**BIOLOGY MAJOR (2017 - 2018)**

**FOUNDATIONS OF WRITTEN COMMUNICATION**
(6 credit hours required – Writing Across the Curriculum - WAC)
Grade of “C” or higher is required in each course
- ENC 1101 ...... College Writing I *(Required)*
- ENC 1102 ...... College Writing II +

**THE FOLLOWING COURSES BELOW MAY BE SUBSTITUTED FOR ENC 1102:**

**English Department**
- ENC 1930+ ...... University Honors Seminar in Writing *(Permit Only)*
- ENC 1939+ ...... Special Topic: College Writing
- ENC 2452+ ...... Honors Composition for Science

**Anthropology Department**
- ANT 1471+ ...... Cultural Difference in a Globalized Society

**History Department**
- HIS 2050+ ...... Writing History

*Note:* Students must take four Writing-Across-the-Curriculum (WAC) courses, two of which must be taken from Foundations of Written Communication.

**FOUNDATIONS OF SCIENCE & THE NATURAL WORLD**
(6 credit hours required - One of the courses must have a lab)
Student must take 2 of the following courses; 1 must be from group A. The second course may be from group A or group B.

<table>
<thead>
<tr>
<th>Group A</th>
<th>Group B</th>
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| **Biology Department (Required)**  
- BSC 1010 & L & D  
  Biological Principles  
  (4 cr. Incl. Lab & Dis)  
| **Biology Department (Required)**  
- BSC 1011 & L & D  
  Biodiversity  
  (4 cr. incl Lab & Dis)  |

**Chemistry Department (Required)**
- CHM 2045 & L  
  General Chemistry I  
  (4 cr. Incl. Lab) *

**Physics Department (Required: select one below)**
- PHY 2048 & L General Physics 1  
  (5 credits incl. Lab) **
- PHY 2053 College Physics 1  
  (5 credits incl. Lab)

*(D) = Discussion, (L) = Lab*
Courses indicating a (D) or (L) are linked with a lecture, a lab, and/or a discussion. If you select one of these courses, you must register for the lecture, lab, and/or discussion. You must attend the lecture, lab, and/or discussion.

**FOUNDATIONS OF SOCIETY & HUMAN BEHAVIOR**
(6 credit hours required)
Student must take 2 of the following courses; 1 must be from group A. The second course may be from group A or group B.

<table>
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<tr>
<th>Group A</th>
<th>Group B</th>
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</table>
| **History Department**  
- AMH 2020 & D ...... United States History Since 1877 *(P/F)*  
| **Anthropology Department**  
- ANT 2000 & D ...... Introduction to Anthropology  
| **Economics Department**  
- ECO 2013 .............. Macroeconomic Principles §  
| **Political Science Department**  
- POS 2041 .............. Government of the United States  
| **Psychology Department**  
- PSY 1012 .............. Introduction to Psychology - see note below  
| **Sociology Department**  
- SYG 1000 .............. Sociological Perspective  
  *(recommended for pre-health-related majors)*  
| **History Department**  
- AMH 2010 & D ...... United States History to 1877 *(P/F)*  
| **Anthropology Department**  
- ANT 2000 & D ...... Introduction to Anthropology  
| **Economics Department**  
- ECO 2023 .............. Microeconomic Principles §  
| **Political Science Department**  
- POS 2041 .............. Government of the United States  
| **Psychology Department**  
- PSY 1012 .............. Introduction to Psychology - see note below  
| **Sociology Department**  
- SYG 1000 .............. Sociological Perspective  
  *(recommended for pre-health-related majors)*  

**D** = Discussion, **L** = Lab
Courses indicating a (D) or (L) are linked with a lecture, a lab, and/or a discussion. If you select one of these courses, you must register for the lecture, lab, and/or discussion. You must attend the lecture, lab, and/or discussion.

*Note:* A required course to take PSY 3234 per the University catalog.
STUDENTS ASSUME RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS

Course selections should be made in consultation with an academic advisor.

LEGEND

+ - ENC 1101 is a prerequisite.
++ - Two Foundations of Written Communications classes are required before taking this course.
§ - Sophomore standing (30 credits earned) is a requirement to take this course.
* - Nursing majors are required to take this course in their first semester.
** - MAC 2311 is a prerequisite for this course. If a lab is needed, then take General Physics 1 Lab (PHY 2048 Lab).
*** - MAC 1105 and MAC 1114 are prerequisites for this course. If a lab is needed, then take General Physics 1 Lab (PHY 2048 Lab).
‡ - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).

WAC - (WAC) Writing across the curriculum course.

WRITING ACROSS THE CURRICULUM (WAC)

Students must attain grades of “C” or higher. 12 credits of writing (WAC) and 6 credits of mathematics are required.

Please note:
Students must take four (4) WAC courses. Two (2) courses are to be taken from Foundations of Written Communication. We strongly recommend the two additional WAC courses come from these courses: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040 and LIT 2070. See advisor for additional details.

ELECTIVE CREDITS

Courses are available upon request to meet individual student needs. Please consult an academic advisor to determine the number of elective credits required for your major. 

CERTAIN MAJORS DO NOT ALLOW ANY ELECTIVES.

P/F

Certain designated undergraduate courses may be taken for a letter grade of pass (P) or fail (F). Students must indicate the grade option preferred when registering; otherwise, a letter grade will be given. The maximum credit available to any student on the P/F option is one course per term with a maximum of 12 credits during a student’s entire course of study. This option is not available for courses in the student’s major, for students on probation, or for Engineering majors.

http://myfau.fau.edu

GO TO MYFAU TO:

Check e-mail
See FAU Announcements
FAU Self-Service:
Course schedules
Registration (drop/add classes) and withdrawals
Student records and financial aid
Tuition payments
The University Course Catalog
FOREIGN LANGUAGE (4 - 8 credits, 1 or more courses in the same language) - REQUIRED FOR MAJOR
Students with more than one year of a foreign language in high school should enroll in the second half of the beginners foreign language class (ARA/CHI/FRE/GER/HBR/ITA/JPN/LAT/SPN 1121) or a higher level course. Proficiency for a first-level course can be earned by successfully completing a second-level course. For questions related to this requirement, consult an academic advisor. CLEP exam credits meet this requirement: see the catalog.

NOTE: Native Speakers of a foreign language must consult the Languages, Linguistics, and Comparative Literature Department regarding this requirement.

NOTE: Honors Seminars SHALL BE ACCEPTED AS MEETING THE WAC/GRW REQUIREMENT. See the University Advising Services Office for details.

NOTE: See catalog for specific requirements, course descriptions, and additional information. The requirements for some Intellectual Foundations Program (IFP) courses & other courses may be satisfied by passing the appropriate AP or CLEP exam. Check with your advisor and college.

The Charles E. Schmidt College of Science Biology department has the following requirements (per the University catalog):

1. A student must earn a “C-” or better in all biology AND cognate courses taken as part of the requirements for an undergraduate degree in Biological Sciences. However, students must earn a “C” in chemistry courses.
2. Any course work in the major field transferred from another institution must be approved by the major dept.
3. No major course may be taken pass/fail.
4. The maximum amount of credit which may be earned through co-op is 10 credits; some departments allow some of these credits to substitute for major courses, check with department for specifics.
MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES
B.A. DEGREE

Required Courses (Biology Core): 40 - 41 credits:
BSC 1011 & L & D Biodiversity and Lab & Discussion 4 cr – as indicated on first page
BSC 1010 & L & D Biological Principles and Lab & Discussion 4 cr
CHM 2045 & L¹ General Chemistry I and Lab 4 cr – as indicated on first page
CHM 2046 & L¹ General Chemistry II and Lab 4 cr
CHM 2210 & D¹ Organic Chemistry I 3 cr
CHM 2211¹ Organic Chemistry II 3 cr
¹Chemistry courses require a “C” or better.
PSC 2121 Physical Science 3 cr
MAC 2233 Methods of Calculus 3 cr
MAC 2311 Calculus w/Analytic Geometry 4 cr
STA 3173 Introduction to Biostatistics 3 cr (prerequisite: MAC 2233)
PSY 3234 Exp. Design & Stat. Inference 3 cr (prerequisite: PSY 1012)

Select at least three (3) of the courses below (the other course may be used as Biology elective): 9 – 10 credits
PCB 3063 Genetics 4 cr
PCB 3023 Cell Biology 3 cr
PCB 4043 Principles of Ecology 3 cr
PCB 3674 Evolution 3 cr

Biology electives (select 15 credits): Please note you must have course prerequisite(s) completed
Biochemistry I (BCH 3033) 3 credits
Vascular Plant Anatomy & Lab (BOT 3223 & 3223L) 4 credits
Marine Botany & Lab (BOT 4404 & 4404L) 4 credits
Principles of Plant Physiology & Lab (BOT 4503 4503L) 4 credits
Plant Biotechnology (BOT 4734C) 3 credits
Life of a Biologist (BSC 2844) 1 credit
Conservation Biology (BSC 3052) 3 credits
Introduction to Biological Research (BSC 3453) 1 credit
Biological Research (BSC 3491) 2 credits
Molecular Genetics of Aging (BSC 4022) 3 credits
Biotechnology Laboratory 1 (BSC 4403L) 2 credits
Biotechnology Laboratory 2 (BSC 4484L) 2 credits
Concepts in Bioinformatics (BSC 4434C) 3 credits
Biology of Cancer (BSC 4806) 3 credits
Directed Independent Study (BSC 4905) 1-3 credits
Honors Research (BSC 4917) 3 credits
Honors Thesis (BSC 4918) 3 credits
Special Topics (BSC 4930) 1-3 credits
Comparative Animal Behavior (CBH 4024) 3 credits
Organic Chemistry II Lab (CHM 2211L) 2 credits
Critical Thinking in Environmental Science (EVS 4021) 3 credits
General Microbiology & Lab (MCB 3020 & 3020L) 4 credits
Medical Bacteriology (MCB 4203) 3 credits
Virology (MCB 4503) 3 credits
Microbial Ecology (MCB 4603) 3 credits
Marine Biodiversity & Lab (OCB 4032 & 4032L) 4 credits
Marine Biology & Lab (OCB 4043 & 4043L) 4 credits
Marine Microbiology and Molecular Biology & Lab (OCB 4525 & 4525L) 6 credits
Marine Ecology & Lab (OCB 4633 & 4633L) 4 credits
Marine Science (OCE 4006) 4 credits
Human Morphology and Function 1 & Lab (PCB 3703 & 3703L) 4 credits
Human Morphology and Function 2 & Lab (PCB 3704 & 3704L) 4 credits
Issues in Human Ecology (PCB 3352) 3 credits
Genetics Lab (PCB 4067L) 3 credits
Immunology (PCB 4233) 3 credits
Freshwater Ecology & Lab (PCB 4301 & 4301L) 3 credits
Comparative Animal Physiology & Lab (PCB 4723 & 4723L) 4 credits
Cellular Neuroscience and Disease (PCB 4842) 3 credits
Practical Cell Neuroscience (PCB 4843C) 3 credits
Biological Bases of Behavior (PSB 3002) 3 credits
Invertebrate Zoology & Lab (ZO I 2203 & 2203L) 5 credits
Vertebrate Zoology & Lab (ZO I 2303 & 2303L) 4 credits
Functional Biology of Marine Animals & Lab (ZOO 4402 & 4402L) 4 credits
Ornithology & Lab (ZOO 4472 & 4472L) 2 credits
Comparative Vertebrate Morphogenesis & Lab (ZOO 4690 & 4690L) 3 credits
Comparative Vertebrate Morphogenesis Lab (ZOO 4690L) 2 credits
Principles of Human Neuroanatomy (ZOO 4742) 3 credits

31 – 35 credits Intellectual Foundations Program and Foreign Language
40 – 41 credits Biology Core
15 credits Biology Electives
29 – 34 credits Free Electives – (17 – 20 credits must be upper-division)
120 CREDITS TOTAL (45 credits at upper division minimum)
Required Courses (Biology Core): 47 - 48 credits

- BSC 1011 & L & D Biodiversity and Lab & Disc 4 cr – as indicated on first page
- BSC 1010 & L & D Biological Principles and Lab & Disc 4 cr
- CHM 2045 & L General Chemistry I and Lab 4 cr – as indicated on first page - (Chemistry courses require a “C” or better)
- CHM 2046 & L General Chemistry II and Lab 4 cr - (Requires a “C” or better)
- CHM 2210 & D Organic Chemistry I 3 cr - (Requires a “C” or better)
- CHM 2211 Organic Chemistry II 3 cr - (Requires a “C” or better)

OR {  
  - MAC 2333 Methods of Calculus 3 cr
  - MAC 2311 Calculus w/Analytic Geometry 4 cr

OR {  
  - PHY 2053 College Physics I 4 cr - Prerequisite of a “C” in one of these courses: MAC 1114/1147/2233/2311
  - PHY 2048L General Physics I Lab 1 cr

OR {  
  - PHY 2048 General Physics I 4 cr - Prerequisite of a “C” in MAC 2311 per University catalog
  - PHY 2048L General Physics I Lab 1 cr

OR {  
  - PHY 2054 College Physics II 4 cr
  - PHY 2049L General Physics II Lab 1 cr

OR {  
  - PHY 2049 General Physics II 4 cr
  - PHY 2049L General Physics II Lab 1 cr

OR {  
  - STA 3173 Introduction to Biostatistics 3 cr - prerequisite: MAC 2233 per University catalog
  - PSY 3234 Exp. Design & Stat. Inference 3 cr - prerequisite: PSY 1012 per University catalog

Select at least three (3) of the courses below (the other course may be used as Biology elective): 9 – 10 credits

- PCB 3063 Genetics 4 cr
- PCB 3023 Cell Biology 3 cr
- PCB 4043 Principles of Ecology 3 cr
- PCB 3674 Evolution 3 cr

Electives: (select at least 21 credits from the list below):  

- Biochemistry I (BCH 3033) 3 credits
- Vascular Plant Anatomy & Lab (BOT 3223 & 3223L) 4 credits
- Marine Botany & Lab (BOT 4404 & 4404L) 4 credits
- Principles of Plant Physiology & Lab (BOT 4503 4503L) 4 credits
- Plant Biotechnology (BOT 4734C) 3 credits
- Life of a Biologist (BSC 2844) 1 credit
- Conservation Biology (BSC 3052) 3 credits
- Introduction to Biological Research (BSC 3453) 1 credit
- Biological Research (BSC 3481) 2 credits
- Molecular Genetics of Aging (BSC 4022) 3 credits
- Biotechnology Laboratory 1 (BSC 4403L) 2 credits
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47 – 48 credits Biology Core
21 credits Biology Electives
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120 CREDITS TOTAL (45 credits at upper division minimum)