

FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2022 – 2023

All courses are three (3) credits unless otherwise indicated. Course selections should be made in consultation with an academic advisor.

MEDICAL BIOLOGY MAJOR (2022 - 2023)

Charles E. Schmidt College of Science
Bachelor of Science (BS)

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

Group B

- ___ COP 1031CComputer Programming & Data Literacy for Everyone
(For Non-College Engineering & Computer Science majors)
- ___ MAC 1147Precalculus Algebra & Trigonometry (4 credits)
- ___ MAC 2210Intro Calculus w/Applications (4 credits) **(Permit Only)**
- ___ MAC 2233Methods of Calculus
- ___ MAC 2241Life Science Calculus 1 (4 credits) ***
- ___ MAC 2312Calculus with Analytic Geometry 2 (4 credits)
- ___ PHI 2102.....Logic

*****Must Select One - Please discuss your math selection with your academic advisor.**

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 & D (Required)
Biological Principles
(4 cr. Incl. Lab & Dis) ___ CHM 2045 & L (Required)
General Chemistry 1
(4 cr. Incl. Lab) ‡ <p>(Required: select one below)</p> <ul style="list-style-type: none"> ___ PHY 2048 & L General Physics 1
(5 credits incl. Lab) * ___ PHY 2053 College Physics 1
(5 credits incl. Lab) ** | <ul style="list-style-type: none"> ___ BSC 1011 & L & D (Required)
Biodiversity (4 cr. incl Lab & Dis) |
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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 & DUnited States History Since 1877 ♦
- ___ 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 1000Sociological Perspectives
(Recommended for pre-health-related majors)

Group B

- ___ AMH 2010 & DUnited States History to 1877
- ___ CCJ 2002.....Law, Crime & the Criminal Justice System ‡
- ___ DIG 2202Digital Culture
- ___ ECO 2023.....Microeconomic Principles §
- ___ ECP 2002Contemporary Economic Issues
- ___ EEX 2091Disability and Society
- ___ EVR 1110Climate Change: The Human Dimensions
- ___ EVR 2017Environment and Society
- ___ LIN 2001Introduction to Language **(online course)**
- ___ PAD 2081.....Risk Resilience and Rising Seas ‡
- ___ PAD 2258.....Changing Environment of Soc., Bus., & Gov’t
- ___ SYG 2010Social Problems
- ___ URP 2051.....Designing the City

Note: A required course to take PSY 3234 per the University catalog.

(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 IN GLOBAL CITIZENSHIP

(6 credit hours required)

Student must choose two (2) courses from among the following:

- ___ ANT 2410.....Culture and Society
- ___ EDF 2854Educated Citizen in Global Context
- ___ GEA 2000.....World Geography
- ___ INR 2002.....Introduction to World Politics
- ___ JST 2452Global Jewish Communities Ω
- ___ LAS 2000.....Intro to Caribbean & Latin American Studies
- ___ LIN 2607Global Perspectives on Language
- ___ MUH 2121.....Music in Global Society Ω
- ___ POT 2000.....Global Political Theory
- ___ SYP 2450.....Global Society
- ___ SOW 1005Global Perspectives of Social Services
- ___ SOW 1130Race and Cultural Inclusion in Social Work
- ___ WOH 2012 & D.....History of Civilization 1 (WAC) ++
- ___ WOH 2022.....History of Civilization 2
- ___ WST 2351Gender 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 2000Art Appreciation
- ___ MUL 2010.....Music Appreciation
- ___ PHI 2010 & DIntroduction to Philosophy (WAC) ++
- ___ THE 2000Theatre Appreciation

Group B

- ___ ARC 2208.....Culture & Architecture
- ___ DAN 2100Appreciation of Dance
- ___ FIL 2000 & DFilm Appreciation
- ___ HUM 2471Racism 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 2608Public Speaking \pm

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.
- ** - MAC 2233 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).
- \pm - Starting Spring 2022
- Ω - Starting Spring 2023
- \diamond - See information box below 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. We strongly recommend the two additional WAC courses come from these courses: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, LIT 2070 and LIT 2391. See advisor for additional details.

(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

Civic Literacy Requirement

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

Beginning in Fall 2018, students entering a Florida public institution as a degree-seeking student for the first time needs to demonstrate civic literacy through either taking a certain course (AMH 2020 or POS 2041) or passing an assessment exam. 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.

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) 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.
- (4) 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.

B.S. DEGREE

Required Courses (Biology Core): 63 - 64 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)	
___	CHM 221L	Organic Chemistry II Lab	2 cr - (Requires a “C” or better)	
___	BCH 3033	Biochemistry 1		
OR {	___	MAC 2241	Life Science Calculus	4 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
	___	PHY 2048	General Physics I	4 cr - Prerequisite of a “C” in MAC 2311 per the 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
	___	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 the University catalog
	___	PSY 3234	Exp. Design & Stat. Inference	3 cr - prerequisite: PSY 1012 per the University catalog
	___	PCB 3063	Genetics	4 cr.
	___	PCB 3023	Cell Biology	3cr
	___	MCB 3020 & Lab	General Microbiology and lab	4cr
OR {	___	PCB 3703 & Lab	Human Morphology and Function 1 and Lab	4 cr.
	___	PCB 4723 & Lab	Comparative Animal Physiology and Lab	4 cr.
OR {	___	PCB 3704 & Lab	Human Morphology and Function 2 and Lab	4 cr.
	___	ZOO 4690 & Lab	Vertebrate Structure Dev. & Evolution w/Lab	5 cr.

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

Biochemistry 2 or Biochemistry Lab	BCH 3034 or BCH 3103L	3
Molecular Genetics of Aging	BSC 4022	3
Laboratory Methods in Biotechnology	BSC 4403L	3
Biology of Cancer	BSC 4806	3
Directed Independent Research in Biological Sciences ***	BSC 4910	0 - 3
Special Topics	BSC 4930	1 - 3
Comparative Animal Behavior	CBH 4024	3
Introduction to Drug Design	CHM 4273	3
Structural Biochemistry	CHM 4350	3
Directed Independent Study***	CHM 4905	1 - 4
Senior Seminar	CHM 4930	1
Medical Bacteriology	MCB 4203	3
Evolution	PCB 3674	3
Principles of Ecology	PCB 4043	3
Genetics Lab	PCB 4067L	3
Immunology	PCB 4233	3
Molecular Genetics	PCB 4522	3
Genes and Development	PCB 4594	3
Cellular Neuroscience and Disease	PCB 4842	3
Practical Cell Neuroscience	PCB 4843C	0 - 3
Directed Independent Study***	PCB 4905	1 - 3
Directed Independent Research***	PCB 4915	1 - 3
Directed Independent Research***	PCB 4916	0 - 3
Special Topics	PCB 4930	1 - 8

43-47	credits	Intellectual Foundations Program and Foreign Language
51-52	credits	Biology Core
12	credits	Biology Electives
10-13	credits	Free Electives – (8 credits must be upper-division)
120	CREDITS	TOTAL (45 credits at upper division minimum)