LOWER DIVISION GENERAL EDUCATION REQUIREMENTS (33-39 hours)

Written Communication
- ENGL 110C and
- ENGL 211C (previously 111C) or
- ENGL 231C (previously 131C) 6 _____

Fine and Performing Arts
- ARTH 121A, ARTS 122A,
- MUSC 264A, DAN 185A,
- THEA 241A 3 _____

Oral Communication
- COMM 101R, 103R, 112R or
- approved course in major
* Satisfied by BIOL 405W 3 _____

History
- HIST 101H, 102H, 103H,
- 104H, 105H 6 _____

Mathematics
- MATH 162M 3 _____

Literature
- ENGL 112L,
- ENGL 114L (previously 144L),
- FLET 100L 3 _____

Foreign Language
- ARAB 111F, CHIN111F,
- FR 101F-102F,
- GER 101F-102F, HEBR 111F
- ITAL 101-102F, JAPN 111F
- LATN101F-102F,
- RUS 101F-102F,
- SPAN 101F-102F, 121F 0-6 _____

Philosophy
- PHIL 110P, 120P, 150P 3 _____

Social Science
- AAST 100S, ANTR 110S;
- COMM 200S; CRJS215S;
- ECON 200S, 201S, 202S;
- GEOG 100S, 101S;
- POLS 100S, 101S;
- PSYC 201S 203S;
- SOC 201S; WMST 201S 6 _____

NewPAGE (Gen 101) 3 _____
Biology majors may substitute the New PAGE course for either a social science or history course.

REQUIRED BIOLOGY CORE COURSES (23 hours):
- BIOL 115N General Biology I 4 ______
- BIOL 116N General Biology II 4 ______

BIOL 115N-116N must be passed with a C (2.0) or better to continue.

Upon completion of Biology 116N, students must complete the following Biology courses, some of which are pre- or co-requisites for upper level biology courses (see catalog descriptions for individual courses). Biology 293 (Cell Biology) and Biology 303 (Genetics) have Math 162, (Precalculus) and Chemistry 311 (Organic Chemistry) as co-requisites. Biology 303 (Genetics) also has STAT 130M (Elementary Statistics) as a pre-requisite. Biology 405W should be taken during the senior year. Students may not have a grade lower than a C (2.0) in any of the biology core courses.

Practice of Science (290) 1 ______
Ecology (291) 3 _____
Evolution (292) 3 _____
Cell Biology (293) 3 _____
Genetics (303) 3 _____
Senior Seminar (405W) 3 _____ (previously 2 credits)

Prerequisites for 405W: Complete the required core courses listed above AND two Biology electives listed below (300-400 level).
REQUIRED BIOLOGY ELECTIVE COURSES (16 hours):
Students must complete 16 hours of Biology electives, to include one course from each of the areas listed below. A minimum of 3 courses must include a laboratory component. Students may not have a grade lower than a C- (1.7) in any of the Biology elective courses. Note that course offerings in each of these areas may change; students should check the University Catalog for current offerings. Substitutions of electives are possible but must be approved in advance by the Chief Departmental Advisor in Biology.

**Human Anatomy:** BIOL 250
**Botany:** BIOL 308
**Zoology:** BIOL 307, 401, 420, 422, 424, 458, 441
**Microbiology:** BIOL 315

NON-BIOLOGY SCIENCE REQUIREMENTS (27 hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 121N/122N (previously 115N) College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 123N/124N (previously 116N) College Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211&amp; 212 (previously 311 &amp; 312) Organic Chemistry I Lecture and Lab</td>
<td>5</td>
</tr>
<tr>
<td>OEAS 111N and PHYS 111N</td>
<td>8</td>
</tr>
<tr>
<td>MATH 200 or MATH 163/211</td>
<td>3/4</td>
</tr>
<tr>
<td>STAT 130 or STAT 310</td>
<td>3</td>
</tr>
</tbody>
</table>

PROFESSIONAL EDUCATION REQUIREMENTS (32 hours)

**Take Praxis I after completion of English 110/111 and College Algebra**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI 301 (now TLED) Foundations &amp; Introduction to Assessment in Education</td>
<td>3</td>
</tr>
<tr>
<td>ECI 360 (now TLED) Classroom Management and Discipline</td>
<td>2</td>
</tr>
<tr>
<td>ECI 408 (now TLED) Reading and Writing in Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>ECI 430 (now TLED) PK-12 Instructional Technology (satisfies CS requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ECI 454 (now STEM) Developing Instructional Strategies - Science</td>
<td>3</td>
</tr>
<tr>
<td>ESSE 313(now SPED) Fundamentals of Human Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ESSE 406 (now SPED) Students w/ Diverse Learning Needs in the Gen. Ed. Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ECI 483 (now TLED) Practicum Seminar in Education (Coreq with ECI 454)</td>
<td>1</td>
</tr>
<tr>
<td>ECI 485 (now TLED) Student Teaching**</td>
<td>12</td>
</tr>
</tbody>
</table>

*Students must have a passing score on the Praxis I or equivalent SAT or ACT score as established by the VA State Board of Education; acceptance into the Teacher Education program; no grade less than C- in content areas (C in Biology core) and professional education core; minimum major and overall GPA of at least 2.7.

**Students must have completed an approved program in teacher education (i.e., all coursework); successfully completed the writing exit exam; a passing score on the Praxis I or equivalent SAT or ACT score as established by the VA State Board of Education; a passing score on the appropriate Praxis II content examination; departmental approval; permission of the director of teacher education; no grade less than C- in content area (C in Biology core) and professional education core; minimum major and overall GPA of at least 2.7.

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 in the catalog. Students are encouraged to obtain current program information from their advisors and the Darden College of Education website at [http://education.odu.edu](http://education.odu.edu). A student who seeks a bachelor’s degree from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25% of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off- campus instruction. This must include a minimum of 12 hours of upper-level courses in the department of the declared major. The responsibility for meeting the requirements for a degree rests with the student.

Biology Advising Contact: MGB 236 Advising Office (cosadvising@odu.edu)
Education Advising Contact: Ms. Nola Nicholson (nnichols@odu.edu)
Licensure Information: 757-683-3348