

SECONDARY SCIENCE BIOLOGY EDUCATION MAJOR (2023 - 2024)

College for Education

Bachelor of Science (BS) or Bachelor of Science in Education (BSE)

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

- ___ MGF 1106 Math for Liberal Arts 1
- ___ MGF 1107 Math for Liberal Arts 2
- ___ MAC 1105 College Algebra (**REQUIRED for CHM 2045 & lab**)
- ___ STA 2023 Introductory Statistics
- ___ 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 1031C Computer Programming & Data Literacy for Everyone
- ___ MAC 1147 Precalculus Algebra & Trigonometry (4 credits)
- ___ MAC 2210 Intro Calculus w/Applications (4 credits) (**Permit Only**)
- ___ MAC 2233 Methods of Calculus (**REQUIRED**)
- ___ 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

Group B

- | | |
|---|--|
| <ul style="list-style-type: none"> ___ BSC 1010 & L (REQUIRED)
Biological Principles
(4 cr. Incl. Lab) ___ CHM 2045 & L (REQUIRED)
General Chemistry 1
(4 cr. Incl. Lab) ‡ ___ PHY 2121 (REQUIRED)
Physical Science | <ul style="list-style-type: none"> ___ BSC 1011 & L (REQUIRED)
Biodiversity (4 cr. incl Lab) |
|---|--|

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 ♦
(RECOMMENDED)
- ___ ANT 2000 & D Introduction to Anthropology (**WAC**)
- ___ ECO 2013 Macroeconomic Principles §
- ___ POS 2041 Government of the United States ♦
(RECOMMENDED)
- ___ PSY 1012 Introduction to Psychology
- ___ SYG 1000 Sociological Perspectives (**RECOMMENDED**)

Group B

- ___ AMH 2010 & D..... United States History to 1877
(RECOMMENDED)
- ___ 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
- ___ EME 2620..... Digital Literacy in a Globally Connected World ¶
- ___ EVR 1110..... Climate Change: The Human Dimensions
- ___ EVR 2017..... Environment and Society
- ___ LIN 2001..... Introduction to Language (**online course**)
- ___ PAD 2081 Risk Resilience and Rising Seas ‡
- ___ PAD 2258 Changing Environment of Soc., Bus., & Gov't
- ___ SYG 2010..... Social Problems
- ___ URP 2051 Designing the City

(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.

♦ **Civic Literacy Requirement**

<https://www.fau.edu/ugstudies/civic-literacy-requirement/>

Beginning in Summer 2021, Florida Legislature amended the statute and now requires students to complete **both** a civic literacy course (AMH 2020 or POS 2041) and an assessment exam.

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
(RECOMMENDED)
- ___ GEA 2000 World Geography
- ___ INR 2002 Introduction to World Politics
- ___ JST 2452 Global Jewish Communities Ω
- ___ LAS 2000 Intro to Caribbean & Latin American Studies
- ___ LIN 2607 Global Perspectives on Language
- ___ MAR 2142 Culture, Consumers and the Global Marketplace ✕
- ___ MUH 2121 Music in Global Society Ω
- ___ POT 2000 Global Political Theory
- ___ SYP 2450 Global Society
- ___ SOW 1005 Global Perspectives of Social Services
- ___ SOW 1130 Race and Cultural Inclusion in Social Work
- ___ WOH 2012 & D History of Civilization 1 (WAC) ++
(RECOMMENDED)
- ___ 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
- ___ 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 2471 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
- ___ LIT 2931 Special Topics in Literature (WAC) ++ Ω
- ___ 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.
- ‡ - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
- ± - Starting Spring 2022
- Ω - Starting Spring 2023
- ✕ - Starting Fall 2023
- ◇ - See information box regarding Civic Literacy Requirement
- WAC - (WAC) Writing across the curriculum course.

§ Writing Across the Curriculum (WAC)/Gordon Rule

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. Teacher Preparation majors will also complete a WAC course through the required EDF 2085. We strongly recommend the final WAC course be one of the following: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, LIT 2070 and LIT 2193. See advisor for additional

<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

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.***

(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.

FOREIGN LANGUAGE (0 - 8 credits, 1 or more courses in the same language) - REQUIRED FOR BS MAJOR ONLY

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. All students must meet the Admissions Foreign Language requirement.

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 REQUIREMENT. See the University Advising Services Office for details.

30 credits	Intellectual Foundations Program
11 credits	Free Electives (Foreign Language taken for BS count as electives)
09 credits	Lower-Division College Requirements
24 credits	Professional Education
46 - 47 credits	<u>Major Content</u>
120 – 121 CREDITS	TOTAL

For additional information, please contact the College of Education Office for Academic and Student Services:
College of Education, Room 230
(561) 297-3570 or <https://www.fau.edu/education/students/oass/>

Note: To be admitted to a Teacher Education program, students must do the following:

1. Have a minimum **GPA of 2.5 on a 4.0 scale** on the lower division undergraduate general education component.
2. Submit passing scores on all sections of the General Knowledge (GK) test to the College of Education www.fl.nesinc.com
3. Meet the general university requirements for admission.
4. Complete FAU's Intellectual Foundations Program or an AA Degree from a Florida State University or College.
5. Be interviewed and recommended for admission.
6. Be programmed by an assigned advisor.
7. Be approved for admission by the College of Education.

MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

NON-MAJOR/FREE ELECTIVES (12 credits)

Courses in any college, any department, including Education, needed to meet the 120 credits required for graduation. Foreign language will count as an elective if taken for the BS major.

LOWER DIVISION COLLEGE REQUIREMENTS (9 credits):

EDF 2005 Intro to the Teaching Profession (**15 observation hours**) (3 credits)
 EDF 2085 Intro to Diversity for Educators (**15 observation hours**) (3credits) (**WAC**)
 EME 2040 Introduction to Technology for Educators (3 credits)

PROFESSIONAL EDUCATION (24 credits)

EDF 3210 Applied Learning Theory (3 credits)
 EDF 3430 Educational Measurement and Evaluation (3 credits)
 TSL 4324 ESOL Strategies for Content Area Teachers (3 credits)
 SCE 4360 Science: Middle and Secondary (3 credits)
 RED 4335 Reading in the Content Areas (3 credits)
 ESE 3940 Secondary School Effective Instruct (3 credits, 90 - hours plus security) **
 SCE 4944 Student Teaching: Biology 6 - 12 (6 credits) Full-time internship/Fall or Spring (**Final Semester**)

MATHEMATICS REQUIREMENT

PSY 3234 Experimental Design & Statistical Inference (3 credits)

BIOLOGY MAJOR CONTENT (43 – 44 credits)

BSC 1010 + L Biological Principles + Lab (4 credits)
 BSC 1011 + L Biodiversity + Lab (4 credits)
 CHM 2045 + L General Chemistry I + Lab (4 credits)
 CHM 2046 + L General Chemistry II + Lab (4 credits)
 CHM 2210 Organic Chemistry I (3 credits)
 PSC 2121 Physical Science (3 credits)
 MAC 2233 Methods of Calculus (3 credits)
 OCE 3008 Oceanography (3 credits) **or** OCB 4633 Marine Ecology (3 credits)
 PCB 3063 Genetics (4 credits)
 PCB 4043 Principles of Ecology (3 credits) *
 MCB 3020 + L General Microbiology + Lab (4 credits) **or** PCB 4023 Molecular & Cell Biology (3 credits)
 PCB 4723 + L Comparative Animal Physiology + Lab (4 cr) * **or** BOT 4503 +L Principles of Plant Physiology + Lab (4 cr)

Electives Approved Science Electives (6-7 credits, including 3 credits upper division)

BSC 2085 & Lab	Anatomy & Physiology I (4 credits)	MCB 4603	Microbial Biology (Davie) (3 credits)
BSC 2086 & Lab	Anatomy & Physiology II (4 credits)	OCB 4043 & Lab	Marine Biology+ Field Studies and Lab (4 credits)
EVR 2017	Environment & Society (3 credits)	ZOO 4690 & Lab	Comparative Vertebrate Morphogenesis (5 credits)
ZOO 2203 & Lab	Invertebrate Zoology & Lab (5 credits)	BCH 3033	Biochemistry I (3 credits)
PCB 3352	Issues in Human Ecology (3 credits)	CHM 2211 & Lab	Organic Chemistry II & Lab (5 credits)
BOT 3223 & Lab	Vascular Plant Anatomy (4 credits)		
BOT 4404 & Lab	Marine Botany (4 credits)		

* See Catalog for possible prerequisites. Permission of instructor required.

** Must be programmed and taken the fall/spring semester prior to student teaching

IMPORTANT NOTES:

Students registered in Education courses must purchase “Live Text” which is an on-line tool that will be used to track individual student competency mastery (CAs) in initial certification programs. For detailed information, please visit:

<https://www.fau.edu/education/students/livetext/students/>

Field experience is a required component of some Education courses. All students requiring a field experience placement must have evidence of current security clearance. For detailed information, please visit:

<http://www.fau.edu/education/students/oass/fieldexperience/>