MATHEMATICS MAJOR (2013 – 2014)
The Charles E. Schmidt College of Science
Bachelor of Arts (BA) or Bachelor of Science (BS)

FOUNDATIONS OF WRITTEN COMMUNICATION
(Gordon Rule Writing (GRW), 6 credits required)
(A grade of “C” or higher is required in each course)
___ ENC 1101 .......... College Writing I (REQUIRED)
___ ENC 1102+ ........... College Writing II
THE FOLLOWING COURSES CAN BE SUBSTITUTED FOR ENC 1102:
ANT 1471+ .......... Cultural Difference in a Globalized Society
ENC 1930+ .......... University Honors Seminar in Writing (Permit Only)
ENC 2452+ .......... Honor Composition for Science
NSP 1195+ .......... Being Cared For: Reflections from Other Side of Bed
Students must take four (4) GRW Courses. 
Two (2) must be taken from Foundations of Written Communications.
§Two additional courses are REQUIRED.

FOUNDATIONS OF SOCIETY & HUMAN BEHAVIOR
(6 credits required, select 2 courses from 2 different departments)
Anthropology Department
___ ANT 2000 & D ......................... Introduction to Anthropology
Economics Department
___ ECO 2013# ............................ Macroeconomic Principles
___ ECO 2023# ............................ Microeconomic Principles
___ ECP 2002 ............................. Contemporary Economic Issues
Exceptional Student Education Department
___ EEX 2091 .............................. Disability and Society
Geosciences Department
___ EVR 2017 ............................ Environment and Society
Political Science Department
___ POS 2041 ............................. Government of the United States
Psychology Department
___ PSY 1012 ............................. General Psychology
Public Administration Department
___ PAD 2258 ......................... Changing Env. of Soc., Bus., & Government
Sociology Department
___ SYG 1000 ............................. Sociological Perspectives
___ SYG 2010 ............................. Social Problems
Urban & Regional Planning Department
___ URP 2051 ............................. Designing the City

FOUNDATIONS OF SCIENCE & THE NATURAL WORLD
(6/9 credits req., select 2 courses from 2 different departments)
(One (1) course must have a Lab)
Anthropology Department
___ ANT 2511 & L ......................... Intro to Biological Anthropology
Biology Department
___ BSC 1005 & L ......................... Life Science (3 credits incl. Lab)
Chemistry Department
___ CHM 1020C .......................... Contemporary Chemical Issues
___ CHM 2083 (P/F) ..................... Chemistry in Modern Life (Online Course)
Engineering Dean Department
___ ETG 2831 ............................. Nature: Inter. of Sc., Eng. and the Humanities
Geology Department
___ ESC 2070 ............................ Blue Planet (Online Course)
___ GLY 2010C .......................... Physical Geology (4 credits incl. Lab)
___ GLY 2100 ............................. History of Earth and Life
___ MET 2010 & D ..................... Weather and Climate
Physics Department
___ AST 2002 (P/F) ..................... Introduction to Astronomy
___ PSC 2121 ............................. Physical Science
......................... FOR B.S. Degree: ........................
Chemistry Department
___ CHM 2045 & L ................. General Chemistry I (4 credits incl. Lab)
Physics Department
___ PHY 2048 & L* ..................... General Physics I (5 credits incl. Lab)

FOUNDATIONS OF MATHEMATICS & QUANTITATIVE REASONING
(Grade of “C” or higher required. 12 credits required)
PRETEST IS REQUIRED BEFORE TAKING YOUR FIRST MATH CLASS
NOTE: Students must take at least one course with the prefix
MAC from the list below
___ MAC 2311 ......................... Calculus with Analytic Geometry I (4 cr)
___ MAC 2312 ......................... Calculus with Analytic Geometry II (4 cr)
___ MAC 2313 ......................... Calculus with Analytic Geometry III (4 cr)
Calculus requires a solid background in Algebra and Trigonometry.
If you are not ready to take Calculus the following courses will
provide the necessary background:
___ MAC 1105 ......................... College Algebra
___ MAC 1144 ............................ Trigonometry
___ MAC 1140 ............................ Precalculus Algebra
___ MAC 1147 ......................... Precalculus Algebra & Trigonometry (5 cr)

FOUNDATIONS IN GLOBAL CITIZENSHIP
(Select 2 courses from 2 different departments) (6 cr. req.)
At least 1 course must be Global Perspectives – (GP)
Anthropology Department
___ ANT 2410 ............................ Culture and Society (GP)
Curriculum, Culture, & Educational Inquiry Department
___ EDF 2854 ............................ Educated Citizen in Global Context (GP)
Geography Department
___ GEA 2000 & D .......................... World Geography (GP)
History Department
___ AMH 2010 (P/F) .......................... United States History to 1877
___ AMH 2020 (P/F) .......................... United States History Since 1877
___ WOH 2012 & D+ ....................... History of Civilization I (GRW) (GP)
___ WOH 2022 ......................... History of Civilization II (GP)
Languages, Linguistics, & Comparative Literature Department
___ LAS 2000 ............................. Intro to Caribbean & Latin American Studies
___ LIN 2607 ............................. Global Perspectives on Language (GP)
Philosophy Department
___ PHI 2010 & D+ .......................... Introduction to Philosophy (GRW)
Political Science Department
___ INR 2002 ............................. Introduction to World Politics (GP)
Sociology Department
___ SYD 2790 ............................. Race, Class, Gender, and Sexuality
___ SYP 2450 ............................. Global Society (GP)
Social Work Department
___ SOW 1005 ............................. Global Perspectives of Social Services (GP)

FOUNDATIONS OF CREATIVE EXPRESSION
(6 credits req., select 2 courses from 2 different departments)
Architecture Department
___ ARC 2208 ............................. Culture & Architecture
Visual Art & Art History Department
___ ARH 2000 (P/F) .......................... Art Appreciation
School of Communication & Multimedia Studies
___ FIL 2000 & D .......................... Film Appreciation
English Department
___ LIT 2010+ ......................... Interpretation of Fiction (GRW)
___ LIT 2030+ ......................... Interpretation of Poetry (GRW)
___ LIT 2040+ ......................... Interpretation of Drama (GRW)
___ LIT 2070+ ......................... Interpretation of Creative Nonfiction (GRW)
Languages, Linguistics, & Comparative Literature Department
___ LIT 2100 ............................. Intro to World Literature
Music Department
___ MUL 2010 ............................. History & Appreciation of Music
Theatre & Dance Department
___ DAN 2100 ............................. Appreciation of Dance
___ THE 2000 ............................. Appreciation of Theatre

FLORIDA ATLANTIC UNIVERSITY
All courses are three (3) credits unless otherwise indicated. Course selections should be made in consultation with an academic advisor.
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/GRE/GRK/HBR/ITA/JPN/LAT/SPAN 1121) or a higher level course. Proficiency for a first-level course
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 GORDON RULE WRITING REQUIREMENT.
See the University Advising Services Office for details.

HONORS NOTE: Students can apply for the PSYCHOLOGY HONORS PROGRAM after completion of 60 credits, and before completion
of 105 credits. Students must have a 3.2 overall & Psychology GPA to be admitted and retained in the Honors track.

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<thead>
<tr>
<th>BA</th>
<th>BS</th>
<th>Intellectual Foundations Program and Foreign Language</th>
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<tbody>
<tr>
<td>50 credits</td>
<td>53 credits</td>
<td>Major Core (MAP 2302 &amp; MAS 4107 incl. for BS Degree)</td>
</tr>
<tr>
<td>21 credits</td>
<td>27 credits</td>
<td>Major Electives (Upper Division)</td>
</tr>
<tr>
<td>15 credits</td>
<td>18 credits</td>
<td>Free Electives</td>
</tr>
<tr>
<td>34 credits</td>
<td>22 – 24 credits</td>
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<tr>
<td>120 CREDITS</td>
<td>120 CREDITS</td>
<td>TOTAL</td>
</tr>
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NOTE: See the catalog for specific requirements, course descriptions and additional information. The requirements for some
Intellectual Foundations Program (I.F.P.) courses & other courses may be satisfied by passing the appropriate AP or CLEP exam.
Check with your advisor and college. The Department of Mathematical Sciences accepts passing scores for Calculus AB and Calculus
BC.

The Department of Mathematical Sciences has the following requirements: (1) At least 15 credits of 3000 level or above (upper
division) Mathematics core and elective requirements must be completed at FAU; (2) Any course work in the major field transferred
from another institution must be approved by the math department; (3) No major course may be taken pass/fail; (4) The maximum
amount of credit which may be earned through co-op is 10 credits; Mathematics Department does not allow these credits to count
as major courses; (5) The Mathematics Department requires a minimum 2.2 GPA overall for (BA) or 2.5 GPA overall for (BS) in all
Mathematics courses taken at FAU.
MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

MATHEMATICS (33-42 credits beyond the Calculus sequence including the major core)

**Major Core** (21 credits, 7 courses) - **REQUIRED FOR BOTH BA and BS DEGREES**
- MAD 2104 Discrete Mathematics - MAC 1105 or higher is a prerequisite
- MAD 2502 Introduction to Computational Math - MAC 2311 co-requisite
- MAS 2103 Matrix Theory or Linear Algebra - MAC 2311 is a prerequisite
- MAS 4301 Modern Algebra - MAD 2104 is a prerequisite
- MAA 4200 Modern Analysis - MAC 2311 & MAD 2104 are prerequisites
- MAT 4937 Mathematical Problem Solving - MAD 2104, MAS 2103, MAC 2312 & MAD 2502 are prereqs
- STA 4442 Probability and Statistics - MAC 2313 is a prerequisite

**BACHELOR OF ARTS (BA) DEGREE**
Thirty-six (36) credits beyond the Major Core and Major Electives

**Major Electives** (15 credits minimum)

**CHOOSE 6 COURSES, CONSULT WITH ADVISOR FOR APPROVAL IN SELECTION:**
Any 3000 level or higher Mathematics course, listed in the catalog, not previously taken, EXCEPT: STA 3163, 3949, 4032, 4821 & MAT 3949. Only one pair of (MAP 2302, MAP 3305) or (MAP 4303, MAP 4306) may be counted as part of the elective requirements for the major.

**BACHELOR OF SCIENCE (BS) DEGREE**
Forty-five (45) credits beyond the Major Core and Major Electives including the following:

- MAA 4402 Introductory Complex Analysis – **prerequisite** MAC 2313
- MAP 2302 Differential Equations I (3 credits) - **prerequisite** MAC 2254 or MAC 2312
- MAS 4107 Linear Algebra II - **MAS 2103** or **Linear Algebra I** is a prerequisite,

**Major Electives** (15 credits minimum)

**CHOOSE 8 COURSES FROM THE FOLLOWING IN CONSULTATION WITH YOUR ADVISOR:**
Any 3000 level or higher Mathematics course, listed in the catalog, not previously taken, EXCEPT: STA 3163, 3949, 4032, 4821, MAP 3305, and MAT 3949. Only one pair of (MAP 2302, MAP 3305) or (MAP 4303, MAP 4306) may be counted as part of the elective requirements for the major.

**FREE ELECTIVES** (22 – 24 credits for the BS, 34 for the BA)
Free electives are courses in any college, any department, including Mathematics (22 – 34 credits minimum), needed to meet the 120 credits required for graduation.  **Recommend COP 2220 – Programming in C.**

**SPECIALIZATIONS WITHIN MATHEMATICS**
CHECK WITH THE MATHEMATICS DEPARTMENT FOR SPECIALIZATION AREAS AND COURSES, INCLUDING:

- ACTUARIAL SCIENCE
- COMBINATORICS
- APPLIED MATHEMATICS
- PURE MATHEMATICS
- STATISTICS (MINOR)
- CRYPTOGRAPHY
- DYNAMICAL SYSTEMS