



PROGRAM OUTCOME

TAGORE GOVT ARTS AND SCIENCE COLLEGE

Programme Outcome for Bachelor in Arts (TAMIL, ENGLISH, ECONOMICS, FRENCH, SOCIOLOGY, PHILOSOPHY, HISTORY, COMMERCE, TOURISM STUDIES)

Communication Skills : A graduate student in arts/social sciences/humanities shall be confident to speak, write, read, listen and understand the English language and one or more Indian languages. Relate the ideas, knowledge, books, and people. Think and decide rationally, and adopt technology and electronic/print media in disseminating thoughts, facts and realities.

Social responsibility: Develops an obligation to act for the benefit of society at large. Cultivates the responsibility to maintain a balance between the economy and the ecosystems. Nurtures a moral obligation to minimize the adverse effect on those immediately around them.

Critical, logical and rational thinking: Acquire the ability for objective, rational, skeptical, logical, and unbiased analysis of factual evidences to form a judgment or conclusion. Enhance the process of rational thinking, problem solving and analytical evaluation from different perspectives.

Enlightened and effective Citizenship: Cultivates progressive citizenship for a knowledge society for peace and prosperity of nations and the world. Develops clear, rational and progressive thinking. Participating in decision-making concerning the society and upholding national development, integrity, unity and fraternity.

Values and Ethics: Recognizes the importance, worth and usefulness of principles and standards of behavior, moral dimensions of one's own decisions and judgment of what is important in life. Understand the rules of behavior based on systematizing, defending and recommending the concepts of right and wrong.

Sustainable development: Understands, organizes and promotes the principle of human development goals by sustaining the ability of natural systems, natural resources and ecosystem services upon which the economy and society depends.

Life-long process of Learning: Cultivates the proficiency to engage in independent, life-long and progressive learning abilities in the broadest context of changing socio politico-economic-cultural and technological scenario

Programme Outcome for Bachelor OF Science

Three-year B.Sc. Programme The Three-year B.Sc Programme Tagore Govt Arts and Science College offers courses at First, Second and Third year level in the subjects of Physics, Chemistry, Mathematics, Zoology, Botany, Computer Science and Psychology. All of these subjects are designed with a specific aim of introducing students to various laboratory methods thereby exposing them to several laboratory techniques in handling of state of the art equipment, critical thinking and being independent as well as team learning. They develop laboratory skills throughout the curriculum via hands-on experiences with diverse experimental techniques and tools. They learn several approaches to data analysis and become confident in using computational methods to analyze and solve various problems. Although the student's long term goals are quite varied, these courses help in drawing many to careers that demand scientific and technical knowhow and strong logical reasoning abilities. The following is a specification of the key Programme Outcomes (knowledge, skills, values and attitude) that highlight important areas in which the students are expected to gain proficiency at the end of the tenure of their undergraduate program.

Knowledge: Learners are encouraged to apply the knowledge of mathematics and science fundamentals to various solutions of complex problems. As such, knowledge of the subject is the sole objective of any student learner. A student is exposed to a wide range of topics in various subjects and is given intensive training in each of the courses that have laboratory related work. The learner is encouraged to use various mathematical methods (analytical and numerical) and experimental methods as an application to the acquired concepts and principles that help in studying various branches of sciences. At the end of the program, students are able to gain thorough knowledge in key areas in the subjects offered.

Problem Analyses: Well equipped with an understanding of the analytical methods involved, they are in a position to interpret and analyze results so obtained from experiments and draw suitable conclusions against their supported data acquired. At the end of the program, students will be able to identify, formulate and analyze scientific problems and reach concrete solutions using various principles of mathematics and sciences.

Designing Solutions: Having acquired knowledge of subjects, students are trained to think out of the box, design and conduct an experiment or a series of experiments that demonstrate their understanding of the methods and processes involved. For example, as a part of the project of the final year, students in the subject of Physics are encouraged to calculate the overall power consumption of the institution and think of ways and means of minimizing this consumption through alternate sources of energy. This in turn helps in the learner; develop a holistic approach from real time solutions. As such, at the end of the program, learners will be able to design solutions for complex problems and design a process/ processes that can meet specific needs. (Attainment of this is through projects at the final year level). .

Modern tool usage: As an outcome of the above three aspects , learners are trained to create, select, and apply appropriate techniques, resources and IT tools in the analysis and synthesis of data within limitations. (Outcome of final year project).

Communication Development: The medium of instruction being English, proficiency in the subject through English is one of the primary objectives of the science program. In order to improve the writing and oral skills of learners, the program caters to ensuring that learners become effective, clear communicators in written and oral work and are capable of explaining complex issues in accessible terms. With English language being the common mode of communication worldwide, all learners under the programme are encouraged to participate in courses designed to equip students with English-language proficiency through Grammar, Written and Spoken English to enable a holistic enhancement of communication. . As such, at the end of the program, learners will be capable of oral and written communication, and will prove that they can think critically and work independently. Learners will be able to communicate effectively on scientific issues with the scientific community and society at large in writing effective reports and designing documentation, make effective presentations and give and receive instructions.

Employability: With our learners long-term professional pursuits being quite varied, many are drawn to careers that require scientific skills or technical expertise or strong quantitative reasoning abilities. Keeping this in mind, the institution apprises students of various employment opportunities that are available in areas of their choice through the Placement cell. To equip these learners with knowledge other than that of the subject such as skills required helping them qualify for jobs, all the science subjects offer skill enhancement courses and value added courses so that learners have a better edge

over their counterparts. As such, at the end of the programme students will be able to increase their employability through subject knowledge and additional skills.

Ethics: While it is necessary to instill the spirit of competitiveness among students in a world of increasing competition, it is equally vital to develop a strong sense of ethics among learners that will help them develop some positive attitudes and values.

appreciation of the various principles and theories that evolved in science, the impact that science has on social, economical and environmental issues. One of the main objectives of any academic exercise, therefore, should be to produce well-groomed individuals who understand the significance of ethical values and abide by them even in the most pressing circumstances. In this programme, this process is enabled through courses and facilitators who integrate the teaching of ethics in everyday pedagogy. As such, at the end of this programme students will be able to develop, internalise and exercise ethics in their professional as well as personal practices. (8) PO-8: Environment and Sustainability: 'Environmental sustainability' has become the watchword of the 21st century. An increased engagement with environment-related concerns is appearing tangibly on global fronts; academics cannot and should not remain quarantined from this massive development. Through classroom discussions and research projects, this programme facilitates active dialogues with factors which influence human-ecology interactions. As such, at the end of this programme students will be able to identify and analyze socio-political, cultural and economic problems which act as deterrents to environmental sustainability and provide creative solutions towards the same. (9) PO-9: Soft-Skill Development: Apart from the attainment of knowledge and hands-on skills in practical applicability of the subject, learners need to be equipped with soft-skills and values which will help them function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary groups. These soft skills include leadership, teamwork, project-management, positive outlook, innovative approaches and effective articulation. Several soft skill programs are organized for learners through various agencies that tie up with the state government. As such, at the end of this programme, students will be able to hone the soft-skills required in positively enhancing their academic, professional and personal pursuits towards self and societal advancement. (10) PO-10: Science and Society: As an outcome of PO-1, PO-2 and PO-3, learners are encouraged to apply logical reasoning based on the knowledge, skills, designing solutions to assess societal, health, safety issues and the responsibilities that go along with the scientific practice. As an extension activity to society, learners are encouraged to take up specific projects such as impact of salinity on fresh water wells in an adopted village, and provide effective solutions.

Programme outcome for BSc Programme Three-year B.Sc. Programme Physics, Chemistry, Mathematics, Zoology, , Botany, Computer Science and Psychology. All of these subjects are designed with a specific aim of introducing students to various laboratory methods thereby exposing them to several laboratory techniques in handling of state of the art equipment, critical thinking and being independent as well as team learning. They develop laboratory skills throughout the curriculum via hands-on experiences with diverse experimental techniques and tools. They learn several approaches to data analysis and become confident in using computational methods to analyze and solve various problems. Although the student's long term goals are quite varied, these courses help in drawing many to careers that demand scientific and technical knowhow and strong logical reasoning abilities. The following is a specification of the key Programme Outcomes (knowledge, skills, values and attitude) that highlight important areas in which the students are expected to gain proficiency at the end of the tenure of their undergraduate program.

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Ethics: While it is necessary to instil the spirit of competitiveness among students in a world of increasing competition, it is equally vital to develop a strong sense of ethics among learners that will help them develop some positive attitudes and values. This includes appreciation of the various principles and theories that evolved in science, the impact that science has on social, economical and environmental issues. One of the main objectives of any academic exercise, therefore, should be to produce well-groomed individuals who understand the significance of ethical values and abide by them even in the most pressing circumstances. In this programme, this process is enabled through courses and facilitators who integrate the teaching of ethics in everyday pedagogy. As such, at the end of this programme students will be able to develop, internalise and exercise ethics in their professional as well as personal practices.

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