

THE NAVIGATOR
B.S. in BIOCHEMISTRY
2006-2007

The Navigator will help you develop a 4-year academic plan, enabling you to stay on course with your degree program. The recommended sequence of courses below can be modified to meet your personal needs. Please refer to the catalog for prerequisite information if the sequence is modified, and for possible limitations on elective credits. **It is important to meet with an advisor when planning your schedule each semester, and it is equally important that you review your Cougar Trail ONCOURSE degree audit before and after registering each semester to verify that you are "On Course".** *Students are reminded that they are ultimately responsible for their own academic program and course load. An advisor can only advise and can never replace individual student responsibility.*

***Please note detailed Course Requirements are on the next page.*

Freshman Year

Fall		Spring	
	Credits		Credits
_____	ENGL 101 3	_____	ENGL 102 3
_____	MATH 111 3	_____	MATH 120 4
_____	Foreign Language 101 3	_____	Foreign Language 102 3
_____	CHEM 111 w/lab 4	_____	CHEM 112 w/lab 4
_____	FRSR 101 Freshman Seminar 2 or or General Elective 3	_____	Social Science 3
	15 –16 credits		17 credits

Sophomore Year

Fall		Spring	
	Credits		Credits
_____	MATH 220 4	_____	CHEM 232 w/lab 4
_____	CHEM 231 w/lab 4	_____	CHEM 221 w/lab 4
_____	PHYS 201 w/lab 4	_____	PHYS 202 w/lab 4
_____	Foreign Language 201 3	_____	Foreign Language 202 3
	15 credits		15 credits

Junior Year

Fall		Spring	
	Credits		Credits
_____	HIST 101 or 103 3	_____	HIST 102 or 104 3
_____	CHEM 490 1	_____	CHEM 352 & 354 4
_____	CHEM 341 w/lab 4	_____	CHEM 342 w/lab 4
_____	BIOL 111 w/lab 4	_____	BIOL 112 w/lab 4
_____	Social Science 3	_____	Humanities* 3
_____	CHEM 351 3		
	18 credits		18 credits

Senior Year

Fall		Spring	
	Credits		Credits
_____	CHEM 490 1	_____	CHEM 492 1
_____	CHEM 481 2	_____	CHEM 482 3
_____	BIOL 312 w/lab 4	_____	CHEM 511 3
_____	Humanities* 3	_____	BIOL 200 or above w/lab 3 or 4
_____	Humanities* 3	_____	Humanities* 3
_____	General Elective 3		
	16 credits		14 or 15 credits

**See Humanities list and catalog for restrictions*

Minimum Hours Required for Degree Completion =122

**BIOCHEMISTRY
DEGREE REQUIREMENTS
2006-2007**

General Education Requirements

Major Requirements

		Semester Hours			Semester Hours
English	101 102	3 3	Chemistry Major Courses		
History	101 & 102 or 103 & 104 (Two course sequence)	6	Principles of Chemistry w/lab	CHEM 111	4
Natural Sciences		8	Principles of Chemistry w/lab	CHEM 112	4
Astronomy, Biology, Chemistry, Geology, Physics (Two course sequence with lab)			Quantitative Analysis w/lab	CHEM 221	4
Mathematics	111 & 120	7 ¹	Organic Chemistry w/lab	CHEM 231	4
Foreign Language	101-202	0-12 ¹	Organic Chemistry w/lab	CHEM 232	4
Social Sciences		6	Physical Chemistry w/lab	CHEM 341	4
Humanities (See ONCOURSE for detailed list and limitations)		12	Physical Chemistry w/lab	CHEM 342	4
Total		44-57¹	Biochemistry	CHEM 351	3
Summary: These totals may vary: General Education Courses 44-57¹ Major Courses 60 General Electives 5¹ Additional Requirements 12 TOTAL DEGREE HOURS: 122			Biochemistry II	CHEM 352	3
			Biochemistry lab	CHEM 354	1
			Chemistry & Biochemistry Seminar	CHEM 490 ²	1
			Senior Seminar	CHEM 492	1
			Advanced Inorganic Chemistry w/lab	CHEM 511	4
			Biology requirements		
			Introduction to Cell & Molecular Biology w/lab	BIOL 111	4
			Evolution, Form & Function of Organisms w/lab	BIOL 112	4
			Molecular Biology w/lab	BIOL 312	4
			Four Hours in advanced laboratory courses		4
			Selected from:		
			Genetics w/lab	BIOL 212	
			General Microbiology w/lab	BIOL 310	
			Cell Biology w/lab	BIOL 313	
			General & Comparative Physiology	BIOL 321	
			Total		60
			Additional Requirements		12
			General Physics w/lab	PHYS 201	
			General Physics w/lab	PHYS 202	
			Calculus II	MATH 220	

NOTE:

- * **PLEASE REFER TO THE CATALOG FOR COURSE PREREQUISITES.**
- * **CHEM 511 IS ONLY OFFERED IN THE SPRING SEMESTER.**
- * **ALL CHEMISTRY MAJORS ARE ENCOURAGED TO PARTICIPATE IN THE RESEARCH PROGRAM IN THEIR JUNIOR YEAR OR SENIOR YEAR, CHEM 481.**
- * **ALL JUNIOR & SENIOR CHEMISTRY MAJORS ARE STRONGLY ENCOURAGED TO ATTEND THE SCHEDULED DEPARTMENTAL SEMINARS.**
- * **MATH 221 & CHEM 481/482 ARE STRONGLY RECOMMENDED.**
- * **CHEMISTRY MAJORS ARE STRONGLY URGED TO TAKE AT LEAST ONE COMPUTER SCIENCE COURSE. ADVANCED MATHEMATICS COURSES ARE HIGHLY RECOMMENDED FOR STUDENTS WHO PLAN TO PURSUE GRADUATE STUDIES.**
- * **PLEASE REFER TO THE CHEMISTRY WEBSITE AT <http://www.cofc.edu/~chem/> FOR DETAILED INFORMATION.**

¹ Required credits may vary based on course selection and placement.

² CHEM 490 may be taken twice for credit.

