

## ZAKIA AFAQUE ISLAMIA P. G. COLLEGE, SIWAN (BIHAR)

### Programme Outcomes

Zakia Afaque Islamia College, Siwan offers three year undergraduate Honors degree programmes in Commerce, Economics, Geography, English, Hindi, Urdu, Persian, Sanskrit, History, Political Science, Psychology, Sociology, Mathematics, Physics, Chemistry, Zoology and Botany.

Zakia Afaque Islamia College also offers two years Post Graduate Courses in Physics, Chemistry, Zoology, Botany, Urdu, Hindi, Political Science, Psychology, Geography, and Commerce. (All CBCS)

The College also offers B.B.A, BCA, MCA (Prog). Study Centre of MANU, Hyderabad is also running in this campus.

The learning outcomes of graduate programmes reflect disciplinary knowledge and understanding, generic skills, including global competencies that all students in different academic fields of study should acquire and demonstrate. Some of the programme outcomes in general areas follows:

**Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate programme of study.

- **Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.
- **Critical Thinking:** Capability to apply analytic thought to a body of knowledge; analyze and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.
- **Problem Solving:** Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one's learning to real life situations.
- **Analytical reasoning:** Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
- **Research-related skills:** A sense of inquiry and capability for asking relevant/appropriate questions, problem solving, synthesizing and articulating; Ability to recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyze, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.
- **Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams;

facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

- **Scientific Reasoning:** Ability to analyze, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.
- **Reflective thinking:** Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.
- **Information/digital Literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data.
- **Self-directed Learning:** Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.
- **Multicultural Competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups.
- **Moral and Ethical awareness/reasoning:** Ability to embrace moral/ethical values in conducting one’s life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one’s work, avoid unethical behaviours such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.
- **Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.
- **Lifelong Learning:** Ability to acquire knowledge and skills, including learning how to learn, “that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades.

Programme Name	Programme specific Outcome
B.A. (Hons.) English	<ol style="list-style-type: none"> <li>1. On successful completion of the Programme, the students will be accurate both in oral and written communication as they will be strong in Grammar and its usage.</li> <li>2. They can express a thorough command of English and its linguistic structures.</li> <li>3. They can apply critical frameworks to analyze the linguistic, cultural and historical background of texts written in English.</li> <li>4. They will be familiar with the conventions of diverse textual genres including fiction, non-fiction, poetry, autobiography, biography, Journal, films, plays, editorials etc.</li> <li>5. The course for an English Honours degree has evolved and</li> </ol>

	<p>developed over time, so that it is markedly different now from what it was about 15 years ago. Earlier, students were required to cover literature written primarily in the United Kingdom from the 13th century to the 20th century, with a little room made for literature produced in America. Today's syllabus covers literature in translation from India, as well as the works of writers from Australia, Africa, and South America.</p> <p>6. In addition, the faculty now undertakes teaching papers in contemporary Media Studies, Popular Literature, and English Language teaching in terms of contemporary usage. The course in English Honours today is up to date and relevant.</p>
B.A. (Hons.) Economics	<ol style="list-style-type: none"> <li>1. Economics is the study of how societies, governments, businesses, households and individuals allocate their scarce resources.</li> <li>2. This discipline has two important features. First, it helps to develop conceptual models of behaviour to predict responses to changes in policy and market conditions. Second, rigorous statistical analysis is used to investigate these changes.</li> <li>3. Economists are well known for advising the government on economic issues, formulating policies at the Reserve Bank of India and analyzing economic conditions for investment banks, brokerage houses, real estate companies, and other private sector businesses. They also contribute to the development of many other public policies including health care, welfare, and social reform and efforts to reduce inequality, pollution and crime.</li> <li>4. The study of economics can also provide valuable knowledge for making decisions in everyday life. It offers a tool with which to approach questions about the desirability of a particular financial investment opportunity, whether or not to attend college, the benefits and costs of alternative careers, and the likely impacts of public policies including universal education and a higher minimum wage.</li> </ol>
B.A. (Hons.) Hindi	<ol style="list-style-type: none"> <li>1. On successful completion of the Programme, the students will be skilled in both oral and written communication.</li> <li>2. They will be familiar with the conventions of diverse textual genres including fiction, non-fiction, poetry, autobiography, biography, Journal, films, plays, editorials etc.</li> <li>3. This course helps the students to have a better understanding of the society. They are able to comprehend human behaviour with all sorts of causes and effects, which helps them to become good human beings.</li> <li>4. Other career avenues open for Hindi graduates are pursuing Master's Degree, Journalism, Media, B.Ed., Nursery Teachers Training and sitting for competitive exams.</li> <li>5. Students can work anywhere in India, as they know Hindi – Our National Language. In many other countries also, Hindi is used as second Language. So they can easily gain employment in those countries.</li> </ol>
B.A. (Hons.)	<ol style="list-style-type: none"> <li>1. <b>Sound Knowledge of different Historical Periods:</b> Under the</li> </ol>

History	<p>CBCS papers in each semester are devoted to the study of particular Historical phase in the historical in the events along with the study of a few major works by some master Historians of that period. These not only help the students to understand a historical period better, but also reduce the load of study in the concerned area.</p> <p>2. <b>Knowledge of the Development of Historical perspective:</b> While pursuing Honours course of studies in History it is mandatory that a student develops proper knowledge of the historical events. In this sphere also the present syllabus appears to be illuminating, as it provides the students with standard and upto date knowledge of historical events, impact, war and history, result. The students may acquire knowledge of the historical events of the Ancient, Medieval, Modern and European history in new aspects.</p> <p>3. <b>Development of the Historical Perspectives:</b> The current syllabus is well chosen to represent different events from different angles. They are not only meant to make the students familiar with the dominant events of different ages, but also to open out new perspectives, the student may acquire a knowledge of the changing nature of politics or kingdoms of the changing times.</p>
B.A. (Hons.) Political Science	<p>1. This Programme will help the students to Identify the nature of government processes, the functions of political systems, the structures and roles of institutions and constitutions, the political economy of Third World countries, international relations and foreign policy, and the challenges of globalization.</p> <p>2. The programme also aims to enhance students' ability to think critically, to write with clarity, to orally communicate effectively and increases their ability to make sound judgments through analytical reasoning.</p> <p>3. Opportunities such as Model United Nations, internships, mock trial and international security simulations and preparing graduates for career success are a part of the course curriculum</p>
B.A. (Hons.) Psychology	<p>1. The Department of Psychology emphasizes training in theoretical and applied psychological skills with the purpose of creating students who are high on intra-psychic and inter-personal sensitivity.</p> <p>2. The various realms of life - cognition, emotion, behaviour and spirituality are explored with ample amount of space given to both objectivity and subjectivity of human nature.</p> <p>3. The course is designed to enhance not only knowledge of concepts but also introduce skills required for research and profession as psychologists.</p> <p>4. Empathetic understanding of the socio-cultural and cross-cultural aspects of community living fine-tune students to become responsible individuals and citizens in a highly globalized environment.</p>
B.Sc (Hons.) Maths	<p>Mathematics graduates will be able to apply critical thinking skills to solve problems that can be modeled mathematically, to critically interpret numerical and graphical data, to read and construct mathematical arguments and proofs, to use computer technology</p>

	appropriately to solve problems and to promote understanding, to apply mathematical knowledge to a career related to mathematical sciences or in post -baccalaureate studies.
B.A. (Hons.) Sociology	<ol style="list-style-type: none"> <li>1. The curriculum framework for Sociology is intended to help students understand the nature of society in which they live and acquire skills to view social reality objectively.</li> <li>2. It enables through critical thinking and observation at a national and global level of institutions and social problems of inequality and development in realms of gender, environment, polity, religion, economy, kinship and culture.</li> <li>3. The objective of the course is to introduce sociological concepts and theories to students and help them link these to actual life experiences.</li> </ol>
B.Com (Hons.)	The curriculum planning of B.Com.(Hons) course envisages the students demonstrating inclusive knowledge of the areas related to human resource management international business, corporate and business laws, marketing etc. the students will be made capable of using modern ways and means of dealing with issues arising in t dynamic business world and will also help them tackle the resistances.
Geography ( Hons )	This programme will instill in the students the knowledge and capability of understanding the world and its complexities. It will also make them able and competent enough to have a problem-solving approach to the issues which the world faces. This degree course intends to make future managers and aims at enhancing the employability options of the students. The curriculum helps instill learnability among students upskilling and reskilling even in the later part of life.
Urdu (Hons )	<p>After the completion of the course, students can go for-</p> <ol style="list-style-type: none"> <li>1. Further studies in literature and language.</li> <li>2. Students are eligible for M.A. in Urdu.</li> <li>3. After obtaining graduation degree students are able to learn the literature of Urdu Ghazal, Afsana, KhutootNigari, MazmoonNigari, NavilNigari, Qasida, Marsia, Masnaavee etc.</li> <li>4. Students have also developed confidence in reading and writing Urdu language well.</li> </ol>
Persian	This course introduces students to the Persian language while, developing proficiency in reading, writing, comprehending, and speaking modern Persian, through communicative methods. Students acquire an understanding of grammar that is well integrated into their language usage. Dialogs and reading texts are geared toward facilitating practical mastery of basic skills.
Sanskrit	The program has enabled UG level students of Sanskrit to be introduced to Indian age-old heritage, accumulating in the last forty centuries, exercising inexpressible impact on the life and culture of the Indians with the explicit aim of inspiring as well as uplifting qualitatively each and everyone, directly or otherwise concerned with.

<b>Science</b>	
Botany (Hons)	<ol style="list-style-type: none"> <li>1. Understanding the structural organization and variation in chromosomes get self-employment in fields such as mushroom Cultivation, organic manure preparation, horticultural plant production, cultivation of crops in poly-house conditions, plant tissue, culture laboratories, etc.</li> <li>2. Understand plant structures in the context of the physiological functions of plants.</li> <li>3. Understand lipid metabolism in plants.</li> <li>4. Understand the morphological and structural organization of Cryptogams and Phanerogams.</li> <li>5. Economics Botany and plant utilization in concerned with human life. Diversity of plants National plant wealth.</li> <li>6. Developmental biology of plants. Industrial application of microorganism</li> </ol>
Chemistry (Hons)	<p>At the completion of B. Sc. in Chemistry the students are able to:</p> <ol style="list-style-type: none"> <li>1. Provide a broad foundation in chemistry that stresses scientific reasoning and Analytical problem solving with a molecular perspective.</li> <li>2. Achieve the skills required to succeed in graduate school, the chemical industry, and professional school.</li> <li>3. Get exposure of a breadth of experimental techniques using modern instrumentation.</li> <li>4. Understand the importance of the Periodic Table of the Elements, how it came to be, and its role in organizing chemical information.</li> <li>5. Understand the interdisciplinary nature of chemistry and to integrate the knowledge of mathematics, physics, and other disciplines to a wide variety of chemical problems.</li> <li>6. Learn the laboratory skills needed to design, safely, and interpret chemical research.</li> <li>7. Acquire a foundation of the chemistry of sufficient breadth and depth to enable them to understand and critically interpret the primary chemical literature.</li> <li>8. Develop the ability to communicate scientific information and research results in written and oral formats.</li> <li>9. Learn professionalism, including the ability to work in teams and apply basic ethical principles.</li> </ol>
Mathematics (Hons)	<p>At the completion of B. Sc. in Mathematics the students are able to:</p> <ol style="list-style-type: none"> <li>1. Learn to solve improper integrals.</li> <li>2. Make use of linear equations for solving any differential equations Understand various problems related to planar graphs.</li> <li>3. Understand the Concepts of Matrices and linear equations.</li> <li>4. Learn properties of inverse Laplace transforms</li> </ol>
Physics (Hons)	<p>At the completion of B. Sc. in Physics students are able to:</p> <ol style="list-style-type: none"> <li>1. Demonstrate a rigorous understanding of the core theories &amp; principles of physics, which includes mechanics, electromagnetism, thermodynamics, &amp; quantum mechanics.</li> <li>2. Learn the Concepts as Quantum Mechanics, Relativity,</li> </ol>

	<p>introduced at degree level in order to understand nature at atomic levels.</p> <ol style="list-style-type: none"> <li>3. Provide knowledge about material properties and its Application for developing technology to ease the problems related to society.</li> <li>4. Understand the set of physical laws, describing the motion of bodies, under the influence of the system of forces.</li> <li>5. Understand the relationship between particles &amp; atoms, as well as their creation &amp; decay. Relate the structure of atoms &amp; subatomic particles. Understand the physical properties of molecules the chemical bonds between atoms as well as molecular dynamics.</li> <li>6. Analyze the applications of mathematics to the problems in physics &amp; develop a suitable mathematical method for such application &amp; for the formulation of physical theories.</li> <li>7. Learn the structure of solid materials &amp; their different physical properties along with metallurgy, cryogenics, electronics, &amp; material science.</li> <li>8. Understand the fundamental theory of nature at a small scale &amp; levels of atom &amp; sub-atomic particles.</li> </ol>
Zoology (Hons)	<p>At the completion of B. Sc. in Zoology the students are able to:</p> <ol style="list-style-type: none"> <li>1. Understand the nature and basic concepts of cell biology.</li> <li>2. Understand the basic concepts of chordates and non-chordates.</li> <li>3. Understand the concepts of Goatery and Lac culture.</li> <li>4. Understand the various Applications of Biotechnology.</li> <li>5. Understand the Lamarkism, Neo-Lamarkism and Darwinism.</li> <li>6. Understand the term ELISA technique and DNA finger printing. Understand the process of evolution.</li> </ol>
Computer Science (Hons)	<p>At the completion of BCA, B. Sc. in Computer Science and B. Sc. in Entire Computer Science the students are able to:</p> <ol style="list-style-type: none"> <li>1. Improve their computer literacy, their basic understanding of operating systems and a working knowledge of software commonly used in academic and professional environments.</li> <li>2. Develop criteria to organize and present different type of works in academic and professional environments.</li> <li>3. Learn to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software.</li> <li>4. Develop the skills to present ideas effectively and efficiently.</li> <li>5. Design and deliver an effective presentation and develop the various IT skills related electronic databases.</li> <li>6. Use the Systems Analysis Design paradigm to analyze a problem critically.</li> <li>7. Solve problems (programming networking database and Web design) in the Information Technology environment.</li> </ol>

<b>M.Sc Physics</b>	
	<ol style="list-style-type: none"> <li>1. Adequate knowledge of Physics and associated science subjects like Chemistry, Mathematics, and Statistics are needed to enroll to the M.Sc Physics. B.Sc with Physics and Mathematics as two of three subjects combination is a must as a qualification for entry to this program.</li> <li>2. To keep the eminence of the subject of Physics, one should be passionate and of an inquisitive mind. Hardworking and patience are the best characteristic features of students coming</li> </ol>



	<p>to this program.</p> <ol style="list-style-type: none"> <li>3. Due to the recent rapid progress in sciences, students are getting interested in higher studies. In that regard Physics is a subject that is well connected to various disciplines; e.g. education, technology, health care, space-science, software, air traffic control, etc.</li> <li>4. At the successful completion of this program, students get skilled in logical thinking in steps, formulating model systems, and solving problems.</li> <li>5. With a satisfactory number of presentations and group discussions, the students become good communicators.</li> <li>6. Students get lessons of research and development during their project work and assignments.</li> <li>7. During project work, group discussion, and laboratory class pupils get nurtured to become team members and to stand beside others with fellow feeling in need.</li> <li>8. Their budding creative skills get nourished by inspiring them to manage and organize different events; e.g. Science Day Observation, Lecture Competition, Commemoration of Scientists' birth Day, etc.</li> <li>9. To be honest and ethical in higher education and research, awareness is inculcated amongst the students against plagiarism obeying the intellectual property right. They are instructed to cite references and cross-references in needful.</li> </ol>
MSc (Zoology)	<ol style="list-style-type: none"> <li>1. Understand the biological diversity and grades of the complexity of various animal forms through their systematic classification and comparative structural studies.</li> <li>2. Learn how the earth was formed and how life started and evolved on the planet through the process of organic evolution.</li> <li>3. Understand the roles of plants, animals, and microbes in the sustainability of the environment and their interaction among themselves, and the deterioration of the environment due to anthropogenic activities.</li> <li>4. Understand the concepts and principles of biochemistry, immunology, physiology, ethology, endocrinology, developmental biology, cell biology, genetics, molecular biology, and microbiology.</li> <li>5. Develop technical skills in biotechnology, bioinformatics, and biostatistics.</li> <li>6. Delve into the wonderful world of insects, their success on the planet, and their diversity.</li> <li>7. Acquire knowledge on harmful and beneficial insects, their adaptations for life, and control measures.</li> <li>8. Perform laboratory procedures as per standard protocols in the areas of animal diversity, systematics, cell biology, genetics, biochemistry, molecular biology, microbiology, physiology, immunology, developmental biology, environmental biology, ethology, evolution and Entomology.</li> </ol>