

OLD DOMINION UNIVERSITY 2008-2009 Catalog

Bachelor of Science—Chemistry Major

Students earning the AS, AA, or AA&S (or university parallel) degree from a Virginia Community College automatically satisfy the lower division general education requirements. **Courses marked with * require a grade of C or better to transfer, even with the AS degree. The remaining lower division courses are automatically satisfied by the AS (including foreign language), regardless of the grade earned.** Additionally, courses in which a grade of C- or below were earned will not transfer. Therefore Community College degree holders may require additional credits to meet the 120 credit hour graduation minimum. (AS=Associate degree)

The program leading to the Bachelor of Science with a major in chemistry includes a diversity of fundamental and advanced courses in organic, inorganic, analytical, and physical chemistry. Chemistry majors must earn a grade of C or better in all courses required for the major, including prerequisite courses, and must complete 12 credit hours 300-400 CHEM courses at Old Dominion University.

Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions. The grade point average in the major for chemistry majors is calculated based on Old Dominion University grades in all chemistry courses.

Entrance Writing Sample Placement Test: _____

FRESHMAN FIRST SEMESTER

		credits
CHEM 115N	Foundations of Chemistry I	_____ 4 CHM 111*
MATH 163	Precalculus II	_____ 3 MTH 164*
ENGL 110C	English Composition I	_____ 3 See Transfer Guide
HIST 101H, 102H, 103H, 104H, or 105H		_____ 3 See Transfer guide
CS 149D	Computer Skills	_____ 3 <u>CSC 130,200/EGR 125/ITP</u> <u>120,130,132,136,156,230,232,236 *</u>

FRESHMAN SECOND SEMESTER

CHEM 116N	Foundations of Chemistry II	_____ 4 CHM 112*
MATH 211	Calculus I	_____ 4 MTH 173,273*
ENGL 111C	English Composition II	_____ 3 ENG 112 OR 210
HIST 101H, 102H, 103H, 104H or 105H		_____ 3 See Transfer guide
PHIL 110P or 120P or 150P		_____ 3 See Transfer guide

SOPHOMORE FIRST SEMESTER

CHEM 211	Organic Chemistry Lecture I	_____ 3 CHM 241*
CHEM 212	Organic Chemistry Lab I	_____ 2 CHM 243 or 245*
MATH 212	Calculus II	_____ 4 MTH 174, 274*
PHYS 231N	University Physics I	_____ 4 PHY 231, 241*
CHEM 321	Analytical Chemistry Lecture	_____ 3 _____

SOPHOMORE SECOND SEMESTER

CHEM 213	Organic Chemistry Lecture II	_____ 3 CHM 242*
CHEM 214	Organic Chemistry Lab II	_____ 2 CHM 244 or 246 *
PHYS 232N	University Physics II	_____ 4 PHY 232, 242*
CHEM 322	Analytical Chemistry Lab	_____ 2 _____
ENGL 112L or 144L or FLET 100L		_____ 3 See Transfer guide
Social Science Perspective		_____ 3 See Transfer guide

JUNIOR FIRST SEMESTER

CHEM 331	Physical Chemistry Lecture I	_____ 3 _____
CHEM 332W	Physical Chemistry Lab	_____ 2 _____
CHEM 441	Intro Biochemistry	_____ 3 _____
MATH 312	Calculus III	_____ 4 MTH 275,277 *
Social Science Perspective		_____ 3 See Transfer guide

JUNIOR SECOND SEMESTER

CHEM 333	Physical Chemistry Lecture	_____ 3 _____
CHEM 334	Physical Chemistry Lab II	_____ 2 _____
General Education Cluster or minor (not Biochemistry) courses (2-3 courses)		_____ 6-9 _____

SENIOR FIRST SEMESTER

CHEM 421	Instrumental Analysis Lec	_____ 3 _____
CHEM 422	Instrumental Analysis Lab	_____ 3 _____
CHEM 451	Advanced Inorganic Chem Lec	_____ 3 _____
CHEM 452	Advanced Inorganic Chem Lab	_____ 2 _____
General Education Cluster or minor (cannot be Biochemistry)		_____ 3 _____

SENIOR SECOND SEMESTER

Fine and Performing Arts Perspective		_____ 3 See Transfer guide
CHEM 485	Chemistry Seminar (meets oral communication requirement)	_____ 1 _____
Electives		_____ 8 _____

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment. Additional hours may be required to meet the foreign language requirement.

Minor in Secondary Education

Admission. Students applying for admission to the teacher education programs must (1) complete at least one semester at Old Dominion University, (2) have a 2.75 grade point average overall, in the major, and in the professional education core with no grade less than C- in all courses taken in the major and in the professional education core, (3) have passed PRAXIS I or achieved State Board of Education approved scores on the SAT or ACT, (4) present written recommendations from two faculty members from the Occupational and Technical Studies Department, and (5) have an interview with the program leader. Although students may enroll in a limited number of education courses, admission into the teacher education program and passing PRAXIS I scores or approved equivalent test scores must be on file in the Teacher Education Services Office prior to students enrolling in any professional education practicum course.

Continuance. Student in education licensure programs must (1) satisfy University requirements, (2) continue to maintain a 2.75 grade point average overall, in the major, and in the professional education core with no earned grade less than C- in all courses taken in the major and in the professional education core, and (3) successfully complete a student teaching interview.

Assessments required for teacher education programs and licensure. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure exams. Students who complete their programs after December 1, 2006 are required to take the Virginia Communication and Literacy Assessment (VCLA) to be eligible for licensure. The VCLA should be taken during the semester of student teaching. It is recommended that the VCLA be taken after students have completed their English and reading course requirements. In addition, all students must take and pass the Exit Examination of Writing Proficiency to be eligible for student teaching. The University recommends that students take this exam in their junior year. All students will take and attain a passing score on the appropriate PRAXIS II specialty test in order to be eligible for student teaching and licensure. Score reports of all examinations must be on file in the Teacher Education Services Office in room 152 of the Education Building.

Exit. Students in marketing education and technology education licensure programs must have (1) a 2.75 grade point average overall, in the major, and in the professional education core, (2) earned a passing grade in student teaching, and (3) completed the senior assessment.

NOTE: Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education are under constant revision. Any changes resulting from these factors supersede the program requirements described here or in the University catalog. Students should obtain current program information from their academic advisor and the Darden College of Education website at <http://www.education.odu.edu>. The Professional Education core courses are as follows:

ECI 301 Foundations & Assessment	3	<u>EDU 200*</u>
ECI 360 Class Mgmt and Discipline	2	_____
ECI 430 PK-12 Instructional Tech	3	<u>EDU 280*</u>
(satisfies computer skills requirement)		
ECI 408 Read/Write in Content	3	_____
ECI 454 Developing Instructional	3	_____
Strategies: Science		
ECI 483 Practicum Seminar in Ed	1	_____
ECI 485 Student Teaching	12	_____
ESSE 313 Fundamentals-Human	3	<u>PSY 230*</u>
Growth and Development		
ESSE 406 St w/Diverse Learning	3	_____