PHYSICS MAJOR (2022-2023)

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

FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2022 – 2023

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 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
____ 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 & 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)

Group B
____ 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 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
____ SOW 1005............ Global Perspectives of Social Services
____ 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
____ 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.
◊ - 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 and LIT 2070. 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

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

<table>
<thead>
<tr>
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<th>BA 28 - 32 credits</th>
<th>BS 28 - 32 credits</th>
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<tbody>
<tr>
<td></td>
<td>Intellectual Foundations Program &amp; Foreign Language (Excluding Math &amp; Science)</td>
<td>IFP Science</td>
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<td></td>
<td>Mathematics – Calculus (B.A. and B.S. Degree)</td>
<td>Physics Major</td>
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<td>15 credits</td>
<td>14 credits</td>
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21 - 24 credits | 0 - 1 credit | Upper Division Electives

14 - 20 credits | 14 - 19 credits | Free Electives

**120 CREDITS** | **120 CREDITS** | **TOTAL**

#### BACHELOR OF SCIENCE (BS) DEGREE

<table>
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<tr>
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<th>BS 28 - 32 credits</th>
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<tr>
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<td>Intellectual Foundations Program &amp; Foreign Language (Excluding Math &amp; Science)</td>
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<td>14 credits</td>
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<td>15 credits</td>
<td>Mathematics – Calculus (B.A. and B.S. Degree)</td>
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<tr>
<td>21 - 22 credits</td>
<td>Physics Major</td>
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</table>

21 - 24 credits | Upper Division Electives

14 - 19 credits | Free Electives

**120 CREDITS** | **TOTAL**

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**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

## Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BSC 1010 &amp; Lab &amp; BSC 1011 &amp; Lab</td>
<td>Biological Principles w/ Lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>BSC 1011 &amp; Lab</td>
<td>Biodiversity w/ Lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>CHM 2045 &amp; Lab &amp; CHM 2046 &amp; Lab</td>
<td>*General Chemistry 1 w/ Lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>CHM 2046 &amp; Lab</td>
<td>*General Chemistry 2 w/ Lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Calculus w/ Analytic Geometry 1</td>
<td>4 credits</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus w/ Analytic Geometry 2</td>
<td>4 credits</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Calculus w/ Analytic Geometry 3</td>
<td>4 credits</td>
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<tr>
<td>PHY 2048</td>
<td>General Physics 1</td>
<td>4 credits</td>
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<tr>
<td>PHY 2048L</td>
<td>General Physics 1 Lab</td>
<td>1 credit</td>
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<tr>
<td>PHY 2049</td>
<td>General Physics 2</td>
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<td>PHY 2049L</td>
<td>General Physics 2 Lab</td>
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<td>PHY 1090</td>
<td>First Year Physics Seminar</td>
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<td>MAP 2302</td>
<td>Differential Equations 1</td>
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<td>OR</td>
<td>Engineering Mathematics 1</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAP 3305</td>
<td>Differential Equations 1</td>
<td>3 credits</td>
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### OR

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHM 2210 &amp; D</td>
<td>Organic Chemistry I w/discussion</td>
<td>3 credits</td>
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<tr>
<td>CHM 2211</td>
<td>Organic Chemistry II</td>
<td>3 credits</td>
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<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry II Lab</td>
<td>2 credits</td>
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<tr>
<td>PCB 3063</td>
<td>Genetics</td>
<td>4 credits</td>
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<tr>
<td>BCH 3033</td>
<td>Biochemistry I</td>
<td>3 credits</td>
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### Approved Physics Electives (6 credits)

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### Notes

- *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

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BSC 1011 &amp; L</td>
<td>Biodiversity with lab</td>
<td>3 + 1 = 4 credits</td>
</tr>
<tr>
<td>BSC 1010 &amp; L</td>
<td>Biological Principles with lab</td>
<td>3 + 1 = 4 credits</td>
</tr>
<tr>
<td>CHM 2210 &amp; D</td>
<td>Organic Chemistry I w/discussion</td>
<td>3 credits</td>
</tr>
<tr>
<td>CHM 2211</td>
<td>Organic Chemistry II</td>
<td>3 credits</td>
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