SOUTHERN VIRGINIA UNIVERSITY

BIOCHEMISTRY

Name: _____ Advisor: _____

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 Any 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	A Phys. Activity course from PER 100-199 or, 231, 232, or 259R. • Athletes may only count their sport twice. • Only classes with course numbers that end in 'R' may be repeated for credit. • ***PER 203 does not count as an activity course***	0.5-1
		Phys. Activity 2		0.5-1
		Phys. Activity 3		0.5-1
JR Year		Adv.Writing	WRI 320	3

MAJOR REQUIREMENTS (39 credit hours)

MAJOR CORE (36 HOURS)

Semester	Course	Credits
	BIO 201 General Biology I	4
	BIO 202 General Biology II	4
	BIO 340 Genetics and Molecular Biology	4
	CHE 201 General Chemistry I	4
	CHE 202 General Chemistry II	4
	CHE 301 Organic Chemistry I	4
	CHE 302 Organic Chemistry II	4
	CHE 383 Biochemistry	3
	CHE 383L Biochemistry Lab	1
	CHE 483 Advanced Biochemistry	3
	CHE 498 Senior Capstone	1

ELECTIVES (3)

3 CREDIT HOURS FROM AMONG MAJOR ELECTIVES

COURSE SEQUENCE SUGGESTIONS

First Year
- BIO 201/202 and CHE 201/202

Second Year
- CHE 301/302 and BIO 340

Third Year
- CHE 383/383L, CHE 483

OTHER COURSES TOWARDS GRADUATION

(120 TOTAL HOURS)

Bachelor of Arts
Graduation Requirements

The student must do the following to receive a bachelor of arts degree:

1. 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.

Biochemistry
Major Requirements
(39 credit hours)

The goal of a liberal arts education is to develop and then employ critical thinking to gain a better understanding of ourselves and the world around us. A foundation for understanding ourselves is understanding our physical bodies and how they function. The basis for this understanding is Biochemistry, the integration of Chemistry and Biology. Studying an integrated subject like Biochemistry de-compartmentalizes scientific disciplines and reflects the type of learning sought after by graduate programs, business, industry and government.

Program Coordinator: Dr. Roger Johnson

Major Requirements (39credit hours)
Required (36):
BIO 201 General Biology I (4)
BIO 202 General Biology II (4)
BIO 340 Genetics and Molecular Biology (4)
CHE 201 General Chemistry I (4)
CHE 202 General Chemistry II (4)
CHE 301 Organic Chemistry I (4)
CHE 302 Organic Chemistry II (4)
CHE 383 Biochemistry (3)
CHE 383L Biochemistry Lab (1)
CHE 483 Advanced Biochemistry (3)
CHE 498 Senior Capstone (1)

Electives (an additional 3 credit hours from among the following):
BIO 312 Microbiology (3)
BIO 328 Human Physiology (4)
BIO 345 Cell Biology (3)
CHE 375R Topics in Biochemistry
CHE 385R Directed Studies
CHE 395R Internship/Practicum
CHE 481 Bio-organic and Medicinal Chemistry

Although not required, PHY 201-202 are strongly recommended for the biochemistry major.