

## **Gour Mahavidyalaya, Mangalbari, Malda**

**2.6.2 - Attainment of Programme outcomes ,Programme Specific Outcomes and course outcomes are evaluated by the Institution.**

**Gour Mahavidyalaya, Mangalbari, Malda, is committed to being at the forefront of providing the best education to students and to act as a catalyst in shaping a bright and sustainable future for our nation and the world. These are a set of competencies, skills and abilities that the students develop, within their course of study. Programs offered are therefore synchronized with this vision and are geared to realize the programme/course outcomes in terms of creating competent, skilled and sensitive human resource. The programmes as well as course outcomes of all programmes offered are provided in the College Website, which educate the students with learning outcomes, in terms of critical and analytical competencies, creativity and problem**

**solving methodologies, interpersonal skills etc. This information enables students to select programmes of their interest and to understand how the programme would develop their competencies, skills and abilities through their course of study. . During the orientation programmes and mentoring sessions, the outcomes are also explained by teachers when the new students are admitted..The outcomes of all programmes of Gour Mahavidyalaya are explained by each Department and uploaded in the College website.**

**\*Programme Outcomes: POs are statements that describe what the students graduating from any of the educational Programmes should be able to do.**

**Course Outcome:**

**\*Programme Specific Outcomes: : Programme Specific Outcomes: PSOs are statements that describe what the graduates of a specific educational Programme to do.**

**ARABIC( B.A. Honours and General)**

## **PROGRAMME OUTCOME:**

**1.Acquire knowledge of the major traditions of literatures written in Arabic, understand literature in its social and cultural contexts and interpret ideologies of World's greatest writers.**

**2. Become enriched intellectually and ethically with the lofty and profound thoughts and ideas extracted from great literatures of Arabic..**

**3. Build themselves with rich life skills, comprehend social issues and become agents in bringing about positive societal transformation.**

**4. Pursue critical research in the methods of Arabic language learning and literature teaching..**

**5. Secure prospective careers in International bodies, journalism, translation, Administrative services and teaching Arabic.**

## **PROGRAMME SPECIFIC OUTCOME:**

**1.Apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.**

**2. Cultivate communicative competency and writing skills required in the technical job market..**

**3. Become freelance writers, journalists and creative artists..**

**4. Work as translators in the Arab speaking world..**

**5. Develop competence and caliber to serve as efficient teachers in Arabic.**

**COURSE OUTCOME:**

**1.Students graduating with a foreign language (Arabic) from the Department of Arabic will be able to: Communicate effectively in the Arabic language in a variety of speaking situations. 2.Express themselves competently in a variety of oral situations. 3.Read and comprehend texts of an intermediate high level in both traditional and simplified characters. 4.Understand most native speakers when they speak clearly on familiar topics. 5.Communicate effectively in the Arabic language via proficient, articulate, and wellorganized writing. Students will demonstrate knowledge and understanding of other cultures and their products.6. They will be able to recognize and describe the historical, social, economic, and political forces that shape society in the target culture.**

**ENGLISH( B.A. Honours and General):**

**Programme Outcome:**

**Specific learning outcomes for English courses include the following: 1. Reading: Students will gain awareness about the best literary traditions of the world. By learning how others live and handle their lives, one becomes connected with the world in a way we might not otherwise experience. They will discover that they are part of a huge conglomerate of human thought and emotion. All the great texts that a**

**student of English honours will get chance to study will expand their range of experience. They can gain courage and strength by living vicariously through well-developed characters. Through reading students will have an awareness for varies perspectives. This will also expand their range of experience and in the process they will learn to be more empathetic toward the plights of others.**

**2. Literature, Nation and Tradition: The current syllabus in the UG level will provide students an opportunity to know India's age old literary and cultural tradition through their exposure to Sanskrit texts and modern Indian vernacular literature in translation. How reading literature in English can be an effective means to address the complex issues of identity, nationalism , historical tradition in Indian context, is a new focus area of the present course.**

**3. Awareness about Culture and History: Students gain an understanding of the relations between culture, history and texts. They learn to use texts as a gateway to various cultural traditions and interpret them in their historical contexts. How a literary text can appear as an ideal platform to locate dominant and marginalized voices of a society, is an important focus of the under-graduate literature progrmme.**

**4.Gaining of Critical Insight: An exposure to various social and cultural traditions and through the reading of representative texts from different periods help a student gain a critical insight about the reality as a whole. With the help of their Knowledge of various critical theorieshistorical situatedness.**

**5. Issue of Sexuality and Gender: Literature course teaches a student**

**to believe that one's own sense of identity is not enough to persuade the rest of the world to agree. Human beings are no longer bound by such binary concepts as male-female or masculine-feminine. They will learn that sex is a biological concept based on biological characteristics, whereas gender deals with personal, societal and cultural perceptions of sexuality. Appropriation of literary texts as tools of cultural study will help students to challenge centuries of social tradition and scientific belief which promote such and other types of differentiations. Cross Fertilization with allied Arts: Students of English Honours should also be able to articulate the relations among culture, history, and texts—for example, ideological and political aspects of representation, economic processes of textual production, dissemination and reception, and cross-fertilization with other arts: architecture, sculpture, music, film, painting, dance, and theatre. 6.Acquisition of Values: Acquisition of values is needed for individual development and social transformation.**

**Course Outcome:**

**The Department of English seeks to foster the intellectual development of its students by encouraging study of literature and writing. The Department strives to make its pass and honours programme students familiar with a wide range of works of British writers in particular and World literature in general with a special focus on Indian writings in English. The issues of culture, history, gender, race,**

**ethnicity, politics are addressed and negotiated in the process of imparting knowledge of English literature in its pluralistic forms , to help student develop acritical mindset of their own .The Department wishes that each student who graduates with a BA Honours in English from Gour Mahavidyalaya, will have an enduring interest in language and literature, an awareness of their historical and cultural legacies, knowledge of complexities of human existence, the political and social upheavals and its bearing on literature, an understanding of the ability of great literature to arouse and challenge people to struggle with insightful questions of human identity and values.Students can pursue higher studies and can apply for different kinds jobs in different sectors.**

#### **HISTORY: PROGRAMME SPECIFIC OUTCOME:**

**PSO1: 1. Critical analysis – Students will produce their own historical analysis of documents and develop the ability to think critically and historically when discussing the past. 2. Students will demonstrate in written work and class discussions the ability to recognize and articulate the diversity of human experience, including ethnicity, race, language as well as political, economic, social and cultural structures are time and space. 3. Application – students will employ a full range of techniques and methods used to gain historical knowledge, to make comparisons across time, space and culture. 4. Evaluation – Student will understand and evaluate historical ideas, arguments and point of view.**

**5. Knowledge – An understanding of the major trends of historical knowledge. 6. Construct and communicate historical arguments in both oral and written form..**

**HISTORY: Programme Specific Outcome :1. Students will be able to analyze and evaluate Indian and world history .2. Articulate factual and contextual knowledge of specific places and times to make careful comparisons across time, space and culture. 3. Read texts (Including entire books, routinely) and other media critically to analyze evidence, arguments and competing interpretations. Students can opt for competitive examination after completing cause.4.Students will understand what are the main features of Indian Culture and heritage.**

**HISTORY:COURSE OUTCOME : 1. Students can describe economical, social and cultural history of modern India. (1757- 1857) 2. Students can discuss cultural history of India. 3. Students can review the events of contemporary world (1919-1990) 4. Students will be able to demonstrate conceptual understanding of political and administrative history of modern India. Students can pursue higher studies and can apply for jobs.**





<b>COLLEGE TEACHER</b>
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**POLITICAL SCIENCE (B.A. Honours and General):**

**Programme Outcome:**

**PSO1. Political Science goes beyond the politics carried out in a national social system. PSO2. Political Science helps to understand the concept and origin of power and different types of power relationships. PSO3. In each and every field of society there is politics (e.g. in sports club in companies, in the pub, even in the relationship of couples). PSO4. It raises many questions: who decides? Who has more influence? How are the decisions being made? What are the consequences of a decision? PSO5. Raising questions is not enough: A political scientist also tries to find the answers in a responsible, scholarly and scientific way. PSO6. It makes to understand the inter-connection between local, state, national and international politics**

**Programme Specific Outcome:**

**PSO1. Understanding the origin and nature of State. PSO2. Assessing the social issues from the political perspective. PSO3. Becoming a leader of the nation with actual constitutional knowledge. PSO4. Have a wide variety of positions: One can work as a political advisor, a policy maker, a political journalist etc. PSO5. It helps to know the**

**political activities taking place in other countries and its impact on own nation. PSO6. One can be able to make a substantially critical and scientific contribution to government and society.**

**Course Outcome:**

**CO 1. Discuss the inter-relationship between Liberty and Equality. CO 2. Evaluate the importance of Justice and Freedom in a democratic arena. CO 3. Analyze the concept of “Alienation” as explained by Karl Marx. CO 4. Make an assessment of the relationship between Prime Minister and President in Indian Political System. CO 5. Describe the Human Rights movements in India since 1970s. CO 6. Analyze Rabindranath Tagore views on “Nationalism” . CO 7. Assess the issues of international relations.8.Students can pursue higher study , can apply for job and can prepare for competitive examinations like WBCS, IAS.**

**SOCIOLOGY( B.A. Honours and General):Programme Specific Outcome (Sociology) 1. Theory and knowledge – Students will understand basic concepts and theoretical perspectives of social behavior. 2. Problem solving skill – students will understand how to collect, analyze and interpret empirical evidence in sociological research. 3. Students will be to express sociological ideas clearly and coherently both in writing and in oral presentations. 4. Environment sensitivity – students will be acquainted with the impact of industrialization on environment. 5. Practical Skill – Students will be able to conduct survey ,select tools**

**of data collection like questionnaire, interview schedule, case study, interview guide and social survey, etc**

**SOCIOLGY:Course Outcome : 1. Students will be able to define, demonstrative understanding of apply analyze and evaluate social problems like casteism, regionalism, corruption, cybercrime, awareness about women and child rights, etc. 2. Students can compare sociological thoughts of Indian and western thinkers.**

### **FOOD AND NUTRITION( Honours)**

#### **PROGRAMME OUTCOME:**

**1.Utilize knowledge from the physical and biological sciences as a basis for understanding the role of food and nutrients in health and disease processes. 2. Provide nutrition counseling and education to individuals, groups, and communities throughout the lifespan using a variety of communication strategies.**

**Programme Specific Outcome:1. Evaluate nutrition information based on scientific reasoning for clinical, community, and food service application. 2. Apply technical skills, knowledge of health behavior, clinical judgment, and decision-making skills when assessing and evaluating the nutritional status of individuals and communities and their response to nutrition intervention. 3. Implement strategies for food access, procurement, preparation, and safety for individuals, families, and communities. 6. Perform food**

**management functions in business, health-care, community, and institutional arenas.**

**COURSE OUTCOME:**

**1. Students will gain knowledge about the importance of Food and Nutrition in our life style. 2. Implement strategies for food access, procurement, preparation, and safety for individuals, families, and communities. 3. Perform food management functions in business, health-care, community, and institutional arenas.**

**GEOGRAPHY( B.A. Honours and General):**

**PROGRAMME OUTCOMES :1. Instill confidence and develop a sense of identity in facing the real world. 2. Foster cooperation among students enabling them to connect and contribute towards teamwork activities. 3. Develop effective communications skills that promote leadership qualities individually as well as within a group. 4. Develop critical thinking and skills that train students to analyze problems and validate real life solutions. 5. Prepare objective scientific approach so that students can address research problems in Applied Geography and allied fields. 6. Strive towards making enlightened citizens with commitment and empathy to social concerns. 7. Inculcate a sense of environmental ethics that focus research and concerns on sustainability.**

**PROGRAMME SPECIFIC OUTCOME:**

**1. Establish the position of Geography as a subject and its importance and interrelationships that reiterate and validate the Man-Environment relationship. In the course of field surveys, students acquire a greater understanding of the socio-economic and cultural dimensions of the populations with greater focus on marginalized section of society.**

**3. Physical field surveys enable the students to understand the landforms, geomorphic process and associated hazards.**

**4. Provide training to students in handling modern instruments and methods like Aerial Photographs, Satellite Imagery, Total Station.**

**5. The students are directed towards problem analysis so that they can design and conduct independent research.**

**6. The comprehensive syllabus promotes and develops a thorough knowledge of concepts, methods and theory.**

#### **COURSE OUTCOME:**

**KNOWLEDGE GAINED:** Study landforms and the related processes from the traditional concept to the contemporary development in Geomorphology. Gain in-depth knowledge on the influence of various types of rocks on the development and evolution of the landforms; hydrologic characteristics of an open channel flow that produce erosional and depositional landforms; form-process interaction in the landform development and some modern methods of geomorphic analysis of the landforms through the concept of

**geomorphic threshold, geochronological methods and extreme events and equilibrium.**

## **PHYSICAL EDUCATION( B.A. GENERAL):**

### **PROGRAMME OUTCOME:**

**1.Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives. 2.Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology. 3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings. 4. Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology. 5.. Effective Citizenship: Demonstrate empathetic social concern and equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering. 6. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them. 7. Environment and Sustainability: Understand the issues of**

**environmental contexts and sustainable development. 8. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes.**

#### **PROGRAMME SPECIFIC OUTCOME:**

**1.Students will acquire a comprehensive knowledge and sound understanding of fundamentals of Physical Education. 2.Students will develop practical, theoretical skills in Physical Education. 3.Students will be prepared to acquire a range of general skills, to specific skills to communicate with society effectively and learn independently. 4.Students will acquire a job efficiently in diverse fields concerning Games and Sports.**

#### **COURSE OUTCOME:**

**1. Apply knowledge of physical education, growth education, and in the professional world. and development, play, sports and games knowledge, history of physical education .2. The course focuses to develop the basic knowledge in physical PEDN- yoga to explain aim and objectives of physical education.**

**3.Students can appear in NET, SET.3.They can complete Higher studies.**

## **SANSKRIT ( B.A. Honours and General)**

### **PROGRAMME OUTCOME:**

**PO1. Develop a strong concept of ancient Indian history, philosophy and literature. PS02. Enhance communication skills-Listening, Speaking, Reading, Writing. PO3.Students will be able to write Devnagari scripts which provide them paleographical knowledge to read out the script of modern languages like Hindi and Marathi. PO4. Increase in depth knowledge of the Core Areas of the subject. PO5.Students will demonstrate the skill needed to participate in conversation that builds knowledge with collaboration..**

### **PROGRAMME SPECIFIC OUTCOME:**

**PSO1. Develop a strong concept of ancient Indian history, philosophy and literature. PSO2. Enhance communication skills-Listening, Speaking, Reading, Writing. PSO3.Students will be able to write Devnagari scripts which provide them the paleographical knowledge to read out the script of modern languages like Hindi and Marathi. PSO4.Students will demonstrate the skill needed to participate in conversation that builds knowledge with collaboration. PSO5. Students will gain knowledge of the major traditions of literatures written in Sanskrit. PSO6. To make them eligible for higher education. PSO7. Prepare students for the profession of teacher, WBCS, UPSC etc**



**COURSE OUTCOME:CO1.Students will be able to know not only ancient literature and their classification but also modern Sanskrit literature. they will be manage their cognition, emotive apparatus, confusion and conflict of mind. CO3.They should general introduction of Indian Petrology and definitions and examples of various artharlankara. CO4.The students would learn about the ancient Indian Educational system and Polity, their nature, concepts through the text of Dharmasastra and Arthasastra. CO5.The students would know about the historical importance of Indian Epigraphy, Paleography, Chronology and Inscription.**

#### **JOURNALISM AND MASS COMMUNICATION:Honours:**

##### **Program Outcome:**

- 1.Ability to apply the techniques of reporting, writing and designing skills in print media, Broadcast and Digital media.**
- 2.Work on the various editing software and hardware used in the media organisation and journalism field**
- 3.Ability to apply different research techniques and strategies on a wide cross sections of their specific emphasis.**
- 4.Prepared in the managerial aspects of Broadcast and New Media as required by the industry. Trained in Marketing management and Brand Management of various media products.**

**5. Communicate effectively across various platforms of Media. At the end of the course will be having hands on experience with extensive training and media exposure through formal internships.**

**Course Outcome:**

**1. Reporting in Print/Electronic media**

**2. Editing in Print/Electronic media**

**3. Content Developer**

**4. Copywriter in Advertising Agency**

**5. Anchoring in Radio/TV**

**6. News presenter on Radio/TV**

**7. Public Relations officer in Public and Private Sectors**

**8. Information Service in Central & State Government Organisation**

**9. Web Journalism**

**10. Different arena of Film Making**

**11. Jobs in Production House**

**12. Photography**

**13. Teaching in College and Universities**

**14. Teaching in CBSE Schools**



## **COMPUTER SCIENCE:B.SC( Honours and General):**

### **PROGRAMME OUTCOME:**

**PSO 1: PO-1.To attract young minds to the potentially rich & employable field of computer Science.**

**PO-2.To be a foundation graduate Programme.This will act as a feeder course for higher studies in the area of Computer Science**

**PO-3. To develop skills in software development so as to enable the B.Sc. Computer Science graduates to take up self-employment in Indian & global software market**

**PS04: Able to comprehend and write effective project reports in multidisciplinary environment in the context of changing technologies.**

### **PROGRAMME SPECIFIC OUTCOME:**

**PSO-1. To develop problem solving abilities using a computer**

**PSO-2. To build the necessary skill set and analytical abilities for developing computer based solutions for real life problems.**

**PO-1. Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry. PSO-3. To imbibe quality software development practices.**

**PSO-4. To prepare necessary knowledge base for research and development in Computer Science**

**PSO-5. To help students build-up a successful career in Computer Science.**






**COURSE OUTCOME:**

**CO-1. To develop Problem Solving abilities using computers**

**CO-2. To teach basic principles of programming**

**CO- 3. To develop skills for writing programs using ‘C’.**

**CO-4. Students can apply for jobs in IT sectors and MNCs.**

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## **CHEMISTRY( B.Sc. Honours and General)**

### **PROGRAMME OUTCOME:**

**PO-1. Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.**

**PO-2. Solve the problem and also think methodically, independently and draw a logical conclusion.**

**PO-3. Employ critical thinking and the scientific knowledge to design ,carry out, record and analyze the result of chemical reactions**

### **PROIGRAMME SPECIFIC OUTCOME:**

**PSO-1. Know the structure and bonding in molecules/ions and predict the stucture of molecule /ions.**

**PSO-2. Undestandthe various type of aliphatic, aromatic, nucleophilic substitution reaction. PSO-3. Undestand and apply principles of Organic Chemistry for understanding the scientific phenomenon in Reaction mechanisms. PSO-4. Learn the Familiar name reaction and their reaction mechanism. PSO-5. Understand good laboratory practices and safety. PSO-6. Study of organometallic reaction..**

**COURSE OUTCOME:**

**CO-1. Study the Expression for rate constant  $k$  for third order reaction**

**CO-2. Solve the numerical problems based on this topic**

**CO- 3. Understand Nature of wave and its characteristics such as wavelength, wave number, frequency and velocity**

**MATHEMATICS ( B.Sc. Honours and General):**

**PROGRAMME OUTCOME:**

**PO-1. To get familiar with concepts of mathematics used in higher study**

**PO-2. To understand the daily life scenario in which mathematics is involved**

**PO-3. To think logically about a problem**

**PO-4. Enhance problem solving aptitude.**

**PROGRAMME SPECIFIC OUTCOME:**

**1. Student will get deeper knowledge of mathematics**

**2 Student will get deeper knowledge of mathematics .**

**3. Student will understand the existing solutions and their applications in computer graphics and machine vision.**

**4. Student will learn the principles of Geometric algebra including its application in Graphics and vision related tasks.**

**5. Student will practice programming, problem solving and defence of a small project.**

### **COURSE OUTCOME:**

**After completion of these courses students should be able to;**

**CO-2. define the basic terms and concepts in metric space topology**

**CO-3. Apply Ratio test, root test , limit and limit comparison test.**

**CO-14. Understand the meaning of Operations Research and how to use it. How to write linear program in the event of minimum cost or maximum profit.**

### **ZOOLOGY( B.SC. Honours, General):**

#### **Programme Outcome:**

**1.PO.- Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms 2. PO2 – Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment 3. PO3 – Apply the knowledge of internal**

**structure of cell, its functions in control of various metabolic functions of organisms. 4. PO4 – Understands the complex evolutionary processes and behaviour of animals 5. PO5 – Correlates the physiological processes of animals and relationship of organ systems 6. PO6 – Understanding of environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species 7. PO7 – Gain knowledge of Agro based Small Scale industries like sericulture, fish farming, butterfly farming and vermicompost preparation. 8. PO8 – Understands about various concepts of genetics and its importance in human health .**

**Program Specific Outcomes: 1. PSO1. Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology 2. PSO2. Analyse the relationships among animals, plants and microbes 3. PSO3. Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and techniques of Zoology, Toxicology, Entomology, Nematology Sericulture, Biochemistry, Fish biology, Animal biotechnology, Immunology and research methodology 4. PSO4. Understand the applications of biological sciences in Apiculture, Aquaculture, Agriculture and Medicine 5. PSO5. Gains knowledge about research methodologies, effective communication and skills of problem solving methods 6. PSO6. Contributes the knowledge for Nation building.**



**Course Outcomes: Animal Diversity – Invertebrates**

**CO1 Describe general taxonomic rules on animal classification**

**CO2 Classify Protista up to phylum using examples from parasitic adaptation**

**CO3 Classify Phylum Porifera to Echinodermata with taxonomic keys**

**CO4 Describe Phylum Nematoda and give examples of pathogenic Nematodes**

**Ecology, Zoogeography and Animal Behaviour:**

**CO1 Distribution of fauna in different realms interaction**

**CO2 Understand Animal behaviour and response of animals to different instincts**

**CO3 Interaction of biota abiota**

**CO4 Various kinds of Animal adaptations.**

**05. Student can pursue higher study and can apply for job.**

**PHYSICS: B.SC( Honours and General):**

**PROGRAMME OUTCOME:**

**PO-1: apply newtons laws of motion, surface tension, fluid mechanics, elasticity in real life**

**PO-2: understand the basic laws governing atoms and molecules, the bonding between them, the EM spectra and their applications**

**PO-3: deal with different types of engines, refrigerators, air conditioners their specifications and theories of Carnot's cycle**

**PO-4: understand types of charges, electric field, electric potential, forces between charges, gauss's law, ampere's circuital law and magnetostatics.**

**PROGRAMME SPECIFIC OUTCOME:**

**PSO-1- Understanding the basic concepts of physics particularly concepts in classical mechanics, quantum mechanics, statistical mechanics and electricity and magnetism to appreciate how diverse phenomena observed in nature follow from a small set of fundamental laws through logical and mathematical reasoning. 2. Learn to carry out experiments in basic as well as certain advanced areas of physics such as nuclear physics, condensed matter physics, nanoscience, lasers and electronics. 3. Understand the basic concepts of certain sub fields such as nuclear and high energy physics, atomic and molecular physics, solid state physics, plasma physics, astrophysics, general theory of relativity, nonlinear dynamics and complex system. • Gain hands on experience to work in applied fields. • Gain a through grounding in the subject to be able to teach it at college as well as school lever. 4. Viewing physics as a training ground for the mind developing a critical attitude and the faculty of logical reasoning that can be applied to diverse field.**

**COURSE OUTCOME:**

**CO-1: Fast calculation on how an object moves is measured and frame of references are determined**

**CO-2: work energy relationship is used to analyse a physical situation and develop an equation which relates the energies of initial and final states of motion**

**Botany (B.Sc. Honours, General):**

**Programme Outcome:**

**PO1. Understanding of Plant Diversity and its importance in the maintenance of ecological balance. PO2. Students learn to carry out practical work, in the field and in the laboratory, interpreting plant morphology and anatomy, Plant identification, Vegetation analysis techniques. PO3. Apply the knowledge of basic science, life sciences and fundamental process of plants. PO4. Apply modern techniques and instruments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological studies of plants with an understanding of the applications in human life. PO5. Apply the knowledge gained from the studies for the upliftment of society via addressing health, environmental issues, food scarcity etc.**

**Programme Specific Outcome:**

**PSO1. Critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to**

**recognize their position in the classification systems and at phylogenetic level. PSO2. Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works. PSO3. Students will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms. PSO4. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. PSO5. Students will be able to explain how Plants function at gene, genome, cellular and tissue level, PSO6. Students will be will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.**

**Course Outcome:**

**CO 1 – To understand the universal nature of science CO 2 – To demonstrate the use of scientific method CO 3- To lay a strong foundation to the study in Botany CO 4 - Impart an insight into the different types of classifications in the living kingdom. CO 5- Appreciate the world of organisms and its course of evolution and diversity. CO 6- Develop basic skills to study Botany in detail**

**CO1- To study the evolutionary importance of Algae as progenitors of land plants CO2- Understand the unique and general features Algae and Bryophytes and familiarize it CO3- To study the external morphology, internal structure**

**and reproduction of different types of Algae and Bryophytes**  
**CO4- Realize the application of Phycology in different fields**

**CO1- Understand different types of plant tissues. CO2- Understand the internal structure of different plant organs with reference to their functions. CO3- Understand the process of normal and anomalous secondary thickening in plants. CO4- Know the morphological and anatomical adaptations of plants growing in different habitats. CO5- Understand how botanical knowledge could be applied for crop improvement.CO:6 Students can pursue higher study and can apply for Job as a Teacher.**

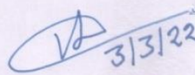
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*Supriya Biswas.*  
Convenor of Academic Council

03.03.2022

  
3/3/22  
Principal  
GOUR MAHAVIDYALAYA  
Mangalbari, Malda.