**REQUIRED BIOLOGY CORE COURSES:**

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 core of biology courses, some of which are pre-requisites or co-requisites for upper level biology courses (see catalog descriptions for individual courses). Biology 293 (Cell Biology) and 303 (Genetics) have Math 162 (Pre-calculus) and Chemistry 211 (Organic Chemistry) as pre- or co-requisites; STAT 130M (Elementary Statistics) is a pre-requisite for Biology 303. Biology 405W should be taken during the junior or senior year. All core courses must be passed with a C (2.0) or better.

BIOL 290 Practice of Science 1 ________ (no longer offered)
BIOL 292 Evolution 3 ________
BIOL 291 Ecology 3 ________
BIOL 293 Cell Biology 3 ________
BIOL 303 Genetics 3 ________
BIOL 405W Senior Seminar 3 ________ (previously 2 credits)

**405W Prerequisites:** The required core courses listed above AND two Biology electives listed below (300-400 level)

**UPPER DIVISION BIOLOGY ELECTIVE COURSES:**

Students must choose 16 elective hours from 300- and 400-level Biology elective courses. A minimum of three of the courses must have a laboratory/field component; BIOL 367, 368, 369 and 498 cannot be used to satisfy the lab/field requirement but can be used to satisfy one (1) of the required 16 elective hours. Students may not have a grade lower than a C- (1.7) in any of the biology elective courses. See catalog for prerequisites. Asterisks (*) indicate laboratory courses.

**Cellular/Molecular Biology**

BIOL 315* General Microbiology 5 ________
BIOL 409 Immunology 3 ________
BIOL 416 Clinical Immunology 2 ________
BIOL 423 Cellular and Molecular Biology 3 ________

**Organismal Biology (Human Emphasis)**

BIOL 250 * Human Anatomy & Physiology 4 ________
BIOL 251 * Human Anatomy & Physiology 4 ________
BIOL 314* Developmental Biology 5 ________
BIOL 408* Introduction to Pharmacology 4 ________

**Organismal Biology (Non-Human Emphasis)**

BIOL 307* Invertebrate Zoology 4 ________
BIOL 308* General Botany 4 ________
BIOL 322 Ethnobotany 3 ________
BIOL 334* Field Ethnobotany 4 ________
BIOL 335* Ecology Laboratory 2 ________
BIOL 340* Field Botany 4 ________
BIOL 400* Flowering Plant Families 5 ________
BIOL 401* Entomology 4 ________
BIOL 412* Plant Physiology 4 ________
BIOL 419* Wetland Plants 5 ________
BIOL 420* Ichthyology 5 ________

**Ecology/Evolutionary Biology**

BIOL 346 Plant Geography 3 ________
BIOL 331 Marine Biology 3 ________
BIOL 4xx Epidemiology 3 ________
BIOL 404* Conservation Biology 5 ________
BIOL 415 Marine Ecology 3 ________
BIOL 435 Marine Conservation Biology 3 ________
BIOL 442* Marine Ecology Laboratory 2 ________

BIOL 443 Environmental Impact Assessment 3 ________
BIOL 444* Field Studies in Marine Biology 5 ________
BIOL 445 Community Ecology 3 ________
BIOL 450* Plant Ecology 4 ________
BIOL 455 Molecular Systematics 3 ________
BIOL 456 Population Genetics 3 ________
BIOL 478 Microbial Ecology 3 ________
BIOL 479* Microbial Ecology Lab 1 ________
Unstructured Biology Courses:

- BIOL 368 Internship 1-3
- BIOL 369 Practicum 1-3
- BIOL 487/488W Honors Research in Biology 4/4

- BIOL 496 Topics 1-3
- BIOL 497 Undergraduate Research 1-3+
- BIOL 498 Independent Study 1-3

+ must complete 3 credits to count as a lab

COGNET MATH, COMPUTER SCIENCE & PHYSICAL SCIENCE REQUIREMENTS:

- CHEM 121N/122N (Previously 115N) College Chem I 4
- CHEM 123N/124N (Previously 116N) College Chem II 4
- CHEM 211(Previously 311) Organic Chemistry Lecture 3
- CHEM elective 200-level or higher 5

- OES 110N or 111N and 112N or PHYS 111N-112N 8
- MATH 200 or MATH 163-211 3/4
- STAT 130M or STAT 310 3
- CS 120G* or 121G* or 126G* (*satisfies CS 149D which is no longer offered)

Prerequisite courses in Chemistry and Mathematics must be passed with a C (2.0) or better for the student to continue to higher-level courses.

LOWER DIVISION GENERAL EDUCATION REQUIREMENTS:

- Written Communication: 6cr
  - ENGL 110C and ENGL 211C (previously 111C) 3
  - or 231C (previously 131C) 3

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

- Mathematics: 3cr
  - MATH 162M 3

- Foreign Language: 0-6cr

- Fine and Performing Arts: 3cr

- History: 6cr
  - HIST 101H, 102H, 103H, 104H, 105H 3

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

- Philosophy: 3cr
  - PHIL 110P, 120P, 150P 3

- Social Science: 6cr
  - ANTR 110S; COMM 200S, CRJS215S; ECON 200S, 201S, 202S; GEOG 100S, 101S; POLS 100S, 101S; PSYC 201S, 203S; SOC 201S; WMST 201S 3

NewPAGE (GEN 101)* 3

* Biology majors may substitute GEN 101 for either a social science or history course; offered through Fall 2007 only.

Upper Division General Education Requirements

Upper division fulfillment options include completion of (A) a disciplinary minor, second major or second degree, (B) an interdisciplinary minor, (C) International Business and Regional Courses or an approved Certification Program such as teaching licensure; and (D) two upper-division courses from another college outside of and not required by the major. See catalog for details.

Notes:

Completion of the University Writing Requirement, University Assessment, and Department Assessment Exam (if offered) are required for graduation. Students must have a total of 120 credit hours to graduate. A minimum of 25% of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) must be completed at ODU 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. No grade below a C (2.0) may be earned in any Biology course for that course to satisfy the requirements of the program. Students must have a 2.0 overall, 2.0 in the major, and a 2.0 in the minor in order to graduate. Students, not advisors, are ultimately responsible for knowing whether or not they have completed their degree requirements. Students are expected to use DegreeWorks to monitor their progress each semester, identify problems as they arise, and seek assistance in a timely fashion. Students are expected to read, understand, and follow the policies and regulations outlined in the University Catalog for the year in which they enroll at ODU. Exceptions to the curriculum requirements, policies and procedures outlined on this sheet must be petitioned to and approved by the Department Chair.