



BACHELOR OF SCIENCE IN BIOLOGY - BIOMEDICAL

INTRODUCTION

Biological Science is the study of God's created life and is therefore one of the broadest subjects you can study. Biology encompasses everything from the minute (molecular study of life processes) to the gigantic (animal and plant communities/ biomes). Most of our classes have both lectures and labs. Due to a common core, lateral transition to a B.A. degree is possible even in the Junior or Senior years. B.S. degrees don't require a minor, but you automatically qualify for a chemistry minor if you wish.

SPECIALTY

Academically strong students interested in the medical fields often choose the Biomedical Track. Our large selection of elective classes taken the first three years of school prepares students well for the professional tests in many areas, including medicine (MCAT), and dentistry (DAT). Previous students share that classes taken the fourth year put them ahead of most peers as they transition into professional school.

SKILLS

Biology degrees start with core classes to give you a basic understanding of the terminology used and the wide range of topics to enjoy. As you progress through the degree, the classes become more specialized and deeper in detail. You will develop key skills such as using a wide range of laboratory equipment, collecting and analysing data, building teams, strong written and oral communication, leadership, and time management.

65 HOURS = CORE (45) + COGNATES (20)

	BIOLOGY CORE	HOURS
BIOL 151-152	General Biology I & II	8
BIOL 282	Biological Analysis	3
BIOL 311	Genetics	4
BIOL 317 or 321	Ecology (Fall) or Field Ecology (Summer)	3
BIOL 412	Cell & Molecular Biology	4
BIOL 424	Issues in Nat Sci & Rel (W)	3
BIOL	Biology Electives *	12
CHEM 151-152	General Chemistry I & II	8

	COGNATES	HOURS
CHEM 361	Biochemistry I	4
CHEM 311-312	Organic Chemistry I & II	8
PHYS 211-212	General Physics I & II*	6
PHYS 213-214	General Physics I & II Lab	2

20

	HIGHLY RECOMMENDED	HOURS
ACCT 221	Principles of Accounting	3
BIOL 297	Research in Biology I	1 - 2
PSYC 122	General Psychology	3

*Contact School of Engineering & Physics regarding pre-requisites. **45**

ELECTIVE AREAS (12 HRS)**

BIOLOGICAL SYSTEMS		
BIOL 313	Developmental Biology	3
BIOL 416	Human Anatomy	3
BIOL 417	Animal Histology	3
BIOL 418	Animal Physiology	3

CLINICAL SCIENCES		
BIOL 315	Human Parasitology (W)	3
BIOL 329	General Microbiology	3
BIOL 333	Medical Toxinology	3
BIOL 340	Immunology	3
BIOL 450	Epidemiology	3

ORGANISMAL BIOLOGY		
BIOL 252	Tropical Biology (Summer)	3
BIOL 314	Ornithology	3
BIOL 320	Entomology	3
BIOL 321	Field Ecology (Summer)	3
BIOL 387	Animal Behavior	3
BIOL 415	Comparative Anatomy	3
BIOL 458	Ecotoxicology	3

** Take one class from each category plus one more from any category. See course schedule for topics courses that may be applied to any elective area.



B.S. BIOLOGY/BIOMEDICAL EMPHASIS 4-YEAR SUGGESTED PLAN SHEET

FALL SEMESTER	HOURS	WINTER SEMESTER	HOURS
FRESHMAN YEAR			
___ BIOL 151: General Biology I (I-7)	4	___ BIOL 152: General Biology II (I-7)	4
___ CHEM 151: General Chemistry I	4	___ CHEM 152: General Chemistry II	4
___ ENGL 101: Crit Thnk in Ac Rdg/Wrt I (I-2)	3	___ ENGL 102: Crit Thnk in Ac Rdg/Wrt II (I-2)	3
___ COMM 135: Comm & Pub Spkg (I-3)	3	___ BIOL 282: Biological Analysis	3
___ NOND 101: Southern Connections (I-1)	1	___ PEAC 125: Fitness for Collegiate Life (P-1)	1
	15		15
SOPHOMORE YEAR			
___ BIOL 311: Genetics	4	___ RELT 138, 225, or 255 (R-2)	3
___ CHEM 311: Organic Chemistry I	4	___ CHEM 312: Organic Chemistry II	4
___ MATH 215: Statistics (I-4)	3	___ Biology Elective *	3
___ Physical Activity (P-1b)	1	___ Historical Perspectives (IN-6)	3
___ RELB 125 or RELT 177 (R-1)	3	___ Elective **	3
___ Elective **	1		16
	16		
JUNIOR YEAR			
___ CHEM 361: Biochemistry I	4	___ BIOL 412: Cell & Molecular Biology	4
___ CPTC 100: Computer Concepts	1	___ PHYS 212: General Physics II	3
___ PHYS 211: General Physics I	3	___ PHYS 214: General Physics II Lab	1
___ PHYS 213: General Physics I Lab	1	___ Biology Elective *	3
___ Aesthetic Analysis (IN-10)	3	___ Physical Activity (P-1b)	1
___ Biblical Studies (R-3)	3	___ UD Elective ** (W)	4
	15		16
SENIOR YEAR			
___ BIOL 317 or 321: Ecology or Field Ecology (Summer)	3	___ PEAC 425: Fit for Hire (P-3)	1
___ BIOL 424: Issues in Nat Sci & Rel (W)	3	___ PSYC 128 or SOCI 125 (I-8)	3
___ UD Biology Elective *	3	___ UD Biology Elective *	3
___ Stewardship, Business & Econ (IN-9)	3	___ UD Religion (W) (R-4)	3
___ Elective **	3	___ Electives **	6
	15		16
		___ ___ ___ "W" Classes	TOTAL HOURS
		___ ___ "S" Classes	124

* Take one class from each category plus one more from any category. See course schedule for topics courses that may be applied to any elective area.

** Electives bring total credit hours to 124. Highly Recommended Electives: ACCT 221, MGNT 334, PSYC 122, BIOL 297 (1-2 hours) or BIOL 476 (1-2 hours).