Sample 5 year course plan for Math Major with Secondary Education Licensure
Last updated Fall 2021

First Year	**Fall (15cr)** • Math 1101 Calculus I (5cr) (M/SR) • Engl 1601 Writing for Liberal Arts (4cr) (WLA) • Intellectual Community (2cr) (IC) • World Language 1 (4cr)	**Spring (17cr)** • Math 1102 Calculus II (5cr) • World Language 2 (4cr) (FL) • CMR 1042 Public Speaking & Analysis (4cr) (E/CR) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP)
Second Year	**Fall (16cr)** • Math 2101 Calculus III (4cr) • Math 3111 Linear Algebra (4cr) • Math Major Computing or Statistics Requirement (4cr) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP)	**Spring (14cr)** • Math 2202 Math Perspectives (4cr) • Math Major Computing or Statistics Requirement (4cr) • Ed 2601 Development, Learning & Teaching (4cr) (SS) • Psych 2581 Drugs Human Behavior (2cr)
Third Year	**Fall (17cr)** • Math 3221 Real Analysis I (4cr) • Math 3411 Discrete and Combinatorial Math (4cr) • Math 2211 History of Math or Math 3211 Geometry (4cr) • Ed 2121 Introduction to Education (4cr) & Ed 2111 Tutor-Aide Practicum (1cr)	**Spring (16cr)** • Math 3231 Abstract Algebra I (4cr) • Math Major Math Applications Course (4cr) • Math or non-math elective (4cr) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP)
Fourth Year	**Fall (14cr)** • Math 4901 Senior Seminar (2cr) • Math 2211 History of Math or Math 3211 Geometry (4cr) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP)	**Spring (16cr)** • Senior Seminar continues • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP) • GenEd (4cr) (Sci, Sci-L, ArtP, Hist, Hum, FA or one from HDiv, Envt, IP) • Math or non-math elective (4cr) • Math or non-math elective (4cr)
Fifth Year	Courses taken in the Division of Education. Education courses are a full course load and it is not recommended that you take any courses other than the required education courses in your fifth year. For the specific courses required check your APAS.	

- Use APAS and Grad Planner to adapt the sample plan to your situation.
- **Geometry and History of Math are offered in alternating years, so it is very important you take them when they are offered. You can take either of these courses as early as your second year.**
- Apply for admission to the Secondary Education program the fall before you begin your education year.
- Try to take an average of 15 credits per semester. Try not to take a heavy load in your first semester.
- A few pure math electives are 2cr courses.
- If you want to participate in programs (study abroad, internships, etc.) that require you to be away from UMM campus, then plan to fit your courses in other semesters.
- The course Math 4901: Senior Seminar is a capstone course for your mathematics major. You should complete any courses which relate to your senior seminar project before you register for the senior seminar. For example, if you wish to pursue a senior seminar that involves a topic in geometry, you should have completed Math 3211 Geometry before you begin senior seminar.