concept of data abstraction and encapsulation. To learn how to overload functions and operators in C++. To learn how containment and inheritance promote code reuse in C++. To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
28	MTMDSE-601(II) LAB	OBJECT ORIENTED PROGRAMMING IN C++ PRACTICAL	To understand the concept of data abstraction and encapsulation. To learn how to overload functions and operators in C++. To learn how containment and inheritance promote code reuse in C++. To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
29	MTMDSE-602(I)	HYDRODYNAMICS	The objective of hydrodynamics is to understand the motion of fluids. The field of hydrodynamics has expanded so widely that it includes the flows of solids as well as fluids—continuous matter, in short.
30	MTMDSE-602(II)	MATHEMATICAL MODELLING	The main objective of this course is to provide an introduction to modelling and simulation and how to model, solve and interpret real life problems using different Mathematical perspectives.
31	MTMDSE-602(II) LAB	MATHEMATICAL MODELLING	The main objective of this course is to provide an introduction to modelling and



		PRACTICAL	simulation and how to model, solve and interpret real life problems using different Mathematical perspectives.
32	MTMDSE-602(III)	THEORY OF EQUATIONS	In algebra, the study of algebraic equations, which are equations defined by a polynomial, is called the theory of equations. A polynomial is an expression consisting of one or more terms. The main difficulty of the theory of equations was to know when an algebraic equation has an algebraic solution.
33	MTMDSE-602(IV)	PROJECT WORK	Learning outcomes describe what students should be able to do by the end of a teaching session or course. They are related to, but different from, teaching aims, which instead describe broadly what the session or course is about and its overall purpose.
34	MTMSEC-301(I)	LOGIC AND SETS	At some point of your academic career, you may wish to study set theory and logic in greater detail. Our main purpose here is to learn how to state mathematical results clearly and how to prove them. A proof in mathematics demonstrates the truth of certain statement.
35	MTMSEC-301(II)	COMPUTER GRAPHICS	The main objective of the course is to introduce students with fundamental concepts and theory of computer graphics. It presents the important drawing algorithm, polygon fitting, clipping and 2D transformation curves and an introduction to 3D transformation
36	MTMSEC-301(III)	PROGRAMMING IN C	Understanding foundation concepts of information and information processing in computer systems: a matter of information, data representation, coding systems. Understanding of an algorithm and its definition. Understanding of a programming language syntax and its definition by example of C language.
37	MTMSEC-401(I)	GRAPH THEORY	Students will achieve command of the fundamental definitions and concepts of graph theory. 2. Students will understand and apply the core theorems and algorithms, generating examples as needed, and asking the next natural

			question.
38	MTMSEC-401(II)	OPERATING SYSTEM LINUX	Understand the theory of Linux design and operation. Ability to be productive in a Linux environment. Text editing in the Linux environment. Implement basic Linux tools.
39	MTMSEC-401(III)	SPECIAL FUNCTIONS	At the end of this course the students will be able to understand a strong foundation in functional analysis, focusing on spaces (Metric Spaces, Normed Spaces, Inner Product Spaces) Operators, Fundamental Theorems and Applications
40	MTMGE-101(I)	DIFFERENTIAL CALCULUS	Lesson Summary. Differential calculus is the study of the instantaneous rate of change of a function. This type of rate of change looks at how much the slope of a function changes, and it can be used to analyze minute changes at a single point of the function
41	MTMGE-101(II)	FINITE ELEMENT METHOD	Interpret the philosophy behind principles, design and modelling considerations in using finite element analysis. Develop stiffness matrices for spring, truss, beam, plane stress problems and three dimensional problems using the concept of direct equilibrium and potential energy methods.
42	MTMGE-101(II) LAB	FINITE ELEMENT METHOD PRACTICAL	Interpret the philosophy behind principles, design and modelling considerations in using finite element analysis. Develop stiffness matrices for spring, truss, beam, plane stress problems and three dimensional problems using the concept of direct equilibrium and potential energy methods.
43	MTMGE-201(I)	DIFFERENTIAL EQUATIONS	To provide students with an introduction to the theory of ordinary differential equations through applications, methods of solution, and numerical approximations.
44	MTMGE-201(II)	ECONOMETRICS	Develop the ability to explain core economic terms, concepts, and theories. Explain the function of the market and prices as allocative mechanisms. Apply the concept of equilibrium to both microeconomics and macroeconomics.

			Identify key macroeconomic indicators and measures of economic change, growth, and development
45	MTMGE-301(I)	REAL ANALYSIS	Real analysis is an area of analysis that studies concepts such as sequences and their limits, continuity, differentiation, integration and sequences of functions.
46	MTMGE-301(II)	MATHEMATICAL FINANCE	Demonstrate understanding of concepts relating to functions and annuities. Employ methods related to these concepts in a variety of financial applications. Apply logical thinking to problem solving in context. Use appropriate technology to aid problem solving
47	MTMGE-401(I)	ABSTRACT ALGEBRA	This course helps the students to study elementary concepts. To introduce the concept of simultaneous differential equations. Understanding the concept of integration in series. To understand the Existence and Uniqueness theorem
48	MTMGE-401(II)	COMBINATORIAL MATHEMATICS	Apply the concept of equilibrium to both microeconomics and macroeconomics. Identify key macroeconomic indicators and measures of economic change, growth, and development
49	MTMDSC-101	DIFFERENTIAL CALCULUS	Calculus is the study of the instantaneous rate of change of a function. This type of rate of change looks at how much the slope of a function changes, and it can be used to analyze minute changes at a single point of the function
50	MTMDSC-201	DIFFERENTIAL EQUATIONS	To provide students with an introduction to the theory of ordinary differential equations through applications, methods of solution, and numerical approximations.
51	MTMDSC-301	REAL ANALYSIS	Real analysis is an area of analysis that studies concepts such as sequences and their limits, continuity, differentiation, integration and sequences of functions
52	MTMDSE-501(II)	MATRICES	Upon completion of this lesson, students will be able to: Identify the number of rows and columns within a matrix. Modify a matrix through individual operations of adding, multiplying, and switching rows.

53	MTMSEC-301(II)	CLASSICAL ALGEBRA & TRIGONOMETRY	Solve systems of equations by graphing, substitution, and addition. Identify inconsistent systems of equations containing two variables. Express the solution of a system of dependent equations containing two variables using standard notations.
54	MTMSEC-401(I)	VECTOR CALCULUS	Vector calculus motivates the study of vector differentiation and integration in two and three dimensional spaces. ✓ It is widely accepted as a prerequisite in various fields of science and engineering.
55	MTMSEC-601(III)	ANALYTICAL GEOMETRY	define matrices and some special matrices, determinants of square matrices and (if there exists) evaluate inverse of matrices. define the notion of matrix. define some special matrices like square, diagonal and triangular matrices. define minor and cofactors of square matrices.
56	MTMDSC-401	ABSTRACT ALGEBRA	This course helps the students to study elementary concepts. To introduce the concept of simultaneous differential equations. Understanding the concept of integration in series. To understand the Existence and Uniqueness theorem
57	MTMDSE-501(I)	LINEAR ALGEBRA	Linear algebra is the study of linear combinations. It is the study of vector spaces, lines and planes. It includes some mappings that are required to perform linear transformations. It includes vectors, matrices, and linear functions. It is the study of linear equations and its transformation properties.
58	MTMDSE-601(I)	LINER PROGRAMMING	Linear programming (LP), also called linear optimization, is a method to achieve the best outcome (such as maximum profit or lowest cost) in a mathematical model whose requirements and objective are represented by linear relationships.
59	MTMDSE-601(II)	COMPLEX ANALYSIS	A fundamental result of complex analysis is the Cauchy-Riemann equations, which give the conditions a function must satisfy in order for a complex generalization of the derivative, the so-called complex derivative, to exist. When the complex derivative is defined "everywhere," the function is said to be analytic.

# DEPARTMENT OF PHILOSOPHY

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Philosophy:

Sl. No.	Course Code	Course Description	Course Outcome
1	PHPHCC101T	Epistemology and Metaphysics: Indian	This paper concentrates on the fundamental concepts of knowledge and truth of Indian philosophy. It helps students to develop a strong foundation of Indian philosophy. Indian Philosophy broadly divided into two groups: Vedic (astika) and non-Vedic (Nastika). There are six vedic schools and three Non Vedicschools. Among these systems this paper contains the general ideas of Nyaya, Vaisesika, Samkhya, Vedanta and three Non-Vedic schools - Carvaka, Jaina and Buddhism.
2	PHPHCC102T	Logic-I	This course helps the students to understand the basic concepts of Logic such as the nature of logic, argument and argument form, different methods to prove the validity and invalidity of arguments. This paper also concentrates on the concepts regarding the different kinds of traditional and modern propositions, various kinds of deductive inference which develops the reasoning power of students.
3	PHPHCC201T	Epistemology and Metaphysics (Western)	This course aims to get students acquainted with the knowledge and truth about Western philosophy. The paper concentrates on the philosophy of Plato, Aristotle, Kant, John Locke, Hegeland Hume.
4	PHPHCC202T	Ethics- I	This paper provides an understanding of the fundamental concepts of ethics and its scope like normative ethics, virtue ethics and deontological ethics. Ethics is a study of moral issues in the fields of individual and collective

			interaction. This paper enables students to have a broad understanding of some ethical issues like rights and duties, Good and virtue and the objects of moral judgments etc. The paper also concentrates on Indian ethics regarding purusartha, ahimsa etc.
5	PHPHCC301T	History of Modern Western Philosophy	The course helps the students to understand the history of Modern Western philosophy. This paper concentrates on the philosophy of Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel and Marx. This paper aims to get students acquainted with empiricism, rationalism and Kant's Critical theory of knowledge.
6	PHPHCC302T	Social and Political Philosophy	This particular course covers the primary concepts of social and political philosophy. Social and political philosophy is a normative pursuit, related to Ethics. Through this paper students get the knowledge regarding the values related to individual, society, community and nation.
7	PHPHCC303T	Ethics – II	The course helps the students to know about some ethical theories such as Meta ethics, emotivism and prescriptivism of some distinguished philosophers. The paper also concentrates on some applied ethical issues like animal rights, euthanasia, amniocentesis etc. This paper also provides to the students about the knowledge of medical ethics, business ethics and feminist ethics.
8	PHPHCC401T	Classical Text- Indian	This paper provides students to have a broad understanding of classical Indian Text. The paper consists of various theories of knowledge of Indian philosophy particularly in Nyaya logic. The paper mainly focuses on Annambhatta's text <i>Tarka Samgraha Dipika</i> .
9	PHPHCC402T	Classical Text- Western	This course aims to get students acquainted with the philosophy of David Hume. This paper aims to make the students to know about Hume's view on impression and ideas, Necessary connection, Liberty and Necessity, skepticism

			etc.
10	PHPHCC403T	Logic II	The course helps the students to know about fundamental concepts of logical reasoning. The paper concentrates on some important topics regarding laws of thought, quantification, Mill's method of experimental enquiries, hypothesis and science etc.
11	PHPHCC501T	Contemporary Western Philosophy	This paper aims to make the students critically analyze various perspectives in the field of Contemporary Western Philosophy. The paper consists of the philosophy of Bertrand Russell, Wittgenstein, Husserl, A.J. Ayer and J.P Sartre.
12	PHPHCC502T	Philosophy of Mind	This paper provides an understanding of the basic concepts of philosophy of mind like personhood, personal identity, mind-body dualism, problem of other minds etc. Philosophy of mind is the philosophical study of the exact nature of the mind, mental events, mental functions, mental properties and consciousness and whether these have a relationship with the physical body.
13	PHPDSE501T	Greek Philosophy	The course helps the students to understand the pre-Socratic philosophy, sophist's philosophy, Philosophy of Socrates, Plato and Aristotle.
14	PHPDSE502T	Comparative Religion	This paper helps the students to understand the comparative study of different religious traditions and their implications. The paper provides the ideas of possibility of Interreligious dialogue, religious pluralism, religious relativism etc.
15	PHPHCC601T	Philosophy of Religion	This course aims to get students acquainted with the philosophical study of the meaning and the nature of religion. This particular course covers the primary concepts of the relation between religion and morality, religion and science. The paper also consists of the general views regarding the arguments for the existence of God, problem of evil etc.
16	PHPHCC602T	Contemporary Indian Philosophy	This paper aims to get students acquainted with the philosophy of certain renowned contemporary Indian Philosophers. This particular course covers the philosophical thought of Indian thinkers such as Swami

			Vivekananda, Sri Aurobindo, M.K. Gandhi, R.N Tagore, S. Radhakrishnan, K.C. Bhattacharjee and Md. Iqbal.
17	PHPDSC601T	Phenomenology and Existentialism	The course helps the students to understand the meaning and concepts of phenomenology as a philosophy of experience and existentialism as a philosophical theory aim towards human existence. This paper concentrates on the philosophy of Edmund Husserl, Kierkegaard, Nietzsche, Sartre, Heidegger and Martin Buber.
18	PHPDSE602T	Philosophy of M.K. Gandhi	The paper provides an understanding of religious and social ideas implemented and developed by Mahatma Gandhi. The course helps the students to philosophically understand the Gandhian concept regarding nonviolence, truth, Swaraj, Swadeshi, Sarvodaya, Satyagraha, religion etc.

19	PHPDSE/GE101T	Logic	This course helps the students to understand the basic concepts of Logic such as the nature of logic, argument and argument form, different methods for proving the validity and invalidity of arguments. This paper also concentrates on the concepts regarding the different kinds of traditional and modern proposition, various kinds of deductive inference which develops the reasoning power of students.
20	PHPDSE/GE201T	Ethics	This paper provides an understanding of the fundamental concepts of ethics and its scope like normative ethics, virtue ethics and deontological ethics. Ethics is a study of moral issues in the fields of individual and collective interaction. This paper enables students to have a broad understanding of some ethical issues like rights and duties, Good and virtue and the objects of moral judgements etc. The paper also concentrates on Indian ethics regarding purusartha, ahimsa etc.
21	PHPDSE/GE301T	Epistemology and Metaphysics (Indian)	This paper concentrates on the fundamental concepts of knowledge and truth of Indian philosophy. It helps students to develop a strong foundation of Indian philosophy. Indian Philosophy broadly divided into two groups:



			Vedic (astika) and non-Vedic (Nastika). There are six Vedic schools and three non-Vedic schools. Among these systems this paper contains the general ideas of Nyaya, Vaisesika, Samkhya, Vedanta and three non-Vedic schools - Carvaka, Jaina and Buddhism
22	PHPDSE/GE401T	Epistemology and Metaphysics (Western)	This course aims to get students acquainted with the knowledge and truth about Western philosophy. The paper concentrates mainly on the philosophy of Plato, Aristotle, Kant, John Locke, Hegel and Hume.
23	PHPDSE 501T	Contemporary Western Philosophy	This paper aims to make the students critically analyze various perspectives in the field of Contemporary Western Philosophy. The paper consists of the philosophy of Bertrand Russell, Wittgenstein, Husserl, A.J. Ayer and J.P Sartre.
24	PHPGE 501	Logic	This course helps the students to understand the basic concepts of Logic such as the nature of logic, argument and argument form, different methods for proving the validity and invalidity of arguments. This paper also concentrates on the concepts regarding the different kinds of traditional and modern proposition, various kinds of deductive inference which develops the reasoning power of students.
25	PHPDSE 601T	Contemporary Indian Philosophy	This paper aims to get students acquainted with the philosophy of certain contemporary Indian Philosophers. This particular course covers the philosophical thought of some eminent Indian thinkers such as Swami Vivekananda, Sri Aurobindo, M.K. Gandhi, R.N Tagore, S. Radhakrishnan, K.C. Bhattacharjee and Md. Iqbal.
26	PHPGE601T	Ethics	This paper provides an understanding of the fundamental concepts of ethics and its scope like normative ethics, virtue ethics and deontological ethics. Ethics is a study of moral issues in the fields of individual and collective interaction. This paper enables students to have a broad understanding of some ethical issues like rights and duties, Good and virtue and the objects of moral judgements etc. The paper also concentrates on Indian ethics regarding purusartha, ahimsa etc.

27	PHPSEC301T (Honours+General)	Logical Reasoning I	This paper helps the students to know about the methods of deductive and inductive reasoning, analytical reasoning, syllogism, anumana, truth functional logic etc. The paper also aims to get students acquainted with the techniques of symbolization and the method of Formal proof of validity.
28	PHPSEC 401 (Honours+General)	Applied Ethics	The paper provides an understanding of the basic concepts of Applied Ethics which consists of the discussion of the application of normative ethical theories to practical moral problems like abortion, surrogacy, euthanasia, suicide, animal rights etc.
29	PHPSEC 501T (General)	Logical Reasoning II	This course helps the students to understand the primacy of Logical reasoning, symbolization, anumana, proof construction and preliminary set theory. This paper also provides an understanding of the shorter truth table method for proving invalidity and the various kinds of fallacies in Indian logic.
30	PHPSEC 601T (General)	Applied Ethics II	This paper aims to make the students critically analyze various perspectives in the field of Applied Ethics which consists of philosophical study of the ethical controversies brought about by advances in biology, biotechnology, medicine, and environment.

# DEPARTMENT OF PHYSICS

DIPHU GOVERNMENT COLLEGE  
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## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Physics:

Sl. No.	Course Code	Course Description	Course Outcome
1	PHSHCC101T	Mathematical Physics-I	After completion of this course students will gain knowledge on Matrices, Ordinary Differential equations, Vector Calculus, Curvilinear Coordinates and on Probability and theory of errors. This will help them in analyzing physical concepts especially in theoretical deductions concerning various branches in physics.
2	PHSHCC101L	Practical	To revise the computer skill some simple Mathematical solutions are introduced in this paper. The Mathematical solutions are performed by C++, Scilab, FORTRAN programming. This will develop the basic needs for the programming in higher semester relating to solving of various problems in Physics.
3	PHSHCC102T	Mechanics	In the 1st semester classes the syllabus is carried from HS classes so that students cannot feel uncomfortable while studying the courses. Topics on Fundamentals of Dynamics, Rotational dynamics, Gravitation, oscillation, special theory of Relativity are introduced in this papers which will give the basic idea of Mechanics.
4	PHSHCC102L	Practical	Keeping some parity with the theory paper, some simple experiments are introduced in the practical paper of 1st semester Honours class. The practicals totally belongs to Mechanics which will help in clarifying their theoretical concepts.
5	PHSHCC201T	Electricity and Magnetism	Concept of Electric field and Potential is given in this unit which will become helpful for further studies. Magnetic properties, dielectric properties, basic electrical circuits are also introduced which also become necessary in our daily life. In this

			paper students will learn about varies electrical components and appliances with the knowledge of that they can solve many electrical problems.
6	PHSHCC201L	Practical	In the practical paper, students will undertake some electrical experiments purely based on dc source. These experiments are helpful for determination of the values of some electrical parameters.
7	PHSHCC202T	Waves and Optics	The syllabus consists of two topics waves & optics. The topics are interrelated and without waves, we cannot explain satisfactorily optics. In case of interference diffraction, polarization, a very clear cut concept of waves is necessary. In this paper, a new concept is also introduced which is Holography which can be used in different field.
8	PHSHCC202L	Practical	Different experiments are introduced which are totally based on optics. There are some standard experiments which are also costly. Students get the idea about various natures of monochromatic light and their properties in this paper.
9	PHSHCC301T	Mathematical Physics-II	Since language of physics is mathematics as such concept of Mathematics is very important for Physics students. Based on this syllabus is framed with some standard functions series, integrals and Partial Differential equations. The contents of the paper give benefit to the students in higher semester and in Higher Studies.
10	PHSHCC301L	Practical	When the students get acquainted with the programming knowledge in 1st semester, again in 3rd semester practical on advance computer programming is introduced. The practical will include some solutions of the theory papers which were taught in 2nd & 3rd semester in theory classes.
11	PHSHCC302T	Thermal Physics	Thermal Physics is one of the important subjects in Physics. Thermo dynamical laws have their importance in Classical and Quantum Physics. Different physical phenomenon can be explained by the laws of thermodynamics. Kinetic Theory of gases is one of the important topic which explain the behavior of gas molecules. The students will get knowledge by studying the topics
12	PHSHCC302L	Practical	This practical paper benefits the students directly which they learn in theory paper. Determination of some physical constant can verify the soundness of the theory. The practical's are totally based on their theory papers.

13	PHSHCC303T	Digital systems and Applications	Electronics is one of the important part in current days. As the students get maturity, some tough topics like Electronics is introduced. Here some simple logic circuits as well as complicated logic circuits are in the syllabus. Students can get the benefit of it and can apply in their higher studies as well as in practical life. This paper cover upto microprocessor which is a very important component of electronics.
14	PHSHCC303L		All the experiments of this paper are based on electronics. Emphasis is given to extend the proper practical knowledge to the students of Honours classes. In this paper students can grow up themselves with the concept of bread board and setting arrangement of electronic components in the same for performing their required experiments.
15	PHSHCC401T	Mathematical Physics-III	Since without Mathematics, Physics cannot be completed, some more intricate Mathematical problems and their solutions e.g. Laplace's 1st & 2nd order transformation and others are introduced in this paper. This knowledge will benefit the students for higher studies also.
16	PHSHCC401L	Practical	Solutions of Higher Differential equations, Laplace's equations, Bessel's function etc. are solved in this paper by the programming language Scilab/C/C++. Soundness of the experiments are that the solutions tallys well with the theoretical concept.
17	PHSHCC402T	Elements of Modern Physics	Modern Physics is a vast area of the subject wherefrom a part of the total content is included in this paper. The contents of the paper include classical and quantum Physics. Students will become benefited with the knowledge gained from various topics of the paper like uncertainty principle, Planck's law, Schrodinger equations, Laser etc.
18	PHSHCC402L	Practical	Some important as well interesting experiments are set in this paper. Students get interested with by performing the experiments and can also verify the theory. The experiments are also helpful for higher studies.
19	PHSHCC403T	Analog system and Applications	Basic idea of semiconductors are discussed in this paper. Starting from the basic idea, various types of rectifiers and amplifiers are discussed. Different amplifiers like RC coupled, feed back are discussed in this paper. Different amplifiers have their

			different uses which will help for manufacturing devices and will also useful in higher studies with electronics. Op-amp is another important device, concept of which is also given in this paper which can perform various mathematical works. Students will thereby gain basic idea on device fabrication in electronics.
20	PHSHCC403L	Practical	Starting from simple experiments on semiconducting devices, there are Solar cell, BJT experiment along with no. of experiments are introduced in this paper on Op-amp. Students can study various Mathematical work to verify their physical significance.
21	PHSHCC501T	Quantum Mechanics and Applications	The entire paper includes detail discussion on quantum mechanics. Detail syllabus on quantum mechanics and its applications is introduced in this paper. Students will gather knowledge on quantum mechanics in undergraduate level. With the updated syllabus, students can pursue higher studies in quantum mechanics. They will gain insight thereby on modern physics where quantum mechanical knowledge plays a prominent role.
22	PHSHCC501L		With the theoretical knowledge of quantum mechanics, students can solve the Schrodinger equations under different boundary conditions. The programming language which are used are C/C++/Scilab/FORTRAN. The students will also acquire knowledge about various programming language
23	PHSHCC502T	Solid State Physics	A new topic is introduced in this paper. Here, properties of different kinds of solids are discussed. Magnetic properties, Dielectric properties, Superconductivity etc. are contained in the syllabus. Students will also get in depth knowledge about band theory of solids by which different characters of the solid can be determined. Students will gain insight for further study in material or nanoscience.
24	PHSHCC502L	Practical	A limited number of experiments are included in this paper which are very standard as well effective experiments for studying the behavior of solids.
25	PHSDSE 501A	Classical Dynamics	This paper is common for Pass and Honours students. The classical mechanics and quantum mechanics are two branches of mechanics where classical mechanics is followed by quantum mechanics. Both the parts are included in the 5th

			semester for Honours students. The syllabus contain Lagrangian equations, Hamiltonian equations, Fluid dynamics etc.
26	PHSDSE502A	Nuclear Physics and Particle Physics	Nuclear Physics deals with nuclear phenomena. Properties of nucleus, its models, its decay types, interaction of nuclear radiation with matter are included in this paper. Particle accelator is also a new phenomenon which has its importance also in medical science. This will help students for further study in high energy Physics
27	PHSHCC601T	Electromagnetic Theory	The syllabus is framed with the latest contents of Physics. Propagation of EM waves in unbounded medium, EM waves in bounded medium, polarization of EM waves, wave guides, and the Optical fibers are included in this paper. Students will be acquainted with various electromagnetic properties and their applications under different situations.
28	PHSHCC601L	Practical	This paper is based on some practicals of Optics as well as some practicals where Stefan's law, Boltzmann's law are to be verified. This will help students in understanding their theoretical concepts through experimental verifications.
29	PHSHCC602T	Statistical Mechanics	This is another branch of Physics where probability distribution functions are used. Classical theory of radiation, quantum theory of radiation, BE statistics, FD statistics are included which have their great importance in higher physics.
30	PHSHCC602L	Practical	Computer practicals are included in this paper which are based on Statistical mechanics. Plotting of graph of Planck's law and compare with Raylei-Jeans law, MB statistics, FD statistics, BE statistics are of great importance.
31	PHSDSE601B	Nano materials and Applications	Nanomaterial is the latest addition from the emerging field of Nanoscience and Nanotechnology. It has almost become an interdisciplinary one. Development of new nanomaterials and their applications is a promising field to which students will be familiarized with synthesis and characterization processes in the study materials.
32	PHSDSE602A	Dissertation	A project of 100 marks to be done on topic related any advanced theoretical/experimental/Computation topics under the Supervision of one of the cou teachers. End semester will comprise of presentation well as evaluation of the report by an exteri

			examiner. Students may be inspired through the project work for dissertation for their further studies research.
33	PHSDSC101T/ PHSGC101T	Mathematical Physics	In this paper, fundamental idea of Mathematical Physics is given. Over and above, laws of motion, Gravitation, Elasticity, Properties of fluid and special theory of Relativity is included in the syllabus. Students of pass course will be benefited by the syllabus.
34	PHSDSC101L/ PHSGC101L	Practical	Keeping some parity with the theory paper some simple experiments are introduced in the practical paper of 1 <sup>st</sup> semester Honours class. The practicals are totally belongs to Mechanics.
35	PHSDSC201T/ PHSGC201T	Electricity and Magnetism	Vector analysis is a part of the syllabus of this paper. Apart from that electrostatics, magnetism, e.m. induction and Maxwell's equations and electromagnetic wave propagation is also included in this paper. Students of pass course will get some idea regarding electricity and magnetism which will benefit in their daily life as well as for higher studies.
36	PHSDSC201L/ PHSGC201L	Practical	Some electrical experiments are set in this practical paper by which values of some electrical components like resistance, capacitance, inductance can be measured.
37	PHSDSC301T/ PHSGC301T	Thermal Physics and Statistical Mechanics	Since the pass course students have to study comparatively less syllabus compared to Honours course, a part of the total syllabus of thermal Physics of Honours course is incorporated in this paper. In thermal Physics, kinetic theory, thermodynamics and Statistical Mechanics are the course content of this paper.
38	PHSDSC301L/ PHSGC301L	Practical	In this practical paper, all the experiments are set based on the contents of the theory paper of the same semester. This can give benefit to the students to clear their concept of theory paper also
39	PHSSEC301T	Workshop Skill	The syllabus also introduced skill enhancement course. In this paper, students can measure different physical quantities with measuring instruments. This course also increases mechanical skill, electrical skill and electronic skill which they can explain more clearly in their theory paper.
40	PHSDSC401T/ PHSGC401T	Waves and Optics	Different kinds of waves and their properties are the contents of this paper. Over and above, Physical optics-interference, diffraction and polarization are also the contents of this paper. The syllabus is so



			frames to give interest among the students in different semester and overall growth for a student
41	PHSDSC401L/ PHSGC401L	Practical	Different experiments are set in this paper including waves and optics. Students will get idea about various kinds of monochromatic light and can verify the concept of the theory papers learn in the same semester.
42	PHSSEC401T	Electric Circuits and Network	Since the skill enhancement course try to develop the skill of the students, some practical demonstration is given in this so to grow the interest of the students which they will present in the theory paper. In this paper concept of basic electric circuits, transformer, motor etc. are given.
43	PHSDSE501T	Classical Dynamics	The classical mechanics and quantum mechanics are two branches of mechanics where classical mechanics is followed by quantum mechanics. The syllabus contain Lagrangian equations, Hamiltonian equations, Fluid dynamics etc
44	PHSSEC501T	Basic Instrumentation	Here concept of different instruments of electrical and electronics are discussed. Multimeter, electronic voltmeter, CRO, signal generator, Digital multimeter, impedance bridge, Q-meter are discussed from which the students can acquire knowledge for higher studies.
45	PHSDSE601T	Nano materials and Applications	Nanomaterial is the latest addition from the emerging field of Nanoscience and Nanotechnology. It has almost become an interdisciplinary one. Development of new nanomaterials and their applications is a promising field to which students will be familiarized with synthesis and characterization processes in their study materials.
46	PHSSEC601T	Renewable Energy and Energy Harvesting	In the final semester Renewable energy and energy harvesting, solar energy, wind energy harvesting, ocean energy, geo-thermal energy, em energy harvesting are discussed which are quite new concept for Physics students. Students will be aware on the maximum application of renewable energy.

# DEPARTMENT OF POLITICAL SCIENCE

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Political Science:

SL. No	PAPER CODE	NAME OF THE COURSE	OUTCOMES
1	PSC-H-C-101	Understanding Political Theory	This course intends to impart knowledge on the meaning, functions, approaches and perspectives of Political theory and its different schools. It also throws light on Political Theory and Practice.
2.	PSC-H-102	Constitutional Government and Democracy in India	This course aims to provide knowledge on the Philosophy of the Constitution, functions of the Nominal and Real executives in India, three organs of the Government and democratic decentralization through Panchayati Raj System, Fifth and Sixth Schedules.
3.	PSC-H-C- 201	Political Theory— Concepts and Debates	This paper throws light on the importance of freedom, equality, justice, universality of Rights and also delves into major debates on Human Rights, Multi-culturalism and Toleration.
4.	PSC-H-C-202	Political Process in India	This course seeks to underscore Political Parties and the Party System, determinants of Voting Behaviour, Regional Aspirations, debates on Secularism, Communalism and Caste and Politics in India.
5.	PSC-H-C-301	Introduction to Comparative Government and Politics	This course imparts basic ideas about Comparative Politics, Capitalism, Socialism, Colonialism and decolonization. It intends to impart extensive knowledge on the Comparative study of various Constitutions such as Britain, Nigeria, Bangladesh and China.
6.	PSC-H-C-302	Perspectives on Public Administration	This course outlines in-depth knowledge about various theories of Public Administration, Public policy and major approaches in Public Administration.
7.	PSC-H-C -303	Perspectives on International Relations and World History.	This course incorporates theories and approaches of International Relations such as realism, liberalism, Marxist approaches. It also deals with World War I,

			Rise of Fascism, World War II, Cold war, Post-Cold war developments.
8.	PSC-H-C-401	Political Processes and Institutions in Comparative Perspective	This Course provides understanding about approaches of studying Comparative Politics, Electoral System, Party System, Nation State-evolution and Post colonial Contexts and Federalism etc.
9.	PSC-H-C-402	Public Policy and Administration in India	This Course stipulates various facets of Public Policy, Decentralization and also about significance of Budget, Citizen and Administrative interface and Social Welfare Administration.
10.	PSC-H-C-403	Global Politics	This Course deals with understanding globalization, political debates on Sovereignty and Territoriality, significance and Anchors of Global Political Economy, ecological issues and International Terrorism.
11.	PSC-H-C-501	Classical Political Philosophy	This course gives insights into the philosophy of early Greek Political thinkers such as Socrates, Plato and Aristotle. It also delves into the political ideas of Machiavelli, Hobbes and Lock.
12.	PSC-H-C-502	Indian Political Thought –I	This Course offers insight into the Brahmanic and Shramanic thought, Islamic and Syncretic thought. It also intends to provide knowledge into the political philosophy of VedVyasa, Manu, Barani and Abul Fazal.
13.	DSE-H-501	India's Foreign Policy in a Globalised World	This course spells out India's Foreign Policy in a globalized world. It also deals with India's relation with USA, Russia, China and also style and strategies of trade, environment and security regimes.
14.	DSE-H-502	Human Rights in a Contemporary Perspective	This course spells out theory and institutionalization of human Rights, issues of torture and structural violence in South Africa and India, gender violence in India and Pakistan and aboriginals and land question in Australia.
15.	PSC-H-C-601	Modern Political Philosophy	This course deals with the political philosophy of Jean Jacques Rousseau, Mary Wollstonecraft, John Stuart Mill, Karl Marx and Antonio Gramsci.
16.	PSC-H-C-602	Indian Political Thought	This course underlines political thoughts of Raja Ram Mohon Roy, Tagore, Vivekananda, Pandita Ramabhai and Mahatma Gandhi.
17.	DSE-H-601	Development Process and Social Movements in Contemporary India	This Course incorporates issues such as development process that India experienced since independence and also industrial development

			strategy and its impact on social structure, agrarian development strategy and social movements.
18.	DSE- H-602	Freedom Movement and Politics in North East India	This course intends to throw light on freedom movement that occurred in various parts of colonial North East, the politics of Congress and Muslim League of that period, politics of immigration, autonomy and language politics in Assam
19.	GE-H 101 /DSC-101	Introduction to Political Theory	This course provides understanding in meaning and relevance of Political theory. It also attempts to give insights into concepts such as Democracy, Liberty, equality, justice etc. and brings forth debates into democracy and economic growth, protective discrimination-its fairness or not, state intervention in the institution of family.
20.	GE –H-201/ DSC 201	Indian Government and Politics	This course aims to offer basic knowledge about the philosophy and features of the Indian Constitution. It also provides insights into the functions of the Indian President, Prime Minister, Party system in India and also various social Movements and power structure in India such as caste, class and patriarchy. It also deals with strategies of development in India since independence.
21.	GE-H-301 /DSC 301	Comparative Government and Politics	The objective of this course is to offer knowledge on comparative Political analysis, classification of Political System, Party System and contemporary debates on state centric security to human centric security and the changing nature of nation –state in the context of globalization.
22.	GE-H-401 /DSC 401	Introduction to International Relations	This course attempts to furnish information and knowledge about various approaches of international relations and significant issues such as cold war, India's Foreign Policy and Non- Alignment. etc.
23.	SEC-P.sc. Pass.301	Legislative Support	This is a skill enhancement elective course delineating powers and functions of People's Representatives at different tiers of governance, law making process, role of various committees and over view in budgetary process and role of Parliament in reviewing the Union Budget.
24.	SEC-P.sc Pass 401	Public Opinion and Survey Research	This course envisages public opinion-its definition, characteristics and role. It also studies about various methods of research methodology such as sampling, interviewing, Questionnaire and understanding opinion Poll etc.
25.	SEC-P.sc. Pass 501	Democratic Awareness and Legal Literacy	This course outlines the legal systems of India, brief understandings of the laws applicable in India such as criminal jurisdiction, dowry, consumer Rights,

			RTI and Cyber Crimes.
26.	SEC-P.sc Pass 601	Conflict and Peace Building	This course incorporates various aspects of conflicts such as its dimensions, sites, its responses and also skills and techniques for building peace.
27.	DSE-Psc.Pass- 601	Administration and Public Policy-Concepts and Theories	This course aims to offer ideas about scope and significance of Public Administration, administrative theories, relevance of policy making, policy formulation and implementation. It also incorporates development Administration to New Public Management.
28.	GE-P.sc Pass 501	Reading Gandhi	This course provides insights into the philosophy of Gandhi such as Hind Swaraj, Satyagraha, Nationalism, his view's on Modern India, women's question and Untouchability.
29.	GE-P.sc Pass 601	Introduction to Political Theory	This course provides understanding in meaning and relevance of Political theory. It also attempts to give insights into concepts such as Democracy, Liberty, equality, justice etc. and brings forth debates into democracy and economic growth, protective discrimination-its fairness or not, state intervention in the institution of family.

# DEPARTMENT OF ZOOLOGY

DIPHU GOVERNMENT COLLEGE  
DIPHU, KARBI ANGLONG, ASSAM

## PROGRAM/COURSE OUTCOME

Programme Specific Outcome (PSO) and Course Outcomes (CO) under NAAC

Course Outcome (CO) of Zoology:

Sl. No.	Course Code	Course Description	Course Outcome
1	ZOOHCC I	Non-chordates I Protista to Pseudocoelomates	Students know about diversity of pseudocoelomate nonchordates, their identification and scientific classification (taxonomy) and will familiarize with the life cycle, pathogenicity and control measures of common helminths parasites (Theory paper). They will be able to know about all these organisms through museum specimens and by preparing a project report on topic related to life cycle of helminths parasites (Practical paper).
2	ZOOHCC II	Principles of Ecology	The course helps to know about various aspects of ecological study (population, community, ecosystem, etc.) and conservation and management strategies wildlife (Theory paper). They will familiarize with how to analyze the various attributes of population and the biological, physical and chemical properties of aquatic ecosystem. In addition, visit to a site of ecological importance or in situ and ex situ conservation help to understand the core issues of ecosystem, wildlife management and to find out the solutions with knowledge of zoology (Practical paper)
3	ZOOHCC III	Non -chordates II: Coelomates	The students know about diversity of coelomate nonchordates, their identification and scientific classification (taxonomy). They will also familiarize with unique biological phenomenon observed in these groups of animals (Theory paper). Students acquaint with all these organisms through museum specimens and by preparing a project report on any related topic to larval forms
4	ZOOHCC IV	Cell Biology	The paper will help in acquiring the knowledge on cell, its structure, composition and communication (Theory paper) and to familiarize with the primary feature of living organism i.e. cell division (Practical paper).

5	ZOOHCC V	Diversity of Chordates	Students be familiarize about diversity of chordates, their identification and scientific classification (taxonomy) and their dispersal and distribution. They will also familiarize with unique biological phenomenon observed in these groups of animals like metamorphosis, echolocation, Volant adaptation, etc. (Theory paper) and be able to know about all these organisms through museum specimens (Practical paper)
6	ZOOHCC VI	Physiology: Controlling and Coordinating Systems	The course will develop an understanding of basic physiological process like how signal is transmitted, how contraction of muscle occurs, how chemical messengers control the physiology of body, etc. and the sources of these chemical messengers (Theory paper). The paper will help in familiarizing with the technique of permanent slide preparation in addition to study of common physiological process and glands secreting chemical messengers (Practical paper).
7	ZOOHCC VII	Fundamentals of Biochemistry	The paper helps to understand the life at molecular level and the catalyst of biological reactions (Theory paper) and to familiarize with the techniques like chromatography, biochemical tests, SDS-PAGE, etc. commonly used to study biomolecules (Practical paper).
8	ZOOSec I	Apiculture	The course intends to develop the skill of apiculture for entrepreneurship and for research owing to significant health benefits of honey.
9	ZOOHCC VIII	Comparative Anatomy of Vertebrates	The course is designed to provide an understanding of key differences between different structures and organs of vertebrates and their evolutionary significance (Theory paper) and to understand structural differences among vertebrates using models, bones, and project work (Practical paper).
10	ZOOHCC IX	Physiology: Life Sustaining Systems	<ul style="list-style-type: none"> <li>The students acquaint with the fundamental concepts of life sustaining physiological processes like how animals digestion food, how animals respire, how animals excrete the waste products, how nutrition and oxygen is circulated all over body, etc. (Theory paper) and to familiarize with various life sustaining organs and techniques used to analyze the life sustaining physiological processes (Practical paper).</li> </ul>
11	ZOOHCC X	Biochemistry of Metabolic Processes	Students able to understand the life sustaining metabolic processes at molecular level (Theory paper) and familiarize themselves with the techniques used to estimate key biomolecules and study biological reactions (Practical paper).
12	ZOOSec	Medical	Through this paper learners can enrich their knowledge

	II	Diagnostics	about the common diagnostics tools and techniques routinely used in diagnostics centers of Govt. and Pvt. Sectors and hence the transition of students into a career in medical diagnostics.
13	ZOOHCC XI	Molecular Biology	The paper intends to familiarize the students with the molecule this carries the genetic instructions in living organisms and to provide an understanding of the key processes involved by which these instructions are decoded in organisms (Theory paper) and to learn the techniques used to study, detect, and estimate this key biomolecule of living organisms. Detection and the downstream analysis of DNA becomes an important and routine research lab work (Practical paper).
14	ZOOHCC XII	Principles of Genetics	The course enable learners to get an overview of the principles behind the transmission of characters from one generation to its next. The knowledge of genetics and molecular biology has made significant revolution in medical field like gene therapy, rDNA technology, etc. (Theory paper) and to understand the basic principles of genetics using lab works (Practical paper).
15	ZOODSE I	Immunology	The students able to familiarize themselves with the multiples pathways by which our body protect us from foreign pathogens and how this knowledge can be used to fight with them by developing artificial active immunity (Theory paper) and to familiar with the techniques routinely used in serological labs as well as research labs like ELISA, immuno- electrophoresis, blood group determination, etc (Practical paper).
16	ZOODSE II	Fish and Fisheries	The paper helps in understanding the fish biology and to develop the skill of setting up an aquaculture industry for undertaking entrepreneurship (Theory paper) and to familiarize with the traditional as well modern aquaculture practices through demonstration as well as field visit (Practical paper).
17	ZOOHCC XIII	Developmental Biology	The course imparts knowledge of embryonic development of different animals and the application of this knowledge in medical procedures like IVF, stem cell therapy, etc. to solve real life problems (Theory paper) and to visualize the various events of embryonic developments using microscope and permanent slides (Practical paper).
18	ZOOHCC XIV	Evolutionary Biology	The students understand the key evolutionary forces and also the famous theories and evidences in support of organic evolution (Theory paper) and to visualize the evidences of organic evolution through models and fossils (Practical paper).



19	ZOODSE III	Reproductive Biology	The paper help students to pursue their career as reproductive biologist as well as to acquire knowledge to encourage the peoples about the use medical procedures or techniques related to reproductive health (Theory paper) and to familiarize the students about the set up of animal house, breeding technique, surgical technique, etc which are the primary requirement to initiate study on reproductive biology (Practical paper).
20	ZOODSE IV	Animal Behavior and Chronobiology	The students understand various kinds of animal behaviour and the relationship between environmental cues and animal behaviours. Experts of this area have remarkable scope in scopes in wildlife research particularly in this era facing tremendous loss of wildlife (Theory paper) and to feel the various kind of animals' behaviour through lab works, observational study and field study (Practical paper).
21	21 I DSC I	Animal Diversity	Students will be able to know about diversity of nonchordates and chordates, their identification and scientific classification (taxonomy) and. The unique biological phenomenon observed in each group. Students will familiarize with the life cycle, pathogenecity and control measures of common helminths parasites (Theory paper) and understand about the salient features of representative organisms through museum specimens (Practical paper).
22	DSC II	Comparative Anatomy and Developmental Biology of Vertebrates	The course helps in providing an understanding of key differences between different structures and organs of vertebrates and their evolutionary significance to the students and can also enrich their knowledge about embryonic development of mammals (Theory paper), also to understand structural differences among vertebrates using models, bones, and microscopic slides (Practical paper).
23	DSC III	Physiology and Biochemistry	The course designed to acquaint learners with the fundamental concepts of life sustaining physiological processes and biochemistry like how animals digestion food, how animals respire, how animals excrete the waste products, how nutrition and oxygen is circulated all over body, how energy is generated from foodstuff, how catalysis of these biological reactions take place, etc. (Theory paper) and also to familiarize with various life sustaining organs associated with basic human physiology and techniques used to analyze the life sustaining physiological processes as well as bio-molecules (Practical paper).

24	SEC-I	Apiculture	The course design to develop the skill of apiculture for entrepreneurship and for research owing to significant health benefits of honey
25	DSC IV	Genetics and Evolutionary Biology	The paper enable learners to get an overview of the principles behind the transmission of characters from one generation to its next. The knowledge of genetics and molecular biology has made significant revolution in medical field like gene therapy, rDNA technology, etc. In addition learners will also understand the key evolutionary forces and also the famous theories and evidences in support of organic evolution (Theory paper) and to understand the basic principles of genetics using lab works and to visualize the evidences of organic evolution through models and fossils (Practical paper).
26	SEC-II	(Medical Diagnostics)	Through this paper learners can enrich their knowledge about the common diagnostics tools and techniques routinely used in diagnostics centers of Govt. and Pvt. Sectors and hence the transition of students into a career in medical diagnostics
27	SEC-III	(Aquarium Fish Keeping)	Students will be helpful to develop the skill of aquarium management for undertaking entrepreneurship.
28	DSE- II	(Reproductive Biology)	To help students to pursue their career as reproductive biologist as well as to acquire knowledge to encourage the peoples about the use medical procedures or techniques related to reproductive health (Theory paper). To familiarize the students about the set up of animal house, breeding technique, surgical technique, etc which are the primary requirement to initiate study on reproductive biology (Practical paper)
29	SEC-IV	(Sericulture)	The paper intends to develop the skill of sericulture industry establishment and its management for undertaking entrepreneurship.

**GOVERNMENT OF ASSAM  
OFFICE OF THE PRINCIPAL  
DIPHU GOVERNMENT COLLEGE, DIPHU,  
KARBI-ANGLONG, ASSAM**

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DGC/IV-25/2023-24/ 3008

Dated Diphu, the 26<sup>th</sup> March/2024

**DECLARATION**

I hereby declare that all the information and supporting documents attached above are true to be the best of my knowledge and belief.

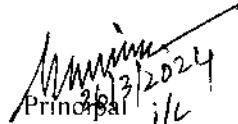
Principal  
Diphu Govt. College, Diphu

Memo No. DGC/IV-25/2023-24/ 3008

Dated Diphu, the 26<sup>th</sup> March/2024

Copy to-

- 1) The President, Governing Body, DGC.
- 2) Coordinator, IQAC, DGC for uploading.
- 3) Office File.

  
Principal  
Diphu Govt. College, Diphu  
Principal i/c  
Diphu Govt. College, Diphu  
26/3/2024