

Math / FSU-Teach

Department of Mathematics

College of Arts and Sciences

Florida State University

The Department of Mathematics at Florida State University offers programs leading to the Bachelor of Science (BS) and Bachelor of Arts (BA) degrees, the Master of Science (MS) and Master of Arts (MA) degrees, and the Doctor of Philosophy (PhD) degree. Areas of specialization are mathematics, applied mathematics and actuarial mathematics.

For those interested in teaching mathematics, FSU-Teach is an innovative approach to teacher education that involves collaboration between scientists, mathematicians and education faculty at Florida State University. In FSU-Teach, students will develop deep science or mathematics knowledge and the knowledge, skill, and experience needed to be an effective science or math teacher. The program will pay for tuition for the first two Education/Teaching courses. Work study positions with scientists, mathematicians and local schools are available. For more information, see our Web site: <http://FSU-Teach.fsu.edu>.

Students desiring to major in FSU-Teach/math must meet the following criteria: satisfactory completion of 52 semester hours; overall 2.5 GPA; and completion of MAC1114, MAC1140 and MAC2311 with a "C-" or better in each. If you have any questions regarding this major, please contact the Mathematics Academic Coordinator, Esther Diaguila, at (850) 644-5868.

A student who has accumulated more than five grades below "C-" (including grades of "U") in mathematics or computer science courses taken for college credit at Florida State University or elsewhere, whether repeated or not, will not be permitted to continue as a major in the department.

Mathematics courses at the 4000-level applied toward the mathematics major must be taken at Florida State University unless specifically exempted by the chair on written request.

The mathematics department is within the College of Arts and Sciences and students in the FSU-Teach/Mathematics program must complete degree requirements for mathematics as well as requirements of both the College of Education and the College of Arts and Sciences. Listed below are some of those requirements. For complete requirements, please consult the *General Bulletin*.

Liberal Studies: All areas of liberal studies must be satisfactorily completed. Students who enter the University with an Associate of Arts (AA) degree from a Florida community college must have completed at least six (6) semester hours of English composition, three (3) semester hours of mathematics, three (3) semester hours of history, six (6) semester hours of humanities, and six (6) semester hours of natural sciences in order to satisfy the College of Arts and Sciences requirements. Students who did not complete these courses at their previous institution will need to do so at Florida State University.

Foreign Language: The College of Arts and Sciences requires that students be proficient at the intermediate level in one language other than English. Students may satisfy the requirement by completing course work through the 2000 level (2200 or equivalent course) of a classical or modern foreign language. (Mathematics majors who are considering doctoral work in mathematics are strongly encouraged to complete the foreign language requirement in French, German or Russian.)

Summer Requirement: Students who enter the University with fewer than sixty (60) semester hours of transfer credit must complete nine (9) hours of course work during the summer at any of the nine State University System institutions.

CLAST requirement: Unless students are exempt, they must show passing scores on all sections of the College Level Academic Skills Test (CLAST).

Minor: Students in the College of Arts and Sciences are required to complete a minor. Minors are typically twelve (12) to eighteen (18) semester hours.

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Please note that the semesters indicated are listed to assist students in planning their schedules and indicate which semesters the courses are usually offered. This does not guarantee these courses will always be offered in the same semesters as they have in the past. Courses marked "irregular" are courses which are not offered on a regular basis. This is the Math portion only. There is additional coursework required through the College of Education. Students coordinate with the FSU-Teach and the Mathematics advisor to complete all requirements.

CORE REQUIREMENTS:

MAC 2311: CALCULUS I (4) (F, SP, SU)
MAC 2312: CALCULUS II (4) (F, SP, SU)
MAC 2313: CALCULUS III (5) (F, SP, SU)
MAP 2302: ORDINARY DIFFERENTIAL EQUATIONS (3) (F, SP, SU)
MAS 3105: APPLIED LINEAR ALGEBRA I (4) (F, SP)
STA 4321: INTRODUCTION TO MATHEMATICAL STATISTICS (3) (F, SP)

ONE OF:

MAD 3703: NUMERICAL ANALYSIS I (3) (F)
COP 3014: PROGRAMMING I (3) (F, SP, SU)
Or
ISC 3313: INTRODUCTION TO SCIENTIFIC COMPUTING (3) (F, SP, SU)

ELECTIVES (MUST CHOOSE AT LEAST TWO)

MAS 4302: INTRO TO ABSTRACT ALGEBRA I (3) (F)
MAA 4224: INTRO TO ANALYSIS (3) (F)
--or-- MAA 4226: ADVANCED CALCULUS I (3) (F)
PHY 2048C : GENERAL PHYSICS A (5) (or an approved Calculus-based natural or social science course.)
MAA 4227: ADVANCED CALC II (3) (F, SP)
MAD 2104: DISCRETE MATHEMATICS I (3) (F, SP, SU)
MAD 3105: DISCRETE MATHEMATICS II (3) (F, SP)
MAP 4170: INTRODUCTION TO ACTUARIAL SCIENCE (3) (F, SU)
MAP 4202: OPTIMIZATION (3) (Irregular)
MAP 4216: CALCULUS OF VARIATIONS (3) (SU)
MAP 4341: ELEM PARTIAL DIFFERENTIAL EQUATIONS I (3) (F, SU)
MAS 4106: APPLIED LINEAR ALGEBRA II (3) (Irregular)
MAS 4303: INTRO TO ABSTRACT ALGEBRA II (3) (SP)
MGF 3301: INTRO TO ADVANCED MATHEMATICS (3) (SP)
MHF 4302: MATHEMATICAL LOGIC I (3) (Irregular)
MTG 4302: ELEMENTARY TOPOLOGY I

CHOOSE AT LEAST ONE FROM EACH GROUP:

Algebra:

MAS 3301: INTRODUCTION TO MODERN ALGEBRA (3)
MAS 4302: INTRODUCTION TO ABSTRACT ALGEBRA (3) (F)
MAS 4203: THEORY OF NUMBERS (3) (F)

Analysis:

MAA 4402: COMPLEX VARIABLES (3) (SP, SU)
MAA 4224: INTRODUCTION TO ANALYSIS I (3) (F)
MAA 4226: ADVANCED CALCULUS I (3) (F)

Geometry:

MTG 4212: COLLEGE GEOMETRY (3)

Modeling:

MAP 4103: MATHEMATICAL MODELING (3) (S/U GRADE ONLY) (SP)
MAP 4175: ACTUARIAL MODELS (4) (F)
MAP 4180: GAME THEORY AND APPLICATIONS (3) (SP)
MAP 4481: MATHEMATICAL MODELING IN BIOLOGY (3)

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COURSE	PREREQUISITE*	SEMESTER OFFERED*
MAC 2311	MAC 1140 & MAC 1114	F, SP, SU
MAC 2312	MAC 2311	F, SP, SU
MAC 2313	MAC 2312	F, SP, SU
MAS 3105	MAC 2312	F, SP
STA 4321	MAC 2313	F, SP
COP 3014	MAC 1140	F, SP, SU
ISC 3313	MAC 2312	F, SP, SU
MAD 3730	MAC 2312, MAS 3105, & Computer Programming	F
MAA 4224	MAC 2313, MAS 3105, (recommended: MGF 3301)	F
MAA 4226	MAC 2313, MAS 3105 (& prior experience with a proof-based course)	F
MAA 4227	MAA 4226	SP
MAA 4402	MAC 2313	SP, SU
MAD 2104	MAC 1140	F, SP, SU
MAD 3105	MAD 2104	F, SP
MAP 2302	MAC 2312	F, SP, SU
MAP 4103	MAP 2302, MAS 3105, PHY 2048C	SP
MAP 4170	MAC 2312	SU, F
MAP 4175	MAP 4170	F
MAP 4180	MAC 2313, MAS 3105, MAP 2302, STA 4321	SP
MAP 4202	MAC 2313, MAD 3703, MAS 3105	Irregular
MAP 4216	MAP 2302, MAA 4226	SU
MAP 4341	MAC 2313, MAP 2302 or 3305	F, SU
MAP 4481	MAC 2311	
MAS 3301	MAC 2312, MAS 3105	
MAS 4106	MAC 2313, MAS 3105	Irregular
MAS 4203	MAS 3301 or 4302	F
MAS 4302	MAS 3105, (recommended: MGF 3301)	
MAS 4303	MAS 4302, MAS 3105, (recommended: MGF 3301)	Irregular
MGF 3301	MAC 2312	
MHF 4302	MAS 3301	
MTG 4212	MAC 2312, MAS 3105	
MTG 4302	MAC 2313, (recommended: MGF 3301)	

*The information above has been collected for you long-term planning, but there are often changes. You are responsible for checking the current University Bulletin and Schedule of Classes. Terms in which particular courses are taught depend on many factors and the students should check the schedule of classes each term.

College of Arts and Sciences

Math / FSU-Teach Check List

Required Core:

MAC 2311 _____

MAC 2312 _____

MAC 2313 _____

MAP 2302 _____

MAS 3105 _____

STA 4321 _____

Choose at least one of:

COP 3014 _____

ISC 3313 _____

Either COP 3014 or ISC 3313 fulfills the computer competency requirement _____

Electives: Must Choose at least Two:

MAA 4227 _____

MAD 2104 _____

MAD 3105 _____

MAP 4170 _____

MAP 4202 _____

MAP 4216 _____

MAP 4341 _____

MAS 4106 _____

MAS 4303 _____

MGF 3301 _____

MHF 4302 _____

MTG 4302 _____

Choose At Least One From Each Group:

Algebra:

MAS 3301 _____

MAS 4302 _____

MAS 4203 _____

Analysis:

MAA 4402 _____

MAA 4224 _____

MAA 4226 _____

Geometry:

MTG 4212 _____

Modeling:

MAP 4203 _____

MAP 4175 _____

MAP 4180 _____

MAP 4481 _____

Required science course

PHY 2048C

Note: Elective can also be a course from any of the 4 categories after completing the requirement of "at least one course". This is the Math portion only. Additional course work through the College of Education is required.

The courses listed above are the Math portion only. Other courses from Education are required.