

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.

SECONDARY MATHEMATICS MAJOR (2023 – 2024)

College for Education
Bachelor of Arts (BA) or Bachelor of Arts in Education (BAE)

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

- ___ 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 w/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 Calculus w/Analytic Geometry 2 (4 credits) **(REQUIRED)**
- ___ 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

Group B

-----For Non-Science Majors-----

- ___ AST 2002
Intro. to Astronomy
- ___ BSC 1005 & L **(RECOMMENDED)**
Life Science (3 cr. w/Lab)
- ___ CHM 1020C
Contemp. Chemical Issues
- ___ ESC 2000
The Blue Planet **(online)**
- ___ EVR 1001
Env. Sci. and Sustainability

-----For Non-Science Majors-----

- ___ ANT 2511 & L
Intro to Biological
Anthropology (4 cr. w/ Lab)
- ___ ETG 2831
Nature: Inter. of Sci., Eng., &
the Humanities
- ___ GLY 2010C
Physical Geol. (4 cr. w/Lab)
- ___ GLY2100
History of Earth and Life
- ___ IDS 2382
Human Mission to Mars
- ___ MET 2010
Weather, Climate & Climate
Change
- ___ PSC 2121 **(RECOMMENDED)**
Physical Science

(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 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 **♦**
(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
(RECOMMENDED)
- ___ 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
(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 ✕
- ___ 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 ±

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.
- ± - Starting Spring 2022
- Ω - Starting Spring 2023
- ✕ - 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.

<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.***

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FOREIGN LANGUAGE (0 - 8 credits, 1 or more courses in the same language) - **REQUIRED FOR BA 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, & 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.*

30 credits	Intellectual Foundations Program
09 credits	Free Electives
09 credits	Lower-Division College Requirements
24 credits	Professional Education
<u>48 credits</u>	<u>Major Content</u>
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. Submit passing scores on all sections of the General Knowledge (GK) test to the College of Education 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.

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/>

MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

NON-MAJOR/FREE ELECTIVES (9 credits minimum)

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 BA 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**) (3credits) (**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)
 MAE 4360 Mathematics: Middle and Secondary School (3 credits)
 RED 4335 Reading in the Content Areas (3 credits)
 ESE 3940 Secondary School Effective Instruct (3 credits, 90 - hours plus security) **
 MAE 4945 Student Teaching: Mathematics 6-12 (6 – 12 credits) (**Taken in your Final Semester**)

MATHEMATICS MAJOR CONTENT (48 credits)

MAC 2311 Calculus with Analytical Geometry I (4 credits)
 MAC 2312 Calculus with Analytical Geometry II (4 credits)
 MAC 2313 Calculus with Analytic Geometry III (4 credits)
 MAD 2104 Discrete Mathematics (3 credits)
 MAS 2103 Matrix Theory (3 credits)
 MHF 3202 Intro to Advanced Mathematics (3 credits)
 STA 4442 Probability and Statistics I (3 credits)
 MAA 4200 Modern Analysis (3 credits)
 MAS 4301 Modern Algebra (3 credits)
 MTG 3212 Survey of Geometry (3 credits)
 MAD 2502 Intro to Computational Math or computer programming course (3 credits)

** Must be programmed and taken the fall/spring semester prior to student teaching.

Electives Upper Division Mathematical Sciences (12 credits) – Please see FAU catalog for possible course prerequisites.

MAS 3203	Introductory Number Theory (Recommended)	3 credits
MAP 3305	Engineering Mathematics I	3 credits
MAD 3400	Numerical Methods (Recommended)	3 credits
MAD 4402	Numerical Analysis II	3 credits
MHF 3404	History of Mathematics (Recommended)	3 credits
MHF 3302	Mathematical Logic	3 credits
STA 4102	Computational Statistics I	3 credits
STA 4103	Computational Statistics II	3 credits
STA 4234	Applied Statistics I (Recommended)	2 credits (and)
STA 4202L	Applied Statistics I Lab (Recommended)	1 credit
STA 4702	Applied Statistics II	3 credits
MAD 4301	Graph Theory (Recommended)	3 credits
STA 4853	Applied Time Series and Forecasting	3 credits
MAP 4303	Differential Equations II	3 credits (OR)
MAP 4306	Engineering Mathematics II	3 credits
MAA 4402	Introductory Complex Analysis (Recommended)	3 credits
STA 4443	Probability and Statistics II (Recommended)	3 credits
STA 4618	Linear Programming and Game Theory (Recommended)	3 credits
MAT 4937	Mathematical Problem Solving	3 credits
CIS 4362	Cryptography and Information Security	3 credits
MAS 4107	Linear Algebra II	3 credits
MAD 4605	Introduction to Coding Theory	3 credits
MTG 4930	Topics in Geometry	(1 – 4 credits)
MAT 4930	Topics in Mathematics	(1 – 4 credits)
MAT 4906	Directed Independent Study	(1 – 4 credits)
STA 4906	Directed Independent Study	(1 – 4 credits)