

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.

PHYSICS MAJOR (2022-2023)

Charles E. Schmidt College of Science
Bachelor of Arts (BA) or 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 1105 College Algebra
- ___ MAC 2311 Calc. with Analytic Geometry 1 (4 credits) **(Required)**
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 **(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
- ___ MAC 2241 Life Science Calculus 1 (4 credits)
- ___ MAC 2312 Calc. with Analytic Geometry 2 (4 credits) **(Required)**

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 (see note)
Biological Principles
(4 cr. Incl. Lab & Dis) ___ CHM 2045 & L (see note)
General Chemistry 1
(4 cr. Incl. Lab) ‡ ___ PHY 2048 & L (REQUIRED)
General Physics 1
(5 credits incl. Lab) * | <ul style="list-style-type: none"> ___ BSC 1011 & L & D (see note)
Biodiversity (4 cr. incl Lab & Dis) |
|--|--|

**Must select either both Biology courses or both Chemistry courses from below:
BSC 1010 & BSC 1011 (with labs) or CHM 2045 & CHM 2046 (with labs)
“CANNOT MIX BIOLOGY AND CHEMISTRY COURSE”**

(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.

Group A

- ___ AMH 2020 & D..... United 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
- ___ SYG 1000..... Sociological Perspectives

Group B

- ___ AMH 2010 & D..... United States History to 1877
- ___ 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 2081 Risk Resilience and Rising Seas ‡
- ___ PAD 2258 Changing Environment of Soc., Bus., & Gov’t
- ___ SYG 2010..... Social Problems
- ___ URP 2051 Designing the City

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 2121Music 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 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.
- * - 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
- Ω - Starting Spring 2023
- ◊ - 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.*

BA	BS	
28 - 32 credits	28 - 32 credits	Intellectual Foundations Program & Foreign Language (Excluding Math & Science)
14 credits	14 credits	IFP Science
15 credits	15 credits	Mathematics – Calculus (B.A. and B.S. Degree)
21 - 22 credits	44 credits	Physics Major
21 - 24 credits	0 - 1 credit	Upper Division Electives
<u>14 - 20 credits</u>	<u>14 - 19 credits</u>	<u>Free Electives</u>
120 CREDITS	120 CREDITS	TOTAL

NOTE: See the 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.

MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

BACHELOR OF ARTS (BA) DEGREE

	BSC 1010 & Lab & BSC 1011 & Lab	Biological Principles w/Lab (4 credits) Biodiversity w/Lab (4 credits)
	OR	
	CHM 2045 & Lab & CHM 2046 & Lab	*General Chemistry 1 w/ Lab (4 credits) *General Chemistry 2 w/ Lab (4 credits)
	MAC 2311	Calculus w/ Analytic Geometry 1 (4 credits)
	MAC 2312	Calculus w/ Analytic Geometry 2 (4 credits)
	MAC 2313	Calculus w/ Analytic Geometry 3 (4 credits)
	PHY 2048	General Physics 1 (4 credits)
	PHY 2048L	General Physics 1 Lab (1 credit)
	PHY 2049	General Physics 2 (4 credits)
	PHY 2049L	General Physics 2 Lab (1 credit)
	PHY 1090	First Year Physics Seminar (1 credit)
	MAP 2302 OR MAP 3305	Differential Equations 1 (3 credits) Engineering Mathematics 1 (3 credits)
	PHY 3101C	Survey of Modern Physics (4 credits)
	PHY 3221	Classical Mechanics (4 credits)
	PHY 3323	Electromagnetism 1 (4 credits)
	PHY 4604	Quantum Mechanics 1 (4 credits)
	PHY 3932	Third Year Physics Seminar (1 credit)
	Choose at least One of the following:	
	PHY 4523	Statistical Physics (4 credits)
	PHY 3722C	Physical Electronics (4 credits)
	PHZ 3151C	Computational Physics (4 credits)

Note: *FAU Chemistry sequence requires a C or better to take the next course in the sequence. Need a C or better in ALL Physics courses.

BACHELOR OF SCIENCE (BS) DEGREE

	BSC 1010 & Lab & BSC 1011 & Lab	Biological Principles w/Lab (4 credits) Biodiversity w/Lab (4 credits)
	OR	
	CHM 2045 & Lab & CHM 2046 & Lab	*General Chemistry 1 w/ Lab (4 credits) *General Chemistry 2 w/ Lab (4 credits)
	MAC 2311	Calculus w/ Analytic Geometry 1 (4 credits)
	MAC 2312	Calculus w/ Analytic Geometry 2 (4 credits)
	MAC 2313	Calculus w/ Analytic Geometry 3 (4 credits)
	PHY 2048	General Physics 1 (4 credits)
	PHY 2048L	General Physics 1 Lab (1 credit)
	PHY 2049	General Physics 2 (4 credits)
	PHY 2049L	General Physics 2 Lab (1 credit)
	PHY 1090	First Year Physics Seminar (1 credit)
	MAP 2302 OR MAP 3305	Differential Equations 1 (3 credits) OR Engineering Mathematics 1 (3 credits)
	PHY 3101C	Survey of Modern Physics (4 credits)
	PHY 3221	Classical Mechanics (4 credits)
	PHY 3323	Electromagnetism 1 (4 credits)
	PHY 3324	Electromagnetism 2 (3 credits)
	PHY 4604	Quantum Mechanics 1 (4 credits)
	PHY 3932	Third Year Physics Seminar (1 credit)
	PHY 4523	Statistical Physics (4 credits)
	PHY 3722C	Physical Electronics (4 credits)
	PHZ 3151C	Computational Physics (4 credits)
	PHY 3802L	Undergraduate Laboratory 1 (1 credit)
	PHY 4803L	Undergraduate Laboratory 2 (1 credit)
	PHZ 4113	Mathematical Methods for Physics (4 credits)
APPROVED PHYSICS ELECTIVES (6 credits)		

Note: *FAU Chemistry sequence requires a C or better to take the next course in the sequence. Need a C or better in ALL Physics courses.

Optional Pre-professional Track (23 credits) - Required Courses

	BSC 1011 & L	Biodiversity with lab (3 + 1 = 4 credits)
	BSC 1010 & L	Biological Principles with lab (3 + 1 = 4 credits)
	CHM 2210 & D	Organic Chemistry I w/discussion (3 credits) – CHM 2045 & CHM 2046 (prereqs)
	CHM 2211	Organic Chemistry II (3 credits)
	CHM 2211L	Organic Chemistry II Lab (2 credits)
	PCB 3063	Genetics (4 credits) – BSC 1010 & CHM 2045 are prerequisites
	BCH 3033	Biochemistry I (3 credits) – CHM 2210 & CHM 2211 are the prerequisites