



# Course Outcomes



## Bachelor of Science

Sr. No.	System	Year/Semester	Subject	Subject Code	Course Outcomes
1.	Annual	1st Year	Mechanics	PHYS101TH	<p>Learning Outcomes:</p> <p>Upon completion of this course, students will acquire knowledge about fundamentals of mechanics, Newton's laws, concept of centre of gravity and moment of inertia, importance of frictional force in real world problems, advantages of using machines, relativity and effect of forces for different phenomenon when the bodies are in motion.</p>
2.	Annual	1st Year	Environment Science	ENVSAECC002	<p>Learning Outcomes:</p> <p>Upon completion of this course, students will acquire knowledge about about different environmental problems like global warming, ozone layer depletion and different kind of pollutions and their solutions. Student will also gain knowledge about ecosystem, biodiversity and its conservation.</p>
3.	Annual	1st Year	Biodiversity	BOTA 101	<p>After completion of this syllabys, student will familiar with lower plants like algae, fungi, bryophytes, pteridophytes and gymnosperms. Beside this they will be also well familiar with viruses and bacteria. They will be also familiar with the practical knowledge of all these plant groups. Which will be beneficial for then in different competitive exams and also serve as backbone for further higher classes</p>

4.	Annual	1st Year	Plant ecology and Taxonomy	BOTA 102	<p>The study if this subject will enable the students to understand the intricate connection's between all the living and non-living components of the living world. They will also be able to estimate various technical factors of the ecosystem.</p> <p>In Taxonomy they will able to identify plants on the basis of various keys used in the field of Taxonomy.</p>
5.	Annual	1st Year	Animal diversity	ZOOL 101 TH	<p>After going through this course, students got to know about various kinds of animals along with different mechanisms they adapted for their survival. Their classification reveals them how diverse animals are.</p>
6.	Annual	1st Year	Zoology	Zool 102 TH	<p>By comparing different organisms with respect to their physiology students will be familiar with their metabolism and how particular organ is evolved. They learn how humans and other organisms develop.</p>
7.	Annual	1st Year	chemistry	CHEM 101TH	<p>After completion of this course student will be familiar with the theoretical concepts of chemistry. Role and importance of this course is to provide knowledge about inorganic as well as organic chemistry in research field and it is challenge to make most important concepts and methods understandable to the undergraduate students.</p>
8.	Annual	1st Year	chemistry	CHEM 102TH	<p>After completion of this course student will be familiar with the theoretical concepts of chemistry. Role and importance of this course is to provide knowledge about physical as well as organic chemistry in research field and it is challenge to make most important concepts and methods understandable to the undergraduate students.</p>
9.	Annual	2nd Year	Zoology (physiology and biochemistry)	ZOOL 201 TH	<p>Students get to know about various processes that are occurring in their body. Along with this, various processes and reactions that takes place in their body.</p>

10.	Annual	2nd Year	Zoology (genetics and evolution)	ZOOL 202 TH	Students learn about various genetic processes and mechanisms, mutations and genetic diseases. Along with his they also learn about the evolution of life, and various organisms.
11.	Annual	2nd Year	Zoology medical diagnostic s	ZOOL 203 TH	Students learn about various medical tests and techniques to identify a particular disease. They got to know about latest techniques and equipments used in diagnosis of various diseases.
12.	Annual	2nd Year	Zoology (Apiculture)	ZOOL204 TH	Students learn about rearing of honey bees along with their biology. They got to know about various uses of honey bee products such as honey, bee wax, propolis, bee venom etc. They got to know about various entrepreneurship programmes of this field.
13.	Annual	2nd Year	Basic instrumentation skills	PHYS206TH	<p>Learning</p> <p>Outcomes:</p> <p>Upon completion of this course, students will acquire knowledge about the functioning of electronic voltmeter, CRO (cathode ray oscilloscope), DSO (digital storage oscilloscope), signal generator, impedance bridges and other digital instruments which are required to measure current, voltage and resistances.</p>
14.	Annual	2nd Year	chemistry	CHEM 201TH	After completion of this course student will familiar with theoretical aspects of chemistry, role of chemistry in research field and in industries also. Along with theoretical concepts this course will also make the students Competent in developing some basic skills and practical knowledge.
15.	Annual	2nd Year	chemistry	CHEM202TH	After completion of this course student will familiar with theoretical aspects of chemistry in research field and in industries also. Role of chemistry and it's importance in the field of chemical engineering. This course also make the students Competent in developing some basic skills of chemistry in research field and in industries also.

16.	Annual	2nd Year	chemistry	CHEM 203	After completion of this course student will familiar with theoretical aspects of chemistry in research field and in industries also. Role and importance of this skill enhancement course is to improve skills of students in the field of chemistry and specially in the field of industrial chemistry.
17.	Annual	2nd Year	chemistry	CHEM 204	After completion of this course student will familiar with theoretical aspects of chemistry in research field and in industries also. Role of chemistry and it's importance in research field is significant. Along with these theoretical concepts the skill enhancement course improves the basis knowledge of industrial chemistry and skills of students in the field of chemistry.
18.	Semester	IV th Semester	Chemistry of Main group Elements,  Theories of acids and Bases	CHEM DSE 604	The students will learn about various theories of acids and bases. They will acquire knowledge about the compounds of the noble gases. They will become familiar with the chemistry of s-block and p-block elements.
19.	Semester	V th Semester	Polymer Chemistry	CHEM DSE 501	After studying this course the students will acquire theoretical and practical knowledge about history of polymers; various polymerisation processes; kinetics of polymerisation; determination of molecular weights of the polymers; crystallisation and crystallinity in polymers; Mechanical, thermal and flow properties of the polymers; Polymer solutions and preparation, properties and applications of commercial polymers.
20.	Semester	V th Semester	Chemical Tech. & Society and Bus. Skills for Chemistry	CHEM SEC 503	After studying this course the students will acquire basic knowledge about chemical technology such as chemical reactors, distillation columns, extruders, pumps and mills. Students will learn to explore societal and technological issues from chemical perspective. They will know about the business basics and importance of chemistry in industry. They will also learn about intellectual property and patents.

21.	Semester	V th Semester	Linear Algebra	MATH503TH	<p>After completion of this course students will be familiar with the basic concepts in linear algebra like vector spaces, quotient spaces, linear independence, basis and dimension of vector space, linear transformations, concepts related with linear transformations like null spaces , range spaces, matrix representation of linear transformations, isomorphism, invertible linear transformations etc.</p> <p>Along with above theoretical concepts this course will help the students to understand applications of linear algebra in various fields like engineering, economics, in computer science etc.</p>
22.	Semester	V th Semester	Probability and Statistics	MATH504TH	<p>After the completion of this course students will become familiar with the basic concepts like random experiment, sample space, axiom of probability, random variable and probability distribution for random variable, moments of random variable about mean and about origin, uniform distribution of discrete and continuous random variable, normal distribution, and distribution of two dimensional random variable.</p> <p>With this conceptual knowledge students will understand to apply probability in general life like medical decisions, weather forecasting etc</p>
23.	Semester	V th Semester	Economic Botany and biotechnology	BoTA 501	<p>The practical and theoretical utility of various plants in all the various aspects of life i.e. on medicine, agriculture will be introduced to the students. Biotechnology is the field of tomorrow and plant biotechnologies miracle will be Targeted to the students in this part of the paper. Students will be familiarized with theoretical Knowledge of various techniques in molecular biology e.g. DNA fingerprinting, RFLP, RAPD, and various other tissue culture techniques</p>

24.	Semester	V th Semester	Economic Botany and biotechnology	BoTA 501	The practical and theoretical utility of various plants in all the various aspects of life i.e. on medicine, agriculture will be introduced to the students. Biotechnology is the field of tomorrow and plant biotechnologies miracle will be Targeted to the students in this part of the paper. Students will be familiarized with theoretical Knowledge of various techniques in molecular biology e.g. DNA fingerprinting, RFLP, RAPD, and various other tissue culture techniques
25.	Semester	V th Semester	Ethnobotany	BOTA 505	The course intends to teach students the various forms in which plants were used by the ancient people. The special emphasis will be on the plants used as medicine by the tribals and various categories of rare plants which should be preserved as soon as possible
26.	Semester	VI th Semester	Pesticide Chemistry & Pharmaceutical Chemistry	CHEM SEC 604	This course will help the students to become familiar with synthesis and uses of many commonly used pesticides such as DDT, Gammaxene, malathion, parathion, carbofuran, chloranil and alachlor. They will learn about the development and design of the pharmaceutical drugs. The students will acquire knowledge about the production of ethyl alcohol, citric acid, antibiotics, amino acids and vitamins by fermentation method.
27.	Semester	VI th Semester	Complex Analysis	MATH602TH	After completion of this course students will be familiar with the algebra, geometric and topological structure of complex number field, complex valued function of complex variable and its limit, continuity and differentiation which will help them to understand the concept of analytic function. By understanding the concept of differentiation and integration of complex valued function of complex variable students will able to find contour integration by use of which they can find complicated real line integration by using residue calculus.

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28.	Semester	VI th Semester	Transportation and game theory	MATH605TH	After completion of this course students will be familiar with the theoretical and practical aspects of transportation problems, assignment problems. By understanding transformation problems and its mathematical formulation students will understand to minimize the transportation cost or to maximize revenue of transportation. Further by understanding assignment problems and its mathematical formulation will understand that how to assign number of jobs to equal number of persons or machines at a minimum cost.
29.	Semester	VI th Semester	Cell and Molecular Biology	BOTA 601	Every student of Biology knows that a cell is the basic unit of all life on Earth. By the end of this course students will understand the structural and functional organization of living beings. Beside this they will also be familiar with various techniques used in molecular biology in recent days
30.	Semester	VI th Semester	Mushroom Cultivation Technology	BOTA 605	Mushroom are an important source if protein, mineral and vitamin's. They are also in demand as they are delicious, therefore this course seeks to develop a skill in the students so they can cultivate mushrooms as a form of self employment

  
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