

CALS BIOLOGY: Biotechnology Track

Choose a minimum of 6 credits from at least 2 of the following subgroups:

General Biotechnology				
Course	Title	Credits	Prerequisite	Typically
ABE 4660	Applied Microbial Biotechnology	3	None	
ABE 4662	Quantification of Biological Processes	3	(ABE 2062 or BSC 2010) and (EGN	Fall
BSC 3422C	Principles of the Biotechnology Industry	2	BSC 2011/L and CHM 2046/L	
BSC 4434C	Introduction to Bioinformatics	3	MCB 3020 or BCH 4024 or CHM	Fall
CHM 4300L	Laboratory in Biochemistry and Molecular Biology	2	CHM 2211L and (CHM 3218 or (CHM 2211 and BCH 4024))	Fall, Spring, Sum C
ZOO 3603C	Evolutionary and Developmental Biology	3	BSC2011 and 2011L with C or better	Fall
Food Biotechnology				
Course	Title	Credits	Prerequisite	Typically
FOS 3042	Introductory Food Science	3	None	Fall, Spring, Sum A
FOS 4202	Food Safety and Sanitation	2	MCB 2000 and 2000L	Fall
FOS 4222	Food Microbiology	3	MCB 2000 or MCB3020	Spring
FOS4222L	Food Microbiology Laboratory	2	MCB 2000L or MCB 3020L; FOS 4222 concurrent or completed	Spring
FOS 4311 & 4311L	Food Chemistry and Laboratory	4	CHM 2200 or (CHM 2210 and CHM 2211); FOS 4311L must be concurrent; BCH recommended	Spring
Animal Biotechnology				
Course	Title	Credits	Prerequisite	Typically
ANS 3319C	Reproductive Physiology &	4	ANS 3006 and BSC 2010 and	Fall, Spring
ANS 3384C	Genetics of Domestic Animals	3	ANS 3006 and BSC 2011 and 2011L	Spring, Sum B
ANS 4389L	Molecular Techniques in Domestic Animal Genetics	2	ANS 3384C	Spring
ENY 4701	Forensic Entomology	3	None	Spring
FAS 4405	Aquariums, Water and Aquaculture	3	BSC 2011 and 2011L	Spring
PCB 4233	Immunology	3	MCB 3020 or BCH 4024 or CHM	Spring
ZOO 4232	Human Parasitology	3	(BSC 2010 and 2010L and BSC 2011 and 2011L) or AGR 3303 with C or better	Fall
Plant Biotechnology				
Course	Title	Credits	Prerequisite	Typically
AGR 4304	Plant Chromosomes and Genomes	3	AGR 3303 or PCB 3063	
BOT 3503	Physiology & Molecular Biology of Plants	3	(BSC 2005 or BSC 2010 or	Spring
BOT 3503L	Physiology & Molecular Biology of Plants Laboratory	2	BOT 3503 concurrent or completed	Spring
HOS 3305	Introduction to Plant Molecular Biology	3	APB 2150 or BOT 2010C or BSC 2010	Fall
HOS 4313C	Laboratory Methods in Plant Molecular	2	AGR 3303 or HOS 3305 or PCB	Fall
PLP 3002C	Fundamentals of Plant Pathology	4	BOT 2010C or BSC 2010	Fall
PLP 4222C	Introductory Plant Virology	3	PLP 3002C and BCH 3025	
PLP 4242C	Introduction to Plant Bacteriology	3	MCB 3020; concurrent PLP 3002C	Spring
PLP 4260C	Intro to Plant Pathogenic Fungi	3	PLP 3002C or PLP 3653C	Spring
PLP 4653C	Basic Fungal Biology	4	(BSC 2010 and 2011) or PLP	Fall
Microbial Biotechnology				
Course	Title	Credits	Prerequisite	Typically
MCB 4034L	Advanced Microbiology Laboratory	1	MCB 3020 and 3020L with C or better	Fall, Spring
MCB 4203	Bacterial and Viral Pathogens	3	MCB 3020 with C or better	Fall
MCB 4304	Genetics of Microorganisms	3	MCB 3020 and 3020L with C or	Fall
MCB 4320C	The Microbiome	3	MCB 3020 with C or better	Spring
MCB 4503	General Virology	3	MCB 3020 or MCB 4203 or PCB	Spring