

Curriculum List Form (Undergraduate program)

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Mandatory Major	BS200		Biochemistry Experiment	0:9:3(2)	Fall	
	BS202		Cell Biology	3:0:3(4)	Fall	
	BS205		Biochemistry I	3:0:3(3)	Spring	
	BS208		Biochemistry II	3:0:3(3)	Fall	
	BS209		Molecular Biology	3:0:3(4)	Spring	
	BS319		Cell Biology Experiment	0:9:3	Spring	
Major Elective	BS223		Introductory Biotechnology	3:0:3	Spring	
	BS232		Microbiology	3:0:3(1)	Fall	
	BS307		Physical Chemistry for Life Science	3:0:3	Spring	
	BS310		Genome Molecular Biology	3:0:3	Fall	
	BS311		Animal Diversity	3:0:3	Spring	
	BS312		Evolution	3:0:3	Fall	
	BS315		Genetics	3:0:3(3)	Spring	
	BS316		Introduction to Epigenetics	3:0:3	Spring, Fall	
	BS318		Developmental Biology	3:0:3	Fall	
	BS322		Biological Engineering	3:0:3(3)	Fall	
	BS325		Microbial and Cell Biotechnology	3:0:3(2)	Spring	
	BS326		Biotechnology Experiment	0:9:3(2)	Fall	
	BS332		Microbial Chemistry	3:0:3(2)	Fall	
	BS342		Enzymology	3:0:3(1)	Fall	
	BS346		Animal Behavior	3:0:3	Fall	
	BS355		Pharmacology	3:0:3(1)	Spring	
	BS357		Introduction to Neuroscience	3:0:3	Fall	
	BS358		Plant Biology	3:0:3	Spring	
	BS365		Environmental Microbiology	3:0:3(1)	Fall	
	BS371		Animal Cell Culture and Engineering	3:0:3	Spring	
	BS413		Experiments for Genetics and Developmental Biology	0:9:3	Spring	◎
	BS431		Virology	3:0:3(3)	Spring	◎
	BS433		Molecular Biology of Gene Regulation	3:0:3(3)	Spring	◎
	BS435		Bio-Imaging	3:0:3	Spring	◎
	BS442		Stem Cell Biology	3:0:3	Fall	◎
	BS452		Immunology	3:0:3	Spring	◎
	BS453		Physiology	3:0:3	Spring	◎
	BS454		Introduction to Structural Biology	3:0:3(1)	Fall	◎
	BS456		Behavioral Physiology	2:3:3	Fall	◎
	BS458		Synthetic Biology	3:0:3	Fall	◎
	BS462		Environmental Biotechnology	3:0:3(1)	Fall	◎

◎: Course mutually recognized by undergraduate and graduate programs

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Major Elective	BS463		Genetic Engineering	3:0:3(3)	Spring	◎
	BS465		NanoBioTechnology	3:0:3	Fall	◎
	BS467		Biomaterials	3:0:3	Spring	◎
	BS469		Scientific communication	3:0:3	Spring	◎
	BS481		Topics in Life Science I	1:0:1		◎
	BS482		Topics in Life Science II	2:0:2		◎
	BS483		Topics in Life Science III	3:0:3		◎
	BS484		Topics in Life Science IV	3:0:3		◎
	BS485		Topics in Life Science V	3:0:3		◎
	BS486		Topics in Life Science VI	3:0:3		◎
Research	BS490		B.S. Thesis Research	0:6:3		Required
	BS495		Specified Research	0:6:1		Elective
	BS496		Seminar	1:0:1		Elective

◎: Course mutually recognized by undergraduate and graduate programs

Curriculum List Form (Graduate program)

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Elective	BS501		Bioassay Standards	3:0:3	Spring	◎
	BS507		General Clinical Medicine	3:0:3	Fall	◎
	BS512		Biostatistics	3:0:3(4)	Fall	◎
	BS515		Behavioral Genetics	3:0:3	Spring	◎
	BS516		Advanced Genetics	3:0:3	Spring	◎
	BS518		Chemical Genomics&Medicinal Systems Biology	3:0:3(1)	Fall	◎
	BS521		Cancer Biology	3:0:3	Spring	◎
	BS524		Advanced Molecular Biology	3:0:3(3)	Fall	◎
	BS525		Gene Expression	3:0:3(3)	Spring	◎
	BS526		Molecular Virology	3:0:3(3)	Fall	◎
	BS528		Advanced Epigenetics	3:0:3	Spring, Fall	◎
	BS531		Advanced Microbiology	3:0:3(2)	Spring	◎
	BS532		Applied and Environmental Microbiology	3:0:3(1)	Spring	◎
	BS536		Environmental Toxicology	3:0:3(2)	Fall	◎
	BS538		Microbial Genomics	3:0:3(4)	Fall	◎
	BS541		Advanced Cell Biology	3:0:3	Spring	◎
	BS542		Immunotherapy	3:0:3	Fall	◎
	BS543		Advanced Neurobiology	3:0:3(1)	Fall	◎
	BS547		Neural Development	3:0:3	Spring	◎
	BS549		Biology of Metabolism	3:0:3	Fall	◎
	BS552		Advanced Fermentation Technology	3:0:3(2)	Fall	◎
	BS553		Omics Biology	3:0:3	Spring	◎
	BS554		Advanced Biological Engineering	3:0:3(3)	Fall	◎
	BS562		Protein Design	3:0:3	Fall	◎
	BS564		Bioanalytical Technology	3:0:3	Fall	◎
	BS571		Advanced Animal Cell Engineering	3:0:3	Spring	◎
	BS582		Food Engineering I	3:0:3(2)	Fall	◎
	BS584		Novel Drug Delivery Systems	3:0:3(3)	Fall	◎
	BS585		Advanced Developmental Biology	3:0:3(6)	Spring	◎
	BS586		Plant Developmental Biology	3:0:3	Fall	◎
	BS588		Cell Signaling	3:0:3(6)	Fall	◎
	BS589		Cancer Genetics	3:0:3	Spring, Fall	◎
	BS611		Advanced Molecular Cell Biology I	3:0:3(3)	Spring	
	BS612		Advanced Molecular Cell Biology II	3:0:3(3)	Fall	
	BS613		Cellular and Molecular Immunology	3:0:3	Fall	

◎: Course mutually recognized by undergraduate and graduate programs

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Elective	BS620		Mechanism of biological molecules	3:0:3	Fall	
	BS622		Enzyme Chemistry	3:0:3	Fall	
	BS624		Protein Chemistry and Engineering	3:0:3	Fall	
	BS626		Nucleic Acid Biochemistry	3:0:3(3)	Fall	
	BS628		Biological Membranes	3:0:3	Fall	
	BS631		Microbial Genetics	3:0:3(2)	Spring	
	BS632		Advanced cancer biology	3:0:3	Spring	
	BS633		Microbial Physiology	3:0:3(2)	Spring	
	BS643		Neurobiology of memory	3:0:3	Spring	
	BS662		Bioseparation Technology	3:0:3	Fall	
	BS664		Numerical Methods for Biochemical Engineering	3:0:3	Fall	
	BS711		Bioinformatics	3:0:3(3)	Fall	
	BS713		Human Genomics	3:0:3(2)	Spring	
	BS720		Selected Topics in Biochemistry	3:0:3	Spring, Fall	
	BS722		Biochemistry of Carcinogenesis	3:0:3(3)	Fall	
	BS723		Cell Signaling Networks	3:0:3	Spring	
	BS730		Selected Topics in Microbiology	3:0:3	Spring, Fall	
	BS740		Selected Topics in Cell Biology	3:0:3	Spring, Fall	
	BS742		Molecular Cell Biology	3:0:3(2)	Fall	
	BS750		Selected Topics in Biotechnology	3:0:3	Spring, Fall	
	BS760		Selected Topics in Environmental Biotechnology	3:0:3	Spring	
	BS781		Special Topics in Food Science & Technology	3:0:3	Spring	
	BS791		Scientific Writing in English	3:0:3(4)	Spring	
	BS801		Advanced Topics in Life Science I	1:0:1		
	BS802		Advanced Topics in Life Science II	2:0:2		
	BS803		Advanced Topics in Life Science III	3:0:3		
Research	BS960		M.S. Thesis Research		Spring, Fall	
	BS965		Independent Study in M.S.		Spring, Fall	
	BS966		M.S. Seminar	1:0:1	Spring, Fall	
	BS980		Ph.D. Thesis Research		Spring, Fall	
	BS986		Ph.D. Seminar	1:0:1	Spring, Fall	
	BS990		Graduate Student Seminar	1:0:1	Spring, Fall	

Alternative Course List Form

Alternative courses in the department					
Category	Courses currently offered		Courses not currently offered		
	Course no.	Course title	Course no	Course title	Remark
Undergraduate	BS319	Cell Biology Experiment	BS319	Cell Biology and Genetics Experiment	course title changed

Alternative courses offered by other departments					
Category	Courses offered by the department		Courses offered by other departments		
	Course no.	Course no.	Course no.	Course no.	Remark
Undergraduate	BS202	Cell Biology	BiS202	Cell Biology	Bidirectional substitution
Undergraduate	BS208	BiochemistryII	BiS208	BiochemistryII	Bidirectional substitution