**FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2020 - 2021**

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

**SECONDARY SCIENCE PHYSICS EDUCATION MAJOR (2021 – 2022)**

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

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### 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.

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### 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  
  Biological Principles  
  (4 cr. Incl. Lab & Dis)
- CHM 2045 & L  
  General Chemistry 1  
  (4 cr. Incl. Lab) *
- PHY 2048 & L (REQUIRED)  
  General Physics 1  
  (5 credits incl. Lab) *

**Group B**

- BSC 1011 & L & D  
  Biodiversity (4 cr. incl Lab & Dis)

**NOTE:** Must select either BSC 1011 & 1010 or CHM 2045 & 2046 (all with labs).

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### 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  
- STA 2023 ...... Introductory Statistics  
- MAC 2311 ..... Calculus 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 ..... Calculus with Analytic Geometry 2 (4 credits) (REQUIRED)

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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 & D ...... United States History Since 1877 (P/F)  
  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 (P/F)  
  RECOMMENDED  
- ANTH 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 2258 ..........Changing Environment of Soc., Bus., & Gov’t  
- SYG 2010 ..........Social Problems  
- URP 2051 ..........Designing the City

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(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 2854 .............. Educated Citizen in Global Context  
- ____ GEA 2000 .............. World Geography **RECOMMENDED**  
- ____ INR 2002 .............. Introduction to World Politics  
- ____ LIN 2607 .............. Global Perspectives on Language  
- ____ SYP 2450 .............. Global Society  
- ____ SOW 1005 .............. Global Perspectives of Social Services  
- ____ 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 **(P/F)**  
- ____ 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  
- ____ LIT 2100 .............. Introduction to World Literature  
- ____ 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) ++**

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**Students Assume Responsibility for Meeting All Graduation Requirements**

Course selections should be made in consultation with an academic advisor.

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**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).

WAC - **(WAC) Writing across the curriculum course.**

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**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.**

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**P/F**

Certain designated undergraduate courses may be taken for a letter grade of pass (P) or fail (F). Students must indicate the grade option preferred when registering; otherwise, a letter grade will be given. The maximum credit available to any student on the P/F option is one course per term with a maximum of 12 credits during a student’s entire course of study. This option is not available for courses in the student’s major, for students on probation, or for Engineering majors.

**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
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/GRW REQUIREMENT. See the University Advising Services Office for details.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Intellectual Foundations Program</td>
</tr>
<tr>
<td>17</td>
<td>Free Electives (Foreign Language taken for BS count as electives)</td>
</tr>
<tr>
<td>9</td>
<td>Lower-Division College Requirements</td>
</tr>
<tr>
<td>24</td>
<td>Professional Education</td>
</tr>
<tr>
<td>29</td>
<td>Major Content</td>
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<tr>
<td>120</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

For additional information, please contact the College of Education Office for Academic and Student Services:
College of Education, Room 230
(561) 297-3570 or [http://www.coe.fau.edu/menu.htm](http://www.coe.fau.edu/menu.htm)

**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](http://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 (9 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.

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8 credits in Biology or Chemistry are required: --------------

### Biology Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BSC 1011 &amp; L &amp; D</td>
<td>Biodiversity (4 cr. incl. Lab and Discussion)</td>
</tr>
<tr>
<td>BSC 1010 &amp; L &amp; D</td>
<td>Biological Principles (4 cr. incl. Lab &amp; Disc)</td>
</tr>
</tbody>
</table>

**2 Biology or 2 Chemistry Courses**

### Chemistry Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHM 2045 &amp; L &amp; D‡</td>
<td>General Chemistry I (4 credits Incl. Lab &amp; Discussion)</td>
</tr>
<tr>
<td>CHM 2046 &amp; L</td>
<td>General Chemistry II (4 credits Incl. Lab)</td>
</tr>
</tbody>
</table>

### LOWER DIVISION COLLEGE REQUIREMENTS (9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDF 2005</td>
<td>Intro to the Teaching Profession <em>(15 observation hours)</em> (3 credits)</td>
</tr>
<tr>
<td>EDF 2085</td>
<td>Intro to Diversity for Educators <em>(15 observation hours)</em> (3 credits) <em>(WAC)</em></td>
</tr>
<tr>
<td>EME 2040</td>
<td>Introduction to Technology for Educators (3 credits) <em>(Online Course)</em></td>
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</tbody>
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### PROFESSIONAL EDUCATION (24 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EDF 3210</td>
<td>Applied Learning Theory (3 credits)</td>
</tr>
<tr>
<td>EDF 3430</td>
<td>Educational Measurement and Evaluation (3 credits)</td>
</tr>
<tr>
<td>TSL 4324</td>
<td>ESOL Strategies for Content Area Teachers (3 credits)</td>
</tr>
<tr>
<td>SCE 4360</td>
<td>Science: Middle and Secondary School (3 credits)</td>
</tr>
<tr>
<td>RED 4335</td>
<td>Reading in the Content Areas (3 credits)</td>
</tr>
<tr>
<td>ESE 3940</td>
<td>Secondary School Effective Instruct (3 credits, 90 - hours plus security) **</td>
</tr>
<tr>
<td>SCE 4944</td>
<td>Student Teaching: Physics 6 – 12 (6 - 12 credits) (Full-time internship, completed during a fall/spring term)</td>
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### PHYSICS MAJOR CONTENT (29 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY 1090</td>
<td>First Year Physics Seminar (1 credit)</td>
</tr>
<tr>
<td>PHY 2049 + L</td>
<td>General Physics II + Lab (5 credits) <em>(Prerequisite of PHY 2048 + L &amp; MAC 2312)</em></td>
</tr>
<tr>
<td>MAP 3305</td>
<td>Engineering Mathematics I (3 credits)</td>
</tr>
<tr>
<td>PHY 3101C</td>
<td>Survey to Modern Physics (4 credits) <em>(Prerequisite MAP 3305 Engineering Mathematics I)</em></td>
</tr>
<tr>
<td>PHY 3323</td>
<td>Electromagnetism I (4 credits)</td>
</tr>
<tr>
<td>PHY 3722</td>
<td>Physical electronics (4 credits)</td>
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**Upper –Division Physics and Mathematics Electives must be approved by advisor**

### SELECT TWO: (All courses are 4 credits each)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHY 3503</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>PHY 4604</td>
<td>Quantum Mechanics I</td>
</tr>
<tr>
<td>PHY 3221</td>
<td>Classical Mechanics</td>
</tr>
</tbody>
</table>

**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/