



**Programme outcome, Programme Specific Outcome & Course Outcome.**

**ASSAMESE**

**Programme Outcome:**

Under graduate course in Assamese honours in CBCS mode deals with a very beneficiary course related to literary history, communicative skills, performing arts, cultural history and cultural tourism, linguistics, literary thoughts, Assamese teaching methods, literary criticism, cultural studies, translation process and application, language teaching methods, comparative literature and it's methods and application , sociology of literature, research methodology, dramatic analysis & criticism, world literature, project work etc. Students will be provided overall skills about all aspects of language and literature, specially the practical impact of this course will be evaluated through the whole course.

**Programme Specific Outcome:**

After completion of this course, students will gain an overall information on the Assamese language, literature, tradition, culture and its value on society, practical knowledge on the field of Assamese Creative writings, analytical views, impact of society on literature, publication works, social views, literary criticism relating with all humanities, communication through literature, relation between author and reader, all literary and linguistic skills etc. Students will be able to connect themselves with the world literary field.

**Course Outcome:**

After passing out with honours in Assamese, students can go for higher studies on the field of linguistics, literature, comparative literature, Cultural Studies, Mass Communication and Tourism, performing arts and several humanities area. They can engage themselves in teaching profession up to secondary level. They also be able to established themselves as entrepreneurs in agricultural fields. This course will help them to be good human, responsible citizen and religiously integrated in society.

## **BOTANY**

### **Program outcome:**

Under graduate course in Botany major deals with Microbiology and Phycology, Biomolecules and Cell Biology, Mycology and Phytopathology, Archegoniate, Anatomy of angiosperm, Economic Botany, Genetics, Molecular Biology, Plant Ecology and Phytogeography, Plant Systematics, Reproductive Biology of Angiosperm, Plant Physiology, Plant Metabolism and Plant Biotechnology. This course provide the knowledge on various forms of microbes and algae and their economic importance, knowledge on biomolecules and structure of the cell organelles, classification, morphological characteristics and reproduction of bryophytes, gymnosperms and fossil plants, different characteristics of angiosperms like structural and anatomical and reproductive. It also provides knowledge about the principle of heredity in genetics and evolutionary relationship, plant ecology and also on physiological characters and metabolism. It also provides knowledge in bioinformatics and biotechnology and also on various economically important plants and plant products. Besides above, we have some other skills development and employment generation courses i.e. Mushroom Cultivation and Vermicopost production. Through these courses, learners may learnt the skills about how to cultivate mushroom and produce vermicampost in low cost input through locally available organic wastes. Subsequently they may choose as income generation source.

### **Program Specific outcome:**

After completion of this course, students will gain knowledge on molecular biology, bioinformatics, biochemical, genetics, microbiology, anatomy, morphology, reproduction and evolution of angiosperm, gymnosperm, lower and vascular cryptograms, plant pathology and economically important plant species, mushroom cultivation and processing and vermicompost production.

### **Course outcome:**

After graduation with major in Botany, students can opt for post graduate in Life Science, Environmental Ecology, Bioinformatics, Biotechnology, Biochemistry and Microbiology. Through skills development courses, students may accept thses as livelihood support activities. Besides, higher study, students can sit for various competitive services i.e. Banking Jobs, Staff Selection Commission, UPSC, TET, etc.

## **CHEMISTRY**

### **Programme Outcome:**

Chemistry is a vast subject which is involved in every sphere of life. A chemist can synthesize, characterize, and analyze the compounds. By teaching physical chemistry, we try to make students understand the principles on which the subject is based on. By teaching inorganic chemistry, we try to make them understand about elements, reactions related to metals and non-metals, coordination chemistry etc. Organic chemistry is about natural products, carbohydrates, pesticides etc. All the concepts we are teaching have practical application and are industrially relevant.

### **Program Specific Outcome:**

The course familiarized the students with different fields of specialization like Inorganic, Organic, Physical, Quantum chemistry & Spectroscopy, Green chemistry and Analytical chemistry.

The honours course (CBCS) consists of fourteen theory honours papers along with four Discipline Specific Elective ( DSC) papers giving ideas of different field of chemistry to the students.

The inorganic chemistry papers provide the knowledge to the students about the characteristics of various elements and compounds. These specific papers includes co-ordination compounds, metallurgy, Inorganic material chemistry, non-metals, bio-inorganics, metal clusters and polymers etc.

The organic chemistry papers gives knowledge of different types of organic reactions, hydrocarbons, biochemistry, pesticides, dyes and pharmaceutical compounds.

The physical chemistry papers provide the knowledge of principles of chemistry and physical forces which govern our surroundings and also provide knowledge about thermodynamics, electrochemistry, chemical kinetics, photochemical processes and catalysis.

Spectroscopy paper highlight the concept of principles and applications of different analytical tools like UV/Visible , NMR , IR , ESR spectroscopy etc.

Green chemistry gives concept of the use of safer chemicals , atom economy ,green solvent and also use of it in our day to day life. It also gives the knowledge of prevention or minimization of hazardous/ toxic products during chemical synthesis .

Analytical chemistry paper provides the knowledge to the students about the principles and applications of modern chemical instrumentation, experimental design and data analysis.

**Course Outcome:**

On successful completion of the course, the Dibrugarh University awards the students the degree of Bachelor of Science. The students on graduating with majors in chemistry, the scopes are many. They can for example, pursue higher education like M.Sc in Chemistry, MBA or B.Ed and whatever they like. Just after B.Sc also they can take up multiple job opportunities. We have many industries nearby Namrup like, Assam Petrochemicals Ltd, Brahmaputra Valley Fertilizer Corporation Ltd, Oil India Ltd, Assam Gas Company Ltd. All these companies require chemists and operators who have graduate degree. Moreover we also have ONGCL and BRPL who hire our graduates. We have many students working in these companies.

We also have many students who have after graduating in B.Sc have pursued M.Sc in universities like Dibrugarh University, Tezpur University, NIT Silchar, Assam University Silchar, Kaziranga University, Tripura University etc and engaged in different Oil and Drug industries. Many students have taken up teaching and have become very successful and sincere teachers.

## **COMPUTER SCIENCE**

**Program Outcome:**

The CBCS undergraduate programmed in Computer science (core) assist the students basic understanding on the computer knowledge. The course defines the basic needs, its uses as well as the recent developments of computer technologies. The course deals with the theoretical studies of algorithm and information to the practical issues of implementing computing systems in the hardware and software. The course also concerned with programming language, coding and its implementation in various applications. The course develops the technical knowledge and skills as well as learning about the concepts and theories behind multimedia and e-commerce technology.

**Program specific outcome:**

Problem-solving skill, diverse software and platform development skills, DNS, HTTP, Wifi security, transaction security, protocol verification, Artificial intelligence, Cloud computing, Transmission of digital data, network security, backup and recovery of data. Students

are also earns the ability on 3D animation, video editing, web design and graphic design effectively.

**Course outcome:**

The course prepares the students for future higher studies in computer science and Information technology. The main focus of computer science course is to give rise to professionals who can work in the sectors that provide different services to the companies. The candidates can present their skills after getting hired in different job roles that include office assistance, software developer, web developer, video game developer, system architect, information security analyst, cyber analyst, mobile app. developer etc.

## **ECONOMICS**

**Programme outcome:**

Three years Under Graduate Course in Economics (Honours) covers Micro Economics, Macro Economics, Mathematical Economics, Econometrics, International Economics, statistical Methods, Development Economics, Economics of Health and Education, Game Theory, Monetary Economics , Public Economics , Money and Financial Markets , Financial Economics, Environmental Economics, The Economy of North –East India, History of Economic thought and Indian Economics to develop knowledge about prospects of growth. Three years Under Graduate Course in Economics (Generic Elective) covers Micro Economics, Macro Economics, Indian Economy, Money and Financial Markets, Environmental Economics, Economic History of India, Public Finance, Development Economics. Three years Under Graduate Course in Economics (Non-Honours) covers Micro Economics, Macro Economics, Economic Development and policy in India, Economic History of India, and Public Finance.

**Programme Specific outcome:**

The course will be designed to expose the learners to the basic principles of economics. The emphasis will be on thinking like an economist and the course will illustrate how economic concepts can be applied to analyze real-life situation. This course is also helping the learners how mathematical techniques are applied in economic theory. Through this course learners understand the fundamental concepts of statistics and its application on research. This course would enable the learners to take cognizance the new economy phenomena like economy and environment, economics of health and education, econometrics.

**Course Outcome:**

This course will enable the learners to acquire knowledge on micro economics, macro economics, mathematical economics, econometrics, international economics, Indian economics and many more. It is helpful for future studies like pursuing P.G in Economics, MSW, MBA, and Mass-communication etc. This course encourages learners to appear in different competitive examination conducted by government, semi-government and private agencies. These courses also help the student to think about entrepreneurship and start own business with the help of the economic ideas acquired from the study.

**EDUCATION****Program Outcome:**

The Under-Graduate program in Education Major helps the students to understand the meaning of education and its role and function. The Major Course explains the concepts of Indian and Western Schools of Philosophy and their impact on education. The course helps students to understand the meaning of different aspects of psychological, sociological and technological foundations of education. It includes the theories of intelligence, personality, learning, application of statistics, measurement and evaluation in education. It also discusses the contributions of great educators around the world. The course explains the emerging trends of the Indian Education system and the recommendations of the different Education Commissions. Students also get an opportunity to understand the educational system of the country and a few other countries in the world. The course elucidates the meaning and importance of guidance, counseling and the concept of mental health and hygiene. The developmental changes of childhood and adolescence are also included in the course. Moreover, in order to have their practical knowledge, Project Report and psychological practical is a part of the course structure.

**Program Specific Outcome:**

Micro-teaching, preparing lesson plans, practice teaching in schools which are an integral part of the Major syllabus. It enhances knowledge on teaching skills and familiarizes the students about teaching different subjects.

**Course Outcome:**

The course prepares students for higher studies in Education. It will equip students for jobs in teaching at the different levels of Education and others

**ENGLISH**

**Programme Outcome:**

This undergraduate programme in English under Dibrugarh University acquaints the students with English literature and its various trajectories. It will introduce the learners to Indian and European classical traditions, British Literature of different periods, and also to Indian, American and European Literature in English. It will further familiarize the students with different fields of English Literature such as Women's Writing, Diasporic Literature, World Literature and Postcolonial literature. They will also learn about the key trends in literary theories and criticism. After completing this programme, the learners shall be in a position to understand and appreciate and critique literary text and thereby their interpretative capabilities will be developed.

**Programme Specific Outcome:**

The programme will enable the students to achieve the distinction between the highest peak of art forms like Sanskrit and European classical literature. This programme will also familiarize the students with many emerging and lesser known forms of literature like Graphic fiction, popular literature, travel literature and translation and film studies. It will sensitize the students towards different socio- political and cultural issues such as race, class, caste and gender politics and thereby lead them to understand the issues from a broader perspective.

**Course Outcome:**

After completing the course, the learners will have a comprehensive knowledge of English literature from different nooks and corners of the world. It will enhance their critical thinking ability and enlighten them to see the world from a different point of view. Further after completing this course, the students will be able to pursue different carrier options like teaching, professional writing like content creator, advertisement writing, editorial jobs, journalism etc. They can also opt for different higher studies like MBA, Mass communication and Journalism, Juridical Studies etc. Overall, the course makes the students conscious towards different socio-political and cultural issues and thus helps them to be better human beings.

## **MATHEMATICS**

### **Program Outcome:**

The Under Graduate program in CBCS mode in the subject of Mathematics Honours as well as non-honours deals with both discrete as well as computational mathematics covering different branches of the subject like Algebra, Geometry, Calculus and Statistics & Probability.

The Objectives of the B.Sc. Programme in Mathematics are listed in the following. After completing the programme the students will be able to-

- (1) Apply Mathematics as a tool to solve problems of other disciplines viz., Science and Technology, Commerce and Management, Humanities, Soft-computing etc.
- (2) Pursue higher studies in the subject to take part in the academic upliftment of the subject.
- (3) Develop new techniques/methods for solving the unsolved problems of the other disciplines.
- (4) Construct Mathematical models to mimic real life problems and make their predictions, estimations, and regression.

### **Program Specific Outcome:**

A student should be able to familiar with basic facts about mathematics as well as able to display knowledge of conventions such as notations, terminology. The course familiarizes students with the subject. After going through the course the students will be able to apply Calculus in real life problems & formulate mathematical models, describe various algebraic structures on sets, also identify the algebraic structures present in different branches of Sciences. Also, a graduate student will develop the ability to read and learn mathematics on their own. Most specific thing is that a student will understand the historical and contemporary role of mathematics and be able to place the discipline properly in the context of other human intellectual achievement.

### **Course Outcome:**

The course will enable students to acquire knowledge in both discrete as well as computational mathematics. As the course is a multi-disciplinary it will also help the students of other disciplines to know the subject well and also will provide lots of career opportunities. One learning the course can communicate mathematical ideas both orally and in writing. They can investigate and apply mathematical problems and solutions in a variety of contexts related to

science, technology, business and industry and illustrate these solutions using symbolic, numeric or graphical methods.

## **POLITICAL SCIENCE**

### **Program outcome:**

The honours course of Political Science as per CBCS syllabus of Dibrugarh University, aims at familiarizing the students with the basic ideas of Political Science, make students understand and also distinguish between basic concepts like Political theory, thought and philosophy and also help students to undertake and relate the concepts and facts with the Political realities. It strives to make an individual aware about performance of many essential functions of the society and also about how people govern and are governed in societal set-up. It emphasis on the study of government, public policies, government institutions, knowledge of key theories and concepts, its historical developments, modern issues in international relations, to develop the ability to logical inferences about social and political issues on basis of comparative knowledge.

### **Course outcome:**

The course outcome as per latest CBCS syllabus of Dibrugarh University, is to help students to understand the significance of the study of political science and theory, to become aware of various theoretical ideas in political theory, to make students understand the philosophy of Indian Constitution and to know the salient features of the Indian Constitution with focus on different method institutions and its functions, help students to get an overview about the nature, evolution, scope and basic ideas and approaches to the study of international relations, to familiarize students about the action part of the government that is public administration and various ideas related to it, to introduce students with prominent classical western and Indian thinkers and their contribution. The course also offers students a scope to know about tradition of human rights and also focuses on helping students to understand the politics of North- East India

### **Program specific outcome:**

The expected program specific outcome of the subject is to facilitate the career choices of students and employment and to shape the students' perception and outlook on social, economic and political environment of India and outside. It also aims to develop the analytical abilities and observational skills and decision- making faculties of students.

## **SOCIOLOGY**

### **Programme Outcome:**

The CBCS course in Sociology is intended to introduce the students to a sociological way of thinking. It provides a detailed and specialized course in sociology in different sociological aspects in human society. The undergraduate programme in Sociology includes varieties of courses related to human society and its various aspects like introduction to Sociology, Sociology of India, Political Sociology, Sociology of Religion, Sociology of Gender, Social Stratification, Sociological Research Methods, Sociological Thinkers, Environmental Sociology, Sociology of Work, Sociology of Health & Medicine, Indian Sociological Tradition, Virtual Culture, Urban and Agrarian Sociology etc.

### **Programme Specific Outcome:**

The objective of the course is to enrich the students with knowledge and ideas about a number of sociological aspects.

By going through this course-

1. Students will be able to understand the emergence and development as well as the importance of Sociology as a specific discipline of Social sciences. Students will come to know about the processes and modes of construction of knowledge of India.
2. Students will be accustomed with major theoretical debates and concepts in political sociology within contemporary political issues. Students will be able to develop a comparative understanding of political relationship through themes like power, governance, state etc. Students will be able to understand relation between religion and society, religious and solitude, religion and socio economic action, elements and techniques of religion etc.
3. Students will be introduced to gender as a sociological lens of enquiry in relation to various social fields and the categories of sex and sexuality. Students will be able to be familiar with gender theories, feminism, gender inequalities, relation between gender, power and subordination.
4. Students will be provided an understanding of the social and cultural bases of economic activity. They will be able to highlighting the significance of sociological analysis for the study of economic processes in local and global context.

5. Students will be acquainted with principal theoretical perspectives on diverse forms of social inequalities in articulation with each other. The contribution of the classical and post classical thinking in enhancing the importance and development of sociology as a specific social science discipline can be generated among the learners.
6. Students will be able to understand some elementary knowledge of the complexities and philosophical understanding of research. They will be benefited with the details of formulation of research design, methods of data collection, data analysis, qualitative & quantitative research etc.
7. Learners will be introduced to the core debates of environmental sociology, different approaches to understand environmental issues and movements in India.
8. Students could get knowledge and ideas about the interlinking of work and industry, various dimensions of work, different industrial culture, post industrial and information society, gender and work , forced labour, unpaid work and work in informal sector.

**Course Outcome:**

After completing the course students will gain knowledge on different types of societies, their changes and development, problems and prospects and a number of issues relating to human interaction. Apart from theoretical knowledge, students can also have practical knowledge about their subject matter by involving in field studies. This course will help the students to pursue higher studies like Masters in Sociology, Cultural Studies, Tribal studies, Social Work, Personal Management, Mass Communication etc. This course will also enable the students to prepare themselves in many competitive examinations relating to administrative services. Moreover the hands on training and practical knowledge on field survey may encourage the students to get employed in project based jobs.

## **ZOOLOGY**

**Programme outcome:**

The main objective of the course is to expose the student's gradual study of various forms of animal forms from simpler to complex systems encompassing, ecology, anatomy, biochemistry, immunity, cell biology, genetics, muscles and nerve coordination, developmental and evolutionary biology.

**Specific outcome:**

The course prepares students for pursuing higher education in various allied courses of Zoology and may provide an edge in studying modern technology associated of Biological Sciences for research purposes.

**Course outcome:**

After completion of courses students will be familiarized with different approaches to all major branches of biological sciences and also they are made competent and lay foundation for appearing in entrance examinations for studying in university and other higher institutions.

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