LOWE DIVISION GENERAL EDUCATION
(Required of all emphasis areas)

Skills
Written Communication
ENGL 110C  _______3 (ENG 111)
ENGL 211C, 221C, or 231C  _______3 (See transfer guide)

Oral Communication
(Satisfied by OEAS 441-444)

Mathematics
MATH 211 required  _______4 (MATH 173, 273)*

Language and Culture
Proficiency through 102F  _______0-6 (See transfer guide)

Information Literacy and Research
CS 120G, 121G, or IT 150G  _______3 (See transfer guide)

Ways of Knowing
Human Creativity  _______3 (See transfer guide)
ARTH 121A, ARTS 122A, MUSC 264A, DANC 185A, THEA
241A, COMM/THEA 270A

Interpreting the Past  _______3 (See transfer guide)

HIST 100H, 101H, 102H, 103H,
104H, or 105H

Literature  _______3 (See transfer guide)
ENGL 112L, 114L, or FLET 100L

Philosophy & Ethics  _______3 (See transfer guide)

PHIL 110P, 120P, 140P, 230E, 250E, 303E, 344E, 345E, 441E, or
442E

The Nature of Science
CHEM 121N/122N-CHEM 123N/124N required
_______3  _______4  _______4 (CHM 111 and 112)*

Human Behavior  _______3 (See transfer guide)

AAST 100S; ANTR 110S; COMM 200S; CRJS 215S; ECON 200S,
201S, 202S; FIN 210S; GEOG 100S, 101S; POLS 100S, 101S,
102S; PSYC 201S, 203S; SOC201S; WMST 210S

Impact of Technology  _______3 (See transfer guide)

COMM 372T, CS 300T, DNTH 440T, or ENGL 307T, GEOL
306T, HIST 300T, 304T, 386T, 389T, IT 306T, MUSC 335T, SCI
302T, PHIL 383T, POLS 305T, STEM 110T, 370T, or WMST
390T (satisfied by TLED 430 for earth science education track)

Course Requirements-Chefical Oceanography Emphasis

OEAS 306 Oceanography    _______3
PHYS 231N-232N University Physics I and II    _______8
STAT 330 Intro to Probability and Statistics or STAT 310 Intro Data Analysis
OEAS 310 Global Earth Systems    _______3
OEAS 406 Matlab    _______1
OEAS 440 Biological Oceanography Lecture/Lab    _______4
BIOL 292 Evolution    _______3
BIOL 415 Marine Ecology    _______3
CHEM 211, 212, 213 Organic Chemistry Lecture/Lab    _______8
CHEM 445 Biochemistry    _______3
Electives (from OEAS 403W, 404, 410, 412, 414, 420)    _______6
OEAS 441-442W Ocean and Earth Science Field Study    _______6

OEAS 306 Oceanography    _______3
OEAS 406 Matlab    _______1
OEAS 410 Chemical Oceanography Lecture/Lab    _______4
CHEM 211/213 Organic Chemistry Lecture    _______6
CHEM 331/333 Physical Chemistry Lecture    _______6
CHEM 332W Experimental Physical Chemistry or 452 Inorganic Chemistry Laboratory    _______2
CHEM 351 Inorganic Chemistry    _______3
Electives (from OEAS 403W, 412, 413, 418)    _______6
OEAS 441-442W Ocean and Earth Science Field Study (satisfies oral communication requirement)

Course Requirements-Physical Oceanography Emphasis

BIOI 115N General Biology I    _______4
BIOI 116N General Biology II    _______4
CHEM 121N/122N/123N/124N College Chemistry (Satisfies natural science perspective)
OEAS 111N Physical Geology    _______4
MATH 211-212 Calculus I and II    _______8
OEAS 306 Oceanography    _______3
PHYS 231N-232N University Physics I and II    _______8
STAT 330 Intro to Probability and Statistics or STAT 310 Intro Data Analysis

OEAS 306 Oceanography    _______3
OEAS 310 Global Earth Systems    _______3
OEAS 405 Physical Oceanography    _______3
OEAS 415 Waves and Tides    _______3
OEAS 451 Data Collection/Analysis in Oceanography    _______3
II and VCLA scores must be on file in the Office of Teacher Education Services and Advising, Education 152, before the candidate may begin the teacher internship Communication and Literacy Assessment (VCLA).

Passing scores on the Praxis II specialty area tests and passing scores established by the Virginia Department of Education must be obtained prior to, or during, enrollment in ECI 301.

Approved equivalent test scores must be on file in the Office of Teacher Education Services and Advising prior to enrollment in ECI 301.

A minimum of 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; and completion of 126 credits.

Students should obtain current program information from their academic advisor and the Darden College of Education website at http://www.education.odu.edu.

The curriculum is as follows:

### Course Requirements—Geology Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 115N</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 116N</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 121N/122N-123N/124N</td>
<td>College Chemistry (Satisfies natural science perspective)</td>
<td>8</td>
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<tr>
<td>OEAS 111N-112N</td>
<td>Physical Geology</td>
<td>8</td>
</tr>
<tr>
<td>MATH 211-212</td>
<td>Calculus I and II</td>
<td>8</td>
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<tr>
<td>OEAS 306 Oceanography</td>
<td>3</td>
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</tr>
<tr>
<td>PHYS 231N-232N</td>
<td>University Physics I and II</td>
<td>8</td>
</tr>
<tr>
<td>STAT 330 Intro to Probability and Statistics</td>
<td>3 or 3</td>
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</tr>
<tr>
<td>STAT 330 Intro to Probability and Statistics</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS 310 Global Earth Systems</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS 313 Mineralogy</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS 314 Petrology</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS 344W Geomorphology</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS 320 Sedimentology/Stratigraphy</td>
<td>4</td>
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<tr>
<td>OEAS 411 Structural Geology</td>
<td>4</td>
<td></td>
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<tr>
<td>OEAS 420 Hydrogeology</td>
<td>3</td>
<td></td>
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<tr>
<td>or OEAS 434 Intro to Geophysical Methods</td>
<td>3</td>
<td></td>
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<tr>
<td>OEAS elective from: OEAS 303, 368, 403W, 408, 412,</td>
<td>3</td>
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<tr>
<td>413, 414, 415, 419, 420, 431, 434, 436, 446,</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OEAS 441-442W Ocean and Earth Science Field Study</td>
<td>6 (satisfies oral communication requirement)</td>
<td>6</td>
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</tbody>
</table>

### Course Requirements—Earth Science Education Emphasis

**Admission.** Students wanting to be admitted to the teacher education program must have a 2.75 grade point average in the major, the professional education core, and overall, with no grade less than C in the content area and C- in the professional education core. Furthermore, they must have passed Praxis I or achieved State Board of Education-approved SAT or ACT scores. Although students may enroll in a limited number of education courses, passing Praxis I scores or approved equivalent test scores must be on file in the Office of Teacher Education Services and Advising prior to enrollment in any education practicum course or courses on developing instructional strategies. It is recommended that students take the Praxis I exam prior to, or during, enrollment in ECI 301.

**Continuance.** Students must maintain an overall grade point average of 2.75 and 2.75 in the academic major and the professional education core and complete all degree requirements for the major and the professional education core with no grade less than a C- for continuance in the College of Education. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the Praxis II specialty area tests. A list of the passing scores established by the Virginia Department of Education is available on the Virginia Department of Education website or the Office of Teacher Education Services and Advising, Education 152. The Praxis II Earth Science Content Examination and the Virginia Communication and Literacy Assessment (VCLA) must be passed before the candidate may begin the teacher internship. Passing Praxis II and VCLA scores must be on file in the Office of Teacher Education Services and Advising prior to student teaching.

**Graduation.** Requirements for graduation included passage of the Exit Examination of Writing Proficiency; completion of the Senior Assessment; a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; and completion of 126 credits.

**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 wishing to be admitted to the teacher education program must have a 2.75 grade point average in the major, and in the professional education core, with no grade less than a C- in the major and C- in the professional education core; and completion of 126 credits.

**Requirements for graduation (non-teacher education tracks) include a minimum cumulative grade point average of 2.00 overall and in the major with a grade of C or better in all major and prerequisite courses, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment.**

### UPPER DIVISION GENERAL EDUCATION

(Teacher Education Core satisfies this requirement.)

Option A. Approved Disciplinary Minor or second degree or second major

Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)

Option C. International Business and Regional Courses or an approved Certification Program such as teaching licensure

Option D. Two Upper-Division Courses from outside the College of Sciences not required by the major (6 hours)

**Requirements for graduation (non-teacher education tracks) include a minimum cumulative grade point average of 2.00 overall and in the major with a grade of C or better in all major and prerequisite courses, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment.**