

Bachelor of Arts in Mathematics with major in Math Education

The Mathematics Department will start offering, starting Fall 2009, a new BA in Mathematics with major in Math Education. The curriculum is designed so completion of this degree will give immediate state accreditation to teach in Florida schools; we expect this to be confirmed by state authorities this Fall.

The program will create more and better-prepared mathematics teachers by incorporating established methods into the programs, methods that seamlessly incorporate recruitment, integrated content-infused teaching strategies, mentoring, and induction. A foundational component allows candidates to “test-drive” teaching through a no-strings-attached early teaching experience, where they explore their interest in teaching as they assist fellow students learn mathematics. Once they enter the program, their teaching skills will be developed through integration of math content within teaching methodology courses, providing a teaching plus content immersive experience. The programs extend beyond the classroom, to include mentoring both while on campus and during induction into the teaching profession, as well as financial support for students (up to \$10,000/year).

Sequenced Course of Study and Expected Learning Outcomes

The typical student will be able to complete the Bachelor of Arts in Mathematics with an Education track in four years. Below is the study plan:

	Fall	Spring	summer
Year 1	Calculus 1 (4 credits) Science w/ Lab (5) Core Curriculum (3) First Year Experience (1)	Calculus 2 (4 credits) Science w /Lab (5) Core Curriculum (6)	Core Curriculum (3)
Credits	13 credits	15 credits	3 credits
Year 2	Calculus 3 (4) Core Curriculum (3) Math Education Seminar (1) Language (5)	Linear Algebra (3) Core Curriculum (6) Language (5) Early Teaching Experience (1)	Computer Programming (3/4) Discreet Math (3)
Credits	13 credits	15 credits	6/ 7 credits
Year 3	Mathematics Modelling (4) MAA 3200 (3) Nature Math & Sci. (3) Statistics (3)	Perspectives in Math and Science Education (3) History of Math (3) RED 4325 (3) MAE 3651 (3) Electives (2)	
Credits	13 credits	14 credits	
Year 4	MAE 4333 (3) TSL 4324 (3) Electives (3) Number Theory (3) College Geometry (3)	Teaching Internship (9) Problem Solving Seminar *(3)	
Credits	15 credits	12 credits	

Common prerequisites:

- MAC 2311 Calculus 1 (4)
- MAC 2312 Calculus 2 (4)
- MAC 2313 Calculus 3 (4)
- COP 2250 Java Programming (3)
 - Or COP 2210 Introduction to Programming (4)
 - Or CGS 2423 C for Engineers (3)

Completion of two of the following courses with labs:

- BSC 1010 General Biology I
- BSC 1010L General Biology Lab I
- BSC 1011 General Biology II
- BSC 1011L General Biology Lab II
- CHM 1045 General Chemistry I
- CHM 1045L General Chemistry Lab I
- CHM 1046 General Chemistry II
- CHM 1046L General Chemistry Lab II
- PHY 2048 Physics with Calculus I
- PHY 2048L Physics with Calculus Lab I
- PHY 2049 Physics with Calculus II
- PHY 2049L Physics with Calculus Lab II

Courses required for degree:

- MAD 2104 Discrete Math (3)
- MAS 3105 Linear Algebra (3)

Upper Division Courses to be taught by Mathematics and Statistics Departments

- MAP 3103 +MAP 3103L Math Modelling and lab (4)
- MAA 3200 Intro to Advanced Math (3)
- MTG 3212 College Geometry (3)
 - MHF 3404 History of Math (3)
- MAS 4203 Number Theory (3)
- MAT 4394 Problem Solving Seminar (3)
- STA 4321 Mathematical Statistics 1 (3)
 - or STA 3163 Statistical Methods 1 (3)
- MAT 3893 Mathematics Education Seminar (1)
- MAT 3894 Early Teaching Experience (1)
- STA 3163 or STA 4321

Courses to be taught by College of Education:

- MAE 4xxx Nature of Math and Science (3)
- MAE 4xxx Perspectives in Math and Science Education (3)
- RED 4325 Reading (3)
- MAE 3651 Learning Math with Technology (3)

MAE 4333 Special Teaching Lab: Math (4)
TSL 4324 Teaching second language (3)
MAE 4942 Teaching Internship (9)