CHEMICAL OCEANOGRAPHY
OCEAN AND EARTH SCIENCES CURRICULUM SHEET
2004-2006 catalog

GENERAL UNIVERSITY REQUIREMENTS

Written Communication Skills (6)
ENGL 110C and one of ENGL 111C
ENGL 131C PHIL 111C HIST 111C

Oral Communication Skills (3)
COMM 101R COMM 103R
COMM 112R

Mathematical Skills
see departmental requirements

Foreign Language Skills (0 - 6) EXEMPT IF:
All “F” courses grad HS before 86
2 HS credits/ 2 lang
3 HS credits/ 1 lang

Computer Skills
see departmental requirements

Literature Perspective (3)
ENGL 112L ENGL 144L
FLET 100L

Fine and Performing Arts Perspective (3)
ARTH 121A ARTS 122A
DANC 185A MUSC 264A
THEA 241A

Philosophy Perspective (3)
PHIL 110P PHIL 120P
PHIL 150P

History Perspective (6)
HIST 101H HIST 102H
HIST 103H HIST 104H
HIST 105H

Social Sciences Perspective (6) (2 fields)
ANTH 110S CRJS 215S
ECON 200S, 201S, 202S
GEOG 100S GEOG 101S
POLS 100S POLS 101S
PSYC 201S PSYC 203S
SOC 201S COMM 200S
WMST 201S

UPPER DIVISION REQUIREMENTS
(9-12 credits)

Minor Focus Area Cluster International Certificate

OCEAN AND EARTH SCIENCE ADVISOR: __________

TRACK REQUIREMENTS

OES and Upper Division (42 cr.) CREDIT GRADE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>OCEN 306 Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OCEN 310 Global Earth Systems</td>
<td>3</td>
</tr>
<tr>
<td>OCEN 410 Chemical Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>OCEN 441-442 Ocean and Earth Science Field Study I-II</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 311/313 Organic Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 331/333 Physical Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 332 Experimental Physical Chemistry OR CHEM 452 Inorganic Chemistry Lab</td>
<td>2 or 3</td>
</tr>
<tr>
<td>CHEM 451 Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Chemical Oceanography Electives: GEOL 414; OCEN 403, 412, 418</td>
<td>6</td>
</tr>
<tr>
<td>STAT 330 Introduction to Probability and Statistics</td>
<td>3</td>
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OUTSIDE SCIENCES (39 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>BIOL 115N-116N General Biology</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 115N-116N Foundations of Chemistry</td>
<td>8</td>
</tr>
<tr>
<td>CS 149D or other programming course</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 111N Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 211-212 Calculus I-II</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 231N-232N University Physics</td>
<td>8</td>
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</tbody>
</table>

Other Electives: must have 120 hours to graduate.

The student is responsible for meeting all graduation requirements as published by Old Dominion University.