SECONDARY SCIENCE CHEMISTRY EDUCATION MAJOR (2023 - 2024)

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.

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 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.
PRETEST IS REQUIRED BEFORE TAKING YOUR FIRST MATH COURSE

Group A
___ MGF 1106...... Math for Liberal Arts 1
___ MGF 1107...... Math for Liberal Arts 2
___ MAC 1105...... College Algebra (REQUIRED)
___ STA 2023 ...... Introductory Statistics
___ MAC 2311...... Calculus with Analytic Geometry 1 (4 credits)
or any mathematics course for which one of the above courses is the direct prerequisite

Group B
___ MAC 1147...... Precalculus Algebra & Trigonometry (4 credits)
___ MAC 2210...... Intro Calculus w/Applications (4 credits) (Permit Only)
___ MAC 2233...... Methods of Calculus (REQUIRED or higher math)
___ MAC 2312...... Calculus with Analytic Geometry 2 (4 credits)
___ COP 1031C ..... Computer Programming & Data Literacy for Everyone (For Non-College Engineering & Computer Science majors)
___ PHI 2102....... Logic

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 Biological Principles (4 cr. incl. Lab)
____ CHM 2045 & L (REQUIRED)
General Chemistry 1 (4 cr. incl. Lab) ±
____ PHY 2053 (REQUIRED)
College Physics 1 (5 credits incl. Lab) **

Group B
____ BSC 1011 & L Biodiversity (4 cr. incl Lab)
____ CHM 2045 & L (REQUIRED)
General Chemistry 1 (4 cr. incl. Lab) §
____ PHY 2053 (REQUIRED)
College Physics 1 (5 credits incl. Lab) **

Additional science courses are required. Consult with your academic advisor.

(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.

◊ 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.
### 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 **(RECOMMENDED)**
- 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 **Ω**
- 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)** **(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
- 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 **±**

#### 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.
- † - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
- ± - Starting Spring 2022
- Ω - Starting Spring 2023
- Η - Starting Fall 2023
- ◊ - See information box 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. Teacher Preparation majors will also complete a WAC course through the required EDF 2085. We strongly recommend the final WAC course be one of the following: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, LIT 2070 and LIT 2391. See advisor for additional details.

#### 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.**
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/SPAN 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 Language, Linguistics, and Comparative Literature Department regarding this requirement.

NOTE: Honors Seminars SHALL BE ACCEPTED AS MEETING THE WAC REQUIREMENT. See the University Advising Services Office for details.

| 30 credits | Intellectual Foundations Program |
| 10 credits | Free Electives (Foreign Language taken for BS count as electives) |
| 09 credits | Lower-Division College Requirements |
| 24 credits | Professional Education |
| 47 credits | Major Content |
| **120 CREDITS** | TOTAL |

For additional information, please contact the College of Education Office for Academic and Student Services:
College of Education, Room 230
(561) 297-3570 or https://www.fau.edu/education/students/oass/

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. Earn 60 credits.
3. Submit passing scores on all sections of the General Knowledge (GK) test to the College of Education www.fl.nesinc.com
4. Meet the general university requirements for admission.
5. Complete FAU’s Intellectual Foundations Program or an AA Degree from a Florida State University or College.
6. Be interviewed and recommended for admission.
7. Be programmed by an assigned advisor.
8. Be approved for admission by the College of Education.
MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

NON-MAJOR/FREE ELECTIVES (12 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.

LOWER DIVISION COLLEGE REQUIREMENTS (9 credits):
- EDF 2005 Intro to the Teaching Profession (15 observation hours) (3 credits)
- EDF 2085 Intro to Diversity for Educators (15 observation hours) (3 credits) (WAC)
- EME 2040 Introduction to Technology for Educators (3 credits)

PROFESSIONAL EDUCATION (24 credits)
- EDF 3210 Applied Learning Theory (3 credits)
- EDF 3430 Educational Measurement and Evaluation (3 credits)
- TSL 4324 ESOL Strategies for Content Area Teachers (3 credits)
- SCE 4360 Science: Middle and Secondary (3 credits)
- RED 4335 Reading in the Content Areas (3 credits)
- ESE 3940 Secondary School Effective Instruct (3 credits, 90-hrs plus security) ****
- SCE 4944 Student Teaching: Chemistry 6 - 12 (6 credits) (Final Semester)

CHEMISTRY MAJOR CONTENT (37 credits)
- MAC 1105 College Algebra (3 credits)
- MAC 2233 Methods of Calculus (3 credits)
- PHY 2053 College Physics for the Life Sciences I (4 credits) (Prerequisite MAC 2233)
- PHY 2054 College Physics for the Life Sciences II (4 credits) (Prerequisite of PHY 2053)
- CHM 2045 + L General Chemistry I + Lab (4 credits)
- CHM 2046 + L General Chemistry II + Lab (4 credits) (Prerequisite of CHM 2045 + L)
- OCE 3008 Oceanography (3 credits)
- CHM 3060 Chemical Literature (1 credit)
- CHM 3120 + L Quantitative Analysis + Lab (4 credits)
- CHM 2210 & D Organic Chemistry I (3 credits)
- CHM 2211 + L Organic Chemistry II + Lab (5 credits)
- BCH 3033 Biochemistry I (3 credits)
- BCH 3103L Biochemistry Lab (3 credits)
- CHM 3400 Introduction to Physical Chemistry (3 credits)
- CHM 3609 + L Inorganic Chemistry + Lab (4 credits)

**** 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/