

# BIOLOGY

# Name:

CORE REQUIREMENTS (51 credit hours)				
	SEMESTER	REQUIREMENT	Course Options	Credits
		Becoming a Knight	SVU 101	3
		Fresh. Writing	WRI 120	3
Complete by Sophomore Year		Philosophy	LIB 110	3
		Am. Republic	LIB 120	3
		Literature	LIB 130	3
		Civilization I	ART 210, HIS 210, HUM 210, MUS 210 or POL 210	3
		Civilization II	ART 215, HIS 215, HUM 215, POL 215 or THE 215	3
		Mathematics	MAT 114, 115, 206, 221, 241, 242, CSC 213, or PHI 223	3-4
		Life Science	BIO 114, 126, 201, 212 or 228	3-4
		Physical Science	CHE 114, 201, PHY 114, 117, 126, or 201	3-4
	One of the above life or physical science courses must have a LAB component. BIO 126, PHY 117, and PHY 126 are non-lab courses.			
		Culture & Language 1	HUM 235 or Foreign Language Course (or approved F.L. equivalency exam)	3
Complete Anv Year		Culture & Language 2	HUM 235 or Foreign Language Course (or approved F.L. equivalency exam)	3
		Fine Arts	ART 120, 121, or 263; ENG 220, MUS 108, 129R, 139R, 221*, 256R*, 259R*, 275R*, 350R*; THE 110, 206, or 230R/330R* (*2 instances of the same ensemble needed to satisfy requirement)	3
		Social Sciences	ECN 210, EDU 200, 250, FHD 210, 250, POL 203, 223, or PSY 105	3
		Health & Wellness	PER 143	2
		Phys. Activity 1	<ul> <li>A Phys. Activity course from PER 100-199 or, 231, 232, or 259R.</li> <li>Athletes may only count their court twice</li> </ul>	0.5-1
		Phys. Activity 2	<ul> <li>Only classes with course numbers that end in 'R' may be repeated for credit.</li> </ul>	0.5-1
		Phys. Activity 3	PER 203 does not count as an activity course	0.5-1
JR Year		Adv.Writing	WRI 320	3

# **MAJOR REQUIREMENTS** (42 credit hours) MAJOR CORE (34 HOURS) SEMESTER COURSE CREDITS BIO 201 General Biology I 4 4 BIO 202 General Biology II BIO 212 General Zoology 4 **BIO 340 Genetics and Molecular Biology** 4 BIO 345 Cell Biology 3 BIO 360 General Ecology 3 3 **BIO 440 Evolution BIO 498 Senior Capstone** 1 CHE 201 General Chemistry I 4 CHE 202 General Chemistry II 4 **MAJOR ELECTIVES (8)** 8 CREDIT HOURS FROM AMONG MAJOR ELECTIVES **OTHER COURSES TOWARDS GRADUATION** (120 TOTAL HOURS)

Advisor:

#### BACHELOR OF ARTS GRADUATION REQUIREMENTS

THE STUDENT MUST DO THE FOLLOWING TO RECEIVE A BACHELOR OF ARTS DEGREE:

- COMPLETE A MINIMUM OF 120 CREDIT HOURS OF STUDY, AT LEAST 60 OF WHICH OR AT LEAST THE LAST 30 CREDITS BEFORE GRADUATION ARE AT SOUTHERN VIRGINIA. NO MORE THAN 9 CREDIT HOURS WILL BE GRANTED FOR INTERNSHIP COURSES.
- 2. COMPLETE ALL REQUIREMENTS OF THE SOUTHERN VIRGINIA CORE.
- 3. COMPLETE ALL REQUIREMENTS OF AT LEAST ONE MAJOR.
- 4. EARN A MINIMUM GRADE POINT AVERAGE OF 2.00 ON ALL COURSE WORK TAKEN AT THE UNIVERSITY.
- 5. COMPLY WITH ALL UNIVERSITY STANDARDS, REGULATIONS, AND PROCEDURES, FROM THE DATE OF MATRICULATION THROUGH THE DATE OF FINAL GRADUATION.

# BIOLOGY MAJOR REQUIREMENTS

(42 CREDIT HOURS)

THE BIOLOGY MAJOR ASSISTS STUDENTS TO ACHIEVE A BROAD-BASED EDUCATION IN THE LIFE SCIENCES, WHICH EMPHASIZE THE VARIOUS BIOLOGICAL PRINCIPLES RELATED TO STRUCTURAL, FUNCTIONAL, TAXONOMICAL AND ECOLOGICAL PHENOMENA. IT PROVIDES A RICH UNDERSTANDING OF THE NATURAL WORLD— KNOWLEDGE WORTH HAVING FOR ITS OWN SAKE AND FOR THE PERSPECTIVE IT BRINGS TO ONE'S LIFE.

### LEARNING OBJECTIVES

THE BIOLOGY FACULTY EXPECTS BIOLOGY MAJOR STUDENTS TO:

- 1. LEARN MOLECULAR/CELLULAR, GENETIC, ORGANISMAL, AND ECOLOGICAL PRINCIPLES OF BIOLOGY INCLUDING HISTORICAL PERSPECTIVES AND CURRENT TRENDS. (BIOLOGICAL PRINCIPLES)
- 2. DEMONSTRATE CRITICAL THINKING SKILLS IN THE AREAS OF EVALUATION OF EXPERIMENTAL DESIGN AND IN THE INTERPRETATION OF EXPERIMENTAL RESULTS. (EXPERIMENTATION)
- 3. DEMONSTRATE LABORATORY SKILLS IN THE AREAS OF EXPERIMENTAL PROCEDURE AND USE OF EQUIPMENT. (LABORATORY SKILLS)
- 4. APPLY EFFECTIVE ORAL AND WRITTEN COMMUNICATION SKILLS. (COMMUNICATION)

PROGRAM COORDINATOR: JARED LEE, PH.D.

# MAJOR REQUIREMENTS (42 CREDIT HOURS)

MAJOR CORE (34 CREDIT HOURS):

- BIO 201 GENERAL BIOLOGY I (GE) (4)
- BIO 202 GENERAL BIOLOGY II (4)
- BIO 212 GENERAL ZOOLOGY (GE) (4)
- BIO 340 GENETICS AND MOLECULAR BIOLOGY (4)
- BIO 345 CELL BIOLOGY (3)
- BIO 360 GENERAL ECOLOGY (3)
- BIO 440 EVOLUTION (3)
- BIO 498 SENIOR CAPSTONE (1)
- CHE 201 GENERAL CHEMISTRY I (GE) (4)
- CHE 202 GENERAL CHEMISTRY II (4)

MAJOR ELECTIVES: AT LEAST 8 CREDIT HOURS FROM AMONG THE FOLLOWING:

- BIO 211 BOTANY (GE) (4)
- BIO 228 HUMAN ANATOMY (GE) (4)
- BIO 310 PARASITOLOGY (4)
- BIO 312 MICROBIOLOGY (3)
- BIO 315 MEDICAL ENTOMOLOGY (3)
- BIO 331 HUMAN ANATOMY AND PHYSIOLOGY I (4)
- BIO 332 HUMAN ANATOMY AND PHYSIOLOGY II (4)
- BIO 338 ENDOCRINOLOGY (3)
- BIO 350 DEVELOPMENTAL BIOLOGY (3)
- BIO 375R TOPICS IN BIOLOGY (VAR.)
- BIO 385R DIRECTED STUDY (VAR.)
- BIO 399 INTERNSHIP/PRACTICUM (1-3)
- CHE 383 BIOCHEMISTRY (3)

ALTHOUGH NOT REQUIRED, MAT 221, PHY 201, AND PHY 202 ARE STRONGLY RECOMMENDED FOR THE BIOLOGY MAJOR.