

K.S.Rangasamy College of Arts& Science (Autonomous), Tiruchengode-637215

Department of Biotechnology

Local / National / Regional / Global

SEMESTER I

COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM101	Core I: Concepts of Cell Biology		✓		✓	Understanding the basic concept of cell biology and cell organelles.
18UBTMP101	Core Practical I: Lab in Cell Biology		✓		✓	Hands on experience on the basic practical

SEMESTER II

COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM201	Core II: Principles of Genetics		✓	✓	✓	Understanding the basics of Genetics
18UBTMP201	Core Practical II: Lab in Genetics		✓	✓	✓	Hands-on experience in genetics.



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SEMESTER III

COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM301	Core III: Microbiology	✓	✓	✓	✓	Make aware of microorganisms to students like Bacteria, fungi, viruses, protozoa, and yeast.
18UBTMP301	Core Practical III: Lab in Microbiology	✓	✓			Provide hands-on experience on handling and isolation of Microbes
18UBTSB301	SBC I: Calculations for Biologist (100% Internal Evaluation)	✓	✓			Provide basic knowledge about the basic calculation in biology
18UBTNM301	NMEC I: Medicinal herbs	✓	✓			Introduce the medicinal herbs to the students for
18UBTAC301	Add-on Course: Medical transcription		✓		✓	Apart from the regular course student can benefit from this add-on course. Which may help the students to advance in his career.
18UBTAC302	Add-on Course: Electrophoresis	✓	✓	✓		Apart from the regular course student can benefit from this add-on course. Which may help the students to advance in his career.



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SEMESTER IV


COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM401	Core IV: Biophysics and Bioinstrumentation		✓	✓	✓	Understanding the basic concept of Biophysics and Bioinstrumentation
18UBTMP401	Core Practical IV: Lab in Biophysics and Bioinstrumentation		✓	✓	✓	Provide hands-on experience on instrumentation
18UBTSB401	SBC II: Biosafety and Bioethics (100% Internal Evaluation)	✓	✓	✓	✓	Provide basic knowledge about the Biosafety and Bioethics in Biological science.
18UBTNM401	NMEC II: Fundamentals of Biotechnology		✓	✓		To disseminate the fundamentals of Biotechnology to non-biotechnology students.
18UBTAC401	Add-on Course: Corporate Biotechnology	✓	✓	✓	✓	Will give more detail about the corporate culture and its systems in Biotechnology.
18UBTAC402	Add-on Course: Animal physiology	✓	✓	✓		Will give more detail about the animal physiology which will give more edge to students to obtain job in medical transcription field.
18UBTAL401	Advanced Learners Course: DNA Science and Drug discovery		✓		✓	This course is very specific for students who performs well in their academics. Which will give more edge in obtaining credit.
18UBTAL402	Advanced Learners Course: Stem cell Biology		✓		✓	This course is very specific for students who performs well in their academics. Which will give more edge in obtaining credit.



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SEMESTER V

COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM501	Core V: Molecular Biology		✓	✓	✓	This paper will give more edge understanding about the molecular mechanism.
18UBTM502	Core VI: Immunology	✓	✓	✓	✓	Immunology will provide basic information about the mechanism of immune system in our body.
18UBTM503	Core VII: Industrial Biotechnology		✓	✓		Provide a wide scope about the large-scale production of biotechnological products and process.
18UBTM504	Core VIII: Plant tissue culture	✓	✓	✓	✓	It's a job-oriented course which helps the students to grow plants from a single cell.
18UBTEL501	Elective I: Nanobiotechnology		✓		✓	Electives gives students to select their choice of subject. Nanotechnology will give more insight about the molecules in nano level.
18UBTEL502	Elective I: Bioinformatics		✓		✓	Electives gives students to select their choice of subject. Bioinformatics will give students to take up career in dry lab.
18UBTMP501	Core Practical-V	✓		✓		Provide hands-on experience on PTC, ACC, Molecular biology, immunology and Industrial biotechnology
18UBTSB501	SBC III: IPR for Lifescience	✓	✓	✓	✓	Provide basic knowledge about the intellectual property rights which is important for Biotechnology students.
18UBTAL501	Advanced Learners Course II: Genes and Humans		✓	✓	✓	This course is very specific for students who performs well in their academics. Which will give more edge in obtaining credit.
18UBTAL502	Advanced Learners Course II: Omics-Science		✓		✓	This course is very specific for students who performs well in their academics. Which will give more edge in obtaining credit.


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SEMESTER VI

COURSE CODE	COURSE NAME	NEED				REMARKS
		Local	National	Regional	Global	
18UBTM601	Core IX: Recombinant DNA Technology		✓		✓	This paper will give more edge understanding about the recombinant DNA technology and its recent advancements.
18UBTM602	Core X: Environmental Biotechnology	✓	✓			As the whole world is cautious about the environment, biotechnology will give new solution for the existing problem.
18UBTM603	Core XI: Basics of Animal Cell culture		✓		✓	It's a job-oriented course which helps the students to grow animals from a single cell.
18UBTEL601	Elective II: Medical Biotechnology		✓		✓	Electives gives students to select their choice of subject. Medical biotechnology will give more insight about the clinical aspects of biotechnology
18UBTEL602	Elective II: Food Biotechnology	✓	✓	✓	✓	Electives gives students to select their choice of subject. Food biotechnology will give more insight about the application of biotechnology extended to food sector.
18UBTMP601	Core Practical - VI	✓	✓	✓		Provide hands-on experience on rDNA technology, ACC and environmental biotechnology
18UBTSB601	SBC IV: Basics of Research		✓	✓	✓	Provide basic knowledge about the Research and its methodologies. And will guide the students to perform basic research in Undergraduate level.


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