

**FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2023 – 2024**

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

**PHYSICS MAJOR (2023-2024)**

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**

- \_\_\_ BSC 1010 & L **(see note)**  
Biological Principles  
(4 cr. Incl. Lab)
- \_\_\_ CHM 2045 & L **(see note)**  
General Chemistry 1  
(4 cr. Incl. Lab) ‡
- \_\_\_ PHY 2048 & L **(REQUIRED)**  
General Physics 1  
(5 credits incl. Lab) \*

**Group B**

- \_\_\_ BSC 1011 & L **(see note)**  
Biodiversity (4 cr. incl Lab)

**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
- \_\_\_ 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

### 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
- \_\_\_ 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) ++
- \_\_\_ 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.
- \* - 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
- ✕ - Starting Fall 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.

<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.**

#### 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.

**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.*

<b>BA</b>	<b>BS</b>	
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>
<b>120 CREDITS</b>	<b>120 CREDITS</b>	<b>TOTAL</b>

**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)
	<b>OR</b>	
	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 <b>OR</b> 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)
	<b>Choose at least One of the following:</b>	
	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)
	<b>OR</b>	
	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 <b>OR</b> MAP 3305	Differential Equations 1 (3 credits)  <b>OR</b> 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)
<b>APPROVED PHYSICS ELECTIVES (6 credits)</b>		

**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) – <b>CHM 2045 &amp; CHM 2046 (prereqs)</b>
	CHM 2211	Organic Chemistry II (3 credits)
	CHM 2211L	Organic Chemistry II Lab (2 credits)
	PCB 3063	Genetics (4 credits) – <b>BSC 1010 &amp; CHM 2045 are prerequisites</b>
	BCH 3033	Biochemistry I (3 credits) – <b>CHM 2210 &amp; CHM 2211 are the prerequisites</b>