#### Florida Atlantic University - Secondary Education: Mathematics 2025-2026

Students must take 2 of the following courses, 1 must be from group A. The second course may be in group A or group B.

#### I. Communication

(Group A)

ENC 1101 College Writing I (WAC) (Required)

Or a course with an ENC prefix for ENC 1101 is a direct prerequisite

(Group B)

ENC 1102 College Writing II (WAC) +
HIS 2050 Writing History (WAC) +
SPC 2608 Public Speaking (non-WAC)

#### II. Humanities

(Group A)

ARH 2000 Art Appreciation

HUM 2020 Introduction to Humanities

HUM 2020 Honors Introduction to Humanities §

LIT 2000 Introduction to Literature

LIT 2000 Honors Introduction to Literature §

MUL 2010 Music Appreciation

PHI 2010 & D Introduction to Philosophy (WAC) ++

THE 2000 Theatre Appreciation

(Group B)

ARC 2208 Culture & Architecture

ARH 2050 History of Art 1 ARH 2051 History of Art 2

DAN 2100 Appreciation of Dance FIL 2000 & D Film Appreciation

FIL 2000 Honors Film Appreciation §
LIN 2607 Perspectives on Language

LIT 2010 Interpretation of Fiction (WAC) ++
LIT 2030 Interpretation of Poetry (WAC) ++
LIT 2040 Interpretation of Drama (WAC) ++
LIT 2070 Inter of Creative Nonfiction (WAC) ++

LIT 2100 Introduction to World Literature

MUH 2121 World Music

SPT 2530 Hispanic Culture and Civilization WOH 2012 & D History of Civilization 1 (WAC) ++

WOH 2022 History of Civilization 2

### III. Mathematics

(Group A)

MAC 1105 College Algebra (R)

MAC 2311 Calc. w/Analytic Geom. 1 (4 cr.) (Required)

Or any mathematics course for which one of the above general education core course options in Mathematics is the direct prerequisite.

(Group B)

COP 1031C Comp. Prog. & Data Literacy for Everyone (For Non-College Engineering & Computer Science majors)

MAC 1114 Trigonometry #
MAC 1140 Precalculus Algebra #

MAC 1147 Precalculus Algebra & Trigonometry (4 cr.)

MAC 2210 Intro Calculus w/App. (4 cr.) (Permit Only)

MAC 2233 Methods of Calculus

MAC 2312 Calc. w/Analytic Geom. 2 (4 cr.) (Required)

MAP 2491 Mathematics for Biological Sciences 1
MGF 1131 Mathematical Thinking in Context 2

PHI 2102 Logic

IV. Natural Science

(Group A)

AST 2002 Introduction to Astronomy
BSC 1005 & L
CHM 1020C Contemporary Chemical Issues

ESC 2000 The Blue Planet (online)

EVR 1001 Environmental Science and Sustainability
GLY 2010C & D Phys. Geol/Evolution of the Earth (4 cr. w/Lab)

OCE 2001 Introduction to Oceanography #

Or any course in the Natural Science for which one of the above general education core course options in Natural Science is the direct prerequisite. NOTE: at least one course must have a lab from Group A or B.

(Group B)

ANT 2511 & L Intro to Biological Anthropology (4 cr. w/ Lab) ETG 2831 Nature: Inter. of Sci., Eng., & the Humanities

GLY 2100 History of Earth and Life IDS 2382 Human Mission to Mars

MET 2010 Introduction to Weather and Climate

PSC 2121 Physical Science (R)

#### V. Social Sciences

(Group A)

AMH 2010 & D United States History to 1877 ♦
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

(Group B)

CCJ 2002 Law, Crime & the Criminal Justice System

ECO 2023 Microeconomic Principles

EME 2620 Digital Literacy

EVR 1110 Human Dimensions of Environmental Change

EVR 2017 Environment and Society

GEA 2000 World Geography

INR 2002 Introduction to World Politics
LIN 2001 Introduction to Language (online)
PAD 2081 Risk & Resilience to Natural Hazards

POT 2000 Global Political Theory

SOW 1005 Perspectives of Social Services

SYG 1000 Sociological Perspectives

URP 2051 Designing the City

#### VI. Additional Enrichment

Choose 6 credits from Humanities, Social Science, or Natural Science

| (1) (2) |  |
|---------|--|
|---------|--|

#### **LEGEND**

- + ENC 1101 is a prerequisite
- ++ Two Communication courses are required before taking this course.
- § Reserved for Wilkes Honors College & University Honors Program students only.
- Please visit FAU's website regarding the Civic Literacy Requirements.

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

- ‡ Co-requisite of MAC 1105 or a prerequisite of CHM 1025.
- \* MAC 2311 is a prerequisite for this course.
- \*\* MAC 2233 is a prerequisite for this course. If a lab is needed, then take General Physics 1 lab (PHY 2048L).
- (R) Recommended
- (SR) Strongly Recommended
- # The following courses are not offered at FAU but will fulfill this requirement if transferred from another school.
- WAC Writing Across the Curriculum course minimum grade of "C" required. Students must take four WAC courses.

# FOREIGN LANGUAGE (4 - 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/FRE/GER/HBR/ITA/JPN/LAT/SPN 1121) or a higher-level course. Proficiency in 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 catalog for specific requirements, course descriptions, and additional information. The requirements for some General Education (Gen Ed) courses & other courses may be satisfied by passing the appropriate AP or CLEP exam. Check with your advisor and college.

|        |        | CREDIT SUMMARY  |
|--------|--------|---|
| 38 – 3 | 89 cr. | General Education (depending on science course)                         |
|        | 9 cr.  | Lower-Division College Requirements                                     |
|        | 9 cr.  | Free Electives (Foreign Language taken for BA count as electives)       |
| 2      | 4 cr.  | Professional Education Courses (Includes 6 credits of student teaching) |
| 4      | 0 cr.  | Secondary Mathematics Major Content                                     |
| 12     | 0 cr.  | 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 <a href="https://www.fl.nesinc.com/">https://www.fl.nesinc.com/</a>
- 3. Meet the general university requirements for admission.
- 4. Complete General Education Requirements 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 online tool that will be used to track individual student competency mastery (CAs) in initial certification programs. For detailed information, please visit: <a href="https://www.fau.edu/education/students/livetext/students/">https://www.fau.edu/education/students/livetext/students/</a>. 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: <a href="https://www.fau.edu/education/students/oass/fieldexperience/">https://www.fau.edu/education/students/oass/fieldexperience/</a>.

#### Florida Atlantic University - Secondary Education: Mathematics 2025-2026

### 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.

# **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 Intro to Technology for Educators (3 credits)

### Professional Education Component offered in the College of 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 - hours plus security)           |
|          | The above course must be programmed and taken fall/spring semester prior to student |

Student Teaching: Mathematics 6-12 (6-12 credits) (Taken in your Final Semester)

# **MATHEMATICS MAJOR CONTENT (48 credits)**

SCE 4944

| MAC 2311 | Calculus with Analytic Geometry I (4 credits)                          |
|----------|--|
| MAC 2312 | Calculus with Analytic 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 3203 | Intro to Advanced Mathematics (3 credits)                              |
| STA 4442 | Probability and Statistics I (3 credits)                               |
| MAS 3156 | Vector Calculus (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) |

 $\textbf{Electives Upper Division Mathematical Sciences} \ (12\ \text{cr.}) - Please see \ FAU\ catalog\ for\ possible\ course\ prerequisites}.$ 

### All courses are 3 credits unless notated otherwise.

| MAS 3203  | Introductory Number Theory <b>(R)</b> |
|-----------|---------------------------------------|
| MAP 3305  | Engineering Mathematics I             |
| MAD 3400  | Numerical Methods (R)                 |
| MAD 4402  | Numerical Analysis II                 |
| MHF 3404  | History of Mathematics (R)            |
| MHF 3302  | Mathematical Logic                    |
| STA 4102  | Computational Statistics I            |
| STA 4103  | Computational Statistics II           |
| STA 4234  | Applied Statistics I (2 cr.) (R)AND   |
| STA 4202L | Applied Statistics I Lab (1 cr.) (R)  |
| STA 4702  | Applied Statistics II                 |
| MAD 4301  | Graph Theory <b>(R)</b>               |
| STA 4853  | Applied Time Series and Forecasting   |
|           |                                       |

| MAP 4303 | Differential Equations II OR           |
|----------|--|
| MAP 4306 | Engineering Mathematics II             |
| MAA 4402 | Introductory Complex Analysis (R)      |
| STA 4443 | Probability and Statistics II (R)      |
| STA 4618 | Linear Programming & Game Theory (R)   |
| MAT 4937 | Mathematical Problem Solving           |
| CIS 4362 | Cryptography and Information Security  |
| MAS 4107 | Linear Algebra II                      |
| MAD 4605 | Introduction to Coding Theory          |
| MTG 4930 | Topics in Geometry (1 - 4 cr.)         |
| MAT 4930 | Topics in Mathematics (1 - 4 cr.)      |
| MAT 4906 | Directed Independent Study (1 - 4 cr.) |
| STA 4906 | Directed Independent Study (1 - 4 cr.) |
|          |  |