BACHELOR OF SCIENCE in CHEMISTRY
Curriculum Sheet
2010-2011 catalog

Student Name: _____

Email: _____

UIN:_____

LOWER DIVISION GENERAL EDUCATION REQUIREMENTS

Area	Credits	Grade
Written Communication ENGL 110C (required) and select one from: ENGL 211C ENGL 231C ENGL 221C	6	
Oral Communication Satisfied by departmental requirements	3	
Mathematics MATH 162M	3	
Language and Culture All "F" courses Exempt if met by HS requirements*	6	
Information Literacy and Research IT150G CS120G HLTH 120G CS121G	3	
Literature ENGL 112L ENGL 114L FLET 100L	3	
Human Creativity ARTH 121A ARTS 122A DANC 185A MUSC 264A THEA 241A COMM/THEA 270A	3	
Philosophy and Ethics‡ PHIL 110P PHIL 120P PHIL 140P PHIL 230E PHIL 250E PHIL 303E PHIL 344E PHIL 345E PHIL 441E PHIL 442E	3	
Interpreting the Past HIST 100H HIST 101H HIST 102H HIST 103H HIST 104H HIST 105H	3	
Human Behavior ANTR 110S CRJS 215S GEOG 100S GEOG 101S PSYC 201S PSYC 203S SOC 201S COMM 200S WMST 201S FIN 210S ECON 200S, 201S, 202S POLS 100S, 101S, 102S	3	
Impact of Technology‡ COMM 372T CS 300T DNTH 440T ENGL 307T IT 360T GEOG 306T MUSC 335T PHIL 383T POLS350T WMST 390T STEM 110T, 370T HIST 304T, 389T, /SCI 386T	3	
Nature of Science Satisfied by departmental requirements and PHYS 231N-232N	8	

UPPER DIVISION GENERAL EDUCATION REQUIREMENTS

Second degree or major, minor or 6 credits minimum of upper division courses‡ outside of and not required by major

Phone:_____

DEPARTMENTAL REQUIREMENTS

Chemistry Requirements

Course	Credits	Grade	
CHEM 121N-123N Foundations of Chemistry I & II or CHEM 137N	6		
CHEM 122N-124N Foundations of Chemistry Laboratory I & II or CHEM138N	2		
CHEM 211-213 Organic Chemistry I & II	6		
CHEM 212-214 Organic Chemistry Laboratory I & II	4		
CHEM 321 Analytical Chemistry	3		
CHEM 322 Analytical Chemistry Laboratory	2		
CHEM 351 Inorganic Chemistry	3		
CHEM 331-333 Physical Chemistry I & II	6		
CHEM 332W-334W Physical Chemistry Laboratory I & II	4		
CHEM 421 Instrumental Analysis Lecture	3		
CHEM 422 Instrumental Analysis Laboratory	3		
CHEM 441 Introductory Biochemistry	3		
Select one in-depth course from: CHEM 415, 443, 449, 451, 453	3		
Select one in-depth Laboratory Course CHEM 352, 442W, 452, 497, 498	1-4		
CHEM 485 Chemistry Seminar	1		

Other Requirements

COMM 101R Public Speaking	3		
MATH 163 Precalculus II	3		
MATH 211 Calculus I	4		
MATH 212 Calculus II	4		
MATH 312 Calculus III	4		
PHYS 231N-232N University Physics	8		

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* Students who have completed three high school credits in one foreign language or two high school credits in each of two languages are exempt from the foreign language requirement. American Sign Language will be accepted in place of a foreign language. Any student who graduated high school prior to June 1986 is also exempt from this requirement. Non-native speakers of English who were required to meet University TOEFL requirements are also exempt from this requirement.

A minimum of 120 hours and a 2.00 GPA in the major, minor, and overall are required for graduation. In addition all undergraduate students are required to complete the Senior Assessment Survey (www.odu.edu/senior) and the Exit Examination of Writing Proficiency (www.odu.edu/writingcenter) prior to the intended graduation date.

Departmental Requirements

CHEM 121N, 122N, 123N, and 124N represents the freshman chemistry sequence, and is prerequisite to ALL other chemistry courses.

AP credit may be assigned for CHEM 121N, 122N, 123N, and 124N providing a qualifying score is received on the Advanced Placement of the College Board exam in Chemistry. A score of 3 provides CHEM 121N and122N credit, and a score of 4 or 5 provides credit for CHEM 121N, 122N, 123N, and 124N.

Most chemistry courses have other CHEM courses as well as MATH courses as prerequisites (courses that must be completed prior to beginning a particular course) or corequisites (courses that must be completed concurrently with a particular course). For this reason a CHEM or BIOCHEM major should register for a CHEM and MATH course every semester until the requirements are complete. The following is a list of the prerequisites for each required CHEM course, as well as when each course is typically offered, so that you can plan your schedule accordingly. All chemistry courses require a minimum grade of "C" in the prerequisite course(s). Prerequisite waivers are not allowed. Questions concerning prerequisites should be addressed to the instructor of record for the course, or Dr. Pinky McCoy; to declare a major in Chemistry or Biochemistry please contact Dr. Pinky McCoy (Alfriend 110B) at pmccoy@odu.edu or 683-4078.

Course	Offered	Prerequisites
CHEM 121N Foundations of Chemistry I *(formerly CHEM 115N)*	Fall, Spring, Summer	MATH 102M
CHEM 122N Foundations of Chemistry Laboratory I *(formerly lab component of CHEM 115N)*	Fall, Spring, Summer	CHEM 121N (pre- or corequisite)
CHEM 123N Foundations of Chemistry II *(formerly CHEM 116N)*	Fall, Spring, Summer	CHEM 121N-122N or CHEM 115N
CHEM 124N Foundations of Chemistry Laboratory II *(formerly lab component of CHEM 116N)*	Fall, Spring, Summer	CHEM 122N; CHEM 117 CHEM 123N (pre- or corequisite)
CHEM 137N Accelerated Foundations of Chemistry	Fall	MATH 162M (pre- or corequisite)
CHEM 138N Accelerated Foundations of Chemistry Laboratory	Spring	CHEM 137N
CHEM 211 Organic Chemistry I	Fall, Summer	CHEM 123N or CHEM 116N or CHEM 117 or CHEM 137N
CHEM 212 Organic Chemistry Laboratory I	Fall, Summer	CHEM 124N or CHEM 138N; CHEM 211 (Pre- or corequisite)
CHEM 213 Organic Chemistry II	Spring, Summer	CHEM 211
CHEM 214 Organic Chemistry Laboratory II	Spring, Summer	CHEM 212 CHEM 213 (pre- or corequisite)
CHEM 321 Analytical Chemistry	Fall, Spring, Summer	CHEM 123N, CHEM 137N, or CHEM 116N MATH 162, 163, or 166
CHEM 322 Analytical Chemistry Laboratory	Spring, Summer	CHEM 116N, CHEM 124N, or CHEM 138N CHEM 321 (pre- or corequisite)
CHEM 331 Physical Chemistry I	Fall	CHEM 321, PHYS 231N-232N MATH 312 (pre- or corequisite)
CHEM 332W Physical Chemistry Laboratory I	Fall	CHEM 322, CHEM 331 (pre- or corequisite)
CHEM 333 Physical Chemistry II	Spring	CHEM 331, MATH 312
CHEM 334 Physical Chemistry Laboratory II	Spring	CHEM 332W, CHEM 333 (pre- or corequisite)
CHEM 421 Instrumental Analysis Lecture	Spring	CHEM 331
CHEM 422 Instrumental Analysis Laboratory	Spring	CHEM 332W, CHEM 421 (pre- or corequisite)
CHEM 351 Inorganic Chemistry	Fall	CHEM 116N, CHEM 117, CHEM 123N, or CHEM 137N
CHEM 352 Inorganic Chemistry Laboratory	varies	CHEM 351 (pre- or corequisite)
CHEM 441 Introductory Biochemistry	Fall, Spring	CHEM 213
CHEM 442W Biochemistry Laboratory	Fall, Spring	CHEM 441 (pre- or corequisite)
CHEM 443 Intermediate Biochemistry	Spring	CHEM 441
CHEM 485 Chemistry Seminar	Fall, Spring	CHEM 331 (pre- or corequisite)
CHEM 415 Intermediate Organic Chemistry	Fall	CHEM 213 or CHEM 313
CHEM 449 Environmental Chemistry	Fall	CHEM 123N or CHEM 116N or CHEM 137N CHEM 213 or CHEM 313, CHEM 321
CHEM 453 Essentials of Toxicology	Fall	CHEM 213 or CHEM 313
CHEM 451 Advanced Inorganic Chemistry	Spring	CHEM 333, CHEM 351
CHEM 452 Advanced Inorganic Chemistry Laboratory	Spring	CHEM 451 (pre- or corequisite)