### 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:**
- ENC 1939 + .... Special Topic: College Writing
- 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 MATHEMATICS & QUANTITATIVE REASONING

(6 credit hours required – Grade of "C" or higher is 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.

**Group A**
- MAC 1105 ..... College Algebra
- MAC 2311 ..... Calculus with Analytic Geometry 1 (4 credits)
  or any mathematics course for which one of the above courses is the direct prerequisite

**Group B**
- COP 1034C .... Computer Programming & Data Literacy for Everyone
  (For Non-College Engineering & Computer Science majors)
- MAC 1147 ..... Precalculus Algebra & Trigonometry (4 credits)
- MAC 2210 ..... Intro Calculus w/Applications (4 credits) (Permit Only)
- MAC 2233 ..... Methods of Calculus (REQUIRED or higher math)
- MAC 2241 ..... Life Science Calculus 1 (4 credits)
- MAC 2312 ..... Calculus with Analytic Geometry 2 (4 credits)
- PHI 2102 ...... Logic

### 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.

- **Group A**
  - BSC 1010 & L & D (Required)
    Biological Principles
    (4 cr. Incl. Lab & Dis)
  - CHM 2045 & L (Required)
    General Chemistry 1
    (4 cr. Incl. Lab) $\

- **Group B**
  - BSC 1011 & L & D (Required)
    Biodiversity (4 cr. incl. Lab & Dis)

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

**Note:**
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.

**Group A**
- AMH 2020 & D ......United States History Since 1877 (P/F)
- ANT 2000 & D......Introduction to Anthropology (WAC)
- ECO 2013 ...............Macroeconomic Principles §
- POS 2041 ................Government of the United States
- PSY 1012 ...............Introduction to Psychology (see note below)
- SYG 1000 ...............Sociological Perspectives
  (recommended for pre-health-related majors)

**Group B**
- AMH 2010 & D ......United States History to 1877 (P/F)
- CCJ 2002 ...............Law, Crime & the Criminal Justice System ±
- DIG 2202 ...............Digital Culture
- ECO 2023 ...............Microeconomic Principles §
- ECP 2002 ...............Contemporary Economic Issues
- EEX 2091 ...............Disability and Society
- EVR 1110 ...............Climate Change: The Human Dimensions
- EVR 2017 ...............Environment and Society
- LIN 2001 ...............Introduction to Language (online course)
- PAD 2013 ...............Risk Resilience and Rising Seas ±
- PAD 2258 ...............Changing Environment of Soc., Bus., & Gov’t
- SYG 2010 ...............Social Problems
- URP 2051 ...............Designing the City

**Note:** A required course to take PSY 3234 per the University catalog.
FOUNDATIONS IN GLOBAL CITIZENSHIP  
(6 credit hours required)  
Student must choose two (2) courses from among the following:  
___ ANT 2410 .............. Culture and Society  
___ EDF 2854 ............... Educated Citizen in Global Context  
___ GEA 2000 .............. World Geography  
___ INR 2002................. Introduction to World Politics  
___ LAS 2000 ............... Intro to Caribbean & Latin American Studies  
___ LIN 2607 ................ Global Perspectives on Language  
___ POT 2000................. Global Political Theory ±  
___ SYP 2450 ............... Global Society  
___ WOH 2012 & D........... History of Civilization 1 (WAC) ++  
___ WOH 2022................. History of Civilization 2  
___ WST 2351................. Gender and Climate Change

FOUNDATIONS OF HUMANITIES  
(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.  

Group A  
___ ARH 2000.............. Art Appreciation (P/F)  
___ MUL 2010.............. Music Appreciation  
___ PHI 2010 & D.......... Introduction to Philosophy (WAC) ++  
___ THE 2000.............. Theatre Appreciation

Group B  
___ ARC 2208.............. Culture & Architecture  
___ DAN 2100.............. Appreciation of Dance  
___ FIL 2000 & D.......... Film Appreciation  
___ HUM 2470.............. Racism and Anti-Racism ±  
___ LIT 2010.............. Interpretation of Fiction (WAC) ++  
___ LIT 2030.............. Interpretation of Poetry (WAC) ++  
___ LIT 2040.............. Interpretation of Drama (WAC) ++  
___ LIT 2070.............. Interpretation of Creative Nonfiction (WAC) ++  
___ LIT 2100.............. Introduction to World Literature  
___ SPC 2608.............. Public Speaking ±

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.  
** - MAC 2311 is a prerequisite 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).  
± - Starting Spring 2022 and afterwards.  
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:  

(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.

(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.

Elective Credits  
The number of elective credits allowed varies by major. Please consult with an academic advisor to determine the number of elective credits required for your major. Certain majors do not allow any electives.

https://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.
5. The Department of Biological Sciences offers an Honors Thesis Program that recognizes research accomplishments of talented undergraduates. Eligible students must have a minimum of 20 credits in biology and an overall GPA of 3.2. Students usually begin the program in their sophomore or junior year and conduct independent supervised research during their junior and senior years. A written paper and a seminar describing the results of their research are required in the senior year. Students who meet the eligibility criteria must apply and be accepted to the program. To enroll in the below Honors Program courses which can be used as biology elective courses. Interested students should contact the faculty member whose research interests are closest to those the student wishes to pursue and see http://biology.fau.edu/academics/undergraduate/research.php for more information. Denoted with (H).
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 & L General Chemistry I and Lab 4 cr – as indicated on first page
- CHM 2046 & L General Chemistry II and Lab 4 cr
- CHM 2210 & D Organic Chemistry I 3 cr
- CHM 2211 Organic Chemistry II 3 cr
- PSC 2121 Physical Science 3 cr
- PHY 2053 College Physics 4 cr
- MAC 2233 Methods of Calculus 3 cr
- STA 3173 Introduction to Biostatistics 3 cr (prerequisite: MAC 2233)
- PSY 3234 Exp. Design & Stat. Inference 3 cr (prerequisite: PSY 1012)

Select four of the courses below (Additional courses selected from this category beyond the four courses may be applied toward the elective requirement.)

- PCB 3063 Genetics 4 cr.
- PCB 3023 Cell Biology 3 cr
- PCB 4043 Principles of Ecology 3 cr
- PCB 3674 Evolution 3 cr
- One course in Physiology ***(4-5 cr)

***Students who select the “One course in Physiology” option above may fulfill this option by choosing one of the below course/lab combinations

- BOT 4503, 4503 L Principles of Plant Physiology and Lab 4 cr.
- PCB 4723, 4723L Comparative Animal Physiology and Lab 4 cr.
- ZOO 4690, 4690L Vertebrate Structure Dev. & Evolution w/Lab 5 cr.
- PCB 3703, 3703L Human Morphology and Function 1 and Lab 4 cr.
- PCB 3704, 3704L Human Morphology and Function 2 and Lab 4 cr.

Biology electives (select 12 credits Upper Division): Please note you must have course prerequisite(s) completed - (H) – Honors Research Program Courses

<table>
<thead>
<tr>
<th>Vascular Plant Anatomy &amp; Lab (BOT 3223 &amp; 3223L) 4 credits</th>
<th>Virology (MCB 4503) 3 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Botany &amp; Lab (BOT 4404 &amp; 4404L) 4 credits</td>
<td>Microbial Ecology (MCB 4603) 3 credits</td>
</tr>
<tr>
<td>Principles of Plant Physiology &amp; Lab (BOT 4503 4503L) 4 credits</td>
<td>Marine Biodiversity &amp; Lab (OOC 4032 &amp; 4032L) 4 credits</td>
</tr>
<tr>
<td>Plant Biotechnology (BOT 4734C) 3 credits</td>
<td>Marine Biology &amp; Lab (OOC 4043 &amp; 4043L) 4 credits</td>
</tr>
<tr>
<td>Life of a Biologist (BSC 2844) 1 credit</td>
<td>Marine Microbiology and Molecular Biology &amp; Lab (OOC 4525 &amp; 4525L) 6 credits</td>
</tr>
<tr>
<td>Conservation Biology (BSC 3052) 3 credits</td>
<td>Marine Ecology &amp; Lab (OOC 4633 &amp; 4633L) 4 credits</td>
</tr>
<tr>
<td>Introduction to Biological Research (BSC 3453) 1 credit (H)</td>
<td>Marine Science (OCE 4006) 4 credits</td>
</tr>
<tr>
<td>Biological Research (BSC 3481) 2 credits (H)</td>
<td>Issues in Human Ecology (PCB3352) 3 credits</td>
</tr>
<tr>
<td>Molecular Genetics of Aging (BSC 4022) 3 credits</td>
<td>Genetics Lab (PCB 4067L) 3 credits</td>
</tr>
<tr>
<td>Biotechnology Laboratory 1 (BSC 4403L) 2 credits</td>
<td>Immunology (PCB 4233) 3 credits</td>
</tr>
<tr>
<td>Biotechnology Laboratory 2 (BSC 4448L) 2 credits</td>
<td>Freshwater Ecology &amp; Lab (PCB 4301 &amp; 4301L) 3 credits</td>
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<tr>
<td>Concepts in Bioinformatics (BSC 4434C) 3 credits</td>
<td>Molecular Genetics (PCB 4522) 3 credits</td>
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<td>Biology of Cancer (BSC 4806) 3 credits</td>
<td>Genes and Development (PCB 4594) 3 credits</td>
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<td>Directed Independent Study (BSC 4905) 1-3 credits</td>
<td>Cellular Neuroscience and Disease (PCB 4842) 3 credits</td>
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<td>Directed Independent Research (BSC 4910) 0-3 credits</td>
<td>Practical Cell Neuroscience (PCB 4843C) 3 credits</td>
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<tr>
<td>Honors Research (BSC 4917) 3 credits (H)</td>
<td>Biological Bases of Behavior (PSB 3002) 3 credits</td>
</tr>
<tr>
<td>Honors Thesis (BSC 4918) 3 credits (H)</td>
<td>Invertebrate Zoology &amp; Lab (ZOO 2203 &amp; 2203L) 5 credits</td>
</tr>
<tr>
<td>Special Topics (BSC 4930) 1-3 credits</td>
<td>Vertebrate Zoology &amp; Lab (ZOO 2303 &amp; 2303L) 4 credits</td>
</tr>
<tr>
<td>Comparative Animal Behavior (CBH 4024) 3 credits</td>
<td>Functional Biology of Marine Animals &amp; Lab (ZOO 4402 &amp; 4402L) 4 credits</td>
</tr>
<tr>
<td>Critical Thinking in Environmental Science (EVS 4021) 3 credits</td>
<td>Ornithology &amp; Lab (ZOO 4472 &amp; 4472L) 2 credits</td>
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<tr>
<td>General Microbiology &amp; Lab (MCB 3020 &amp; 3020L) 4 credits</td>
<td>Principles of Human Neuroanatomy (ZOO 4742) 3 credits</td>
</tr>
<tr>
<td>Medical Bacteriology (MCB 4203) 3 credits</td>
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</table>

<table>
<thead>
<tr>
<th>31 – 35 credits</th>
<th>Intellectual Foundations Program and Foreign Language</th>
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</thead>
<tbody>
<tr>
<td>45 – 47 credits</td>
<td>Biology Core</td>
</tr>
<tr>
<td>12 credits</td>
<td>Biology Electives</td>
</tr>
<tr>
<td>28 – 30 credits</td>
<td>Free Electives = (15 – 16 credits must be upper-division)</td>
</tr>
<tr>
<td>120 CREDITS</td>
<td>TOTAL (45 credits at upper division minimum)</td>
</tr>
</tbody>
</table>
Required Courses (Biology Core): 47 - 48 credits

- BSC 1011 & L & D Biological Principles 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 2233 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 2048 General Physics I 4 cr  
  Prerequisite of a “C” in MAC 2111 per University catalog

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

- STA 3171 Introduction to Statistics 3 cr  
  prerequisite: PSY 1012 per University catalog

Select four of the courses below (Additional courses selected from this category beyond the four courses may be applied toward the elective requirement.)

- PCB 3063 Genetics 4 cr

- PCB 3023 Cell Biology 3 cr

- PCB 4043 Principles of Ecology 3 cr

- PCB 3674 Evolution 3 cr

- One course in Physiology *** 4-5 cr

*** Students who select the “One course in Physiology” option above may fulfill this option by choosing one of the below course/lab combinations

- BOT 4503, 4503L Principles of Plant Physiology and Lab 4 cr

- PCB 4723, 4723L Comparative Animal Physiology and Lab 4 cr

- ZOO 4690, 4690L Vertebrate Structure Dev. & Evolution w/Lab 5 cr

- PCB 3703, 3703L Human Morphology and Function 1 and Lab 4 cr

- PCB 3704, 3704L Human Morphology and Function 2 and Lab 4 cr

Biology electives (select 18 credits Upper Division): Please note you must have course prerequisite(s) completed. (H) – Honors Research Program Courses

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Biochemistry I (BCH 3033)</td>
<td>3 credits</td>
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<tr>
<td>Biochemistry II (BCH 3034)</td>
<td>3 credits</td>
</tr>
<tr>
<td>Biochemistry Lab (BCH 3103L)</td>
<td>3 credits</td>
</tr>
<tr>
<td>Vascular Plant Anatomy &amp; Lab (BOT 3223 &amp; 3223L)</td>
<td>4 credits</td>
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<td>Principles of Plant Physiology &amp; Lab (BOT 4503 4503L)</td>
<td>4 credits</td>
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<tr>
<td>Plant Biotechnology (BOT 4734C)</td>
<td>3 credits</td>
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<tr>
<td>Life of a Biologist (BSC 2844)</td>
<td>1 credit</td>
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<tr>
<td>Conservation Biology (BSC 3052)</td>
<td>3 credits</td>
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<tr>
<td>Introduction to Biological Research (BSC 3453)</td>
<td>1 credit (H)</td>
</tr>
<tr>
<td>Biological Research (BSC 3481)</td>
<td>2 credits (H)</td>
</tr>
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<tr>
<td>Comparative Animal Behavior (CBH 4024)</td>
<td>3 credits</td>
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<tr>
<td>Organic Chemistry II Lab (CHM 2211L)</td>
<td>2 credits</td>
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<tr>
<td>Critical Thinking in Environmental Science (EVS 4021)</td>
<td>3 credits</td>
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<tr>
<td>** Intellectual Foundations Program and Foreign Language **</td>
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<tr>
<td>** Biology Core **</td>
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<tr>
<td>** Biology Electives **</td>
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<tr>
<td>** Free Electives – (9 – 11 credits must be upper-division) **</td>
<td></td>
</tr>
<tr>
<td>** 120 CREDITS **</td>
<td></td>
</tr>
</tbody>
</table>

31 – 35 credits
52 – 53 credits
18 credits
15 – 18 credits

TOTAL (45 credits at upper division minimum)