It is strongly recommended that all mathematics majors take Physics 201 and 202. The minimum number of semester hours required in major courses for a major in mathematics is 33 for the Mathematical Sciences Option and 36 for the Teacher Licensure Option. The minimum number of semester hours in all courses (major and non-major) required for the major in mathematics is 120 (121 for Teacher Licensure Option if the collateral is chosen in a biological or physical science).

MINOR
A minor in mathematics consists of Mathematics 201, 202, and 203 plus nine additional semester hours above the 203-level. At least six of those additional hours must be at the 300-level or higher. Mathematics 270 and 370 cannot be used to satisfy the requirements for a minor in mathematics.

COLLATERAL
A collateral in mathematics consists of Mathematics 201 and 202 plus six semester hours above the 202 level. Mathematics 270 and 370 cannot be used to satisfy the requirements for a collateral in mathematics.

OTHER INFORMATION
During registration, beginning students at FMU are placed by members of the Department of Mathematics in their first mathematics course. Adjustments to the following placements may be made due to low scores on the Verbal Section of the SAT. Equivalent ACT scores are used for students who did not take the SAT. Students who took an AP Calculus AB course in high school and scored a five on the examination or an AP Calculus BC course and scored a three or higher on the examination are typically placed in Mathematics 203; those who scored a three or four on the AP Calculus AB examination are advised to enter Mathematics 202; those who scored a one or two are typically placed in Mathematics 201. Students with a strong high school background in both algebra and trigonometry and who make 570 or higher on the Quantitative Section of the SAT are typically placed in Mathematics 201. Beginning students with a strong background in algebra but little or no background in trigonometry and at least 540 on the Quantitative Section of the SAT are typically placed in either Mathematics 131, Mathematics 132, Mathematics 134, Mathematics 137, Mathematics 140, or Mathematics 170 based on their chosen major. Students who have had at least two years of high school algebra and who make between 460 and 530, inclusively, on the Quantitative Section of the SAT are typically placed in either Mathematics 111 or Mathematics 121 based on their chosen major. Students who have less than two years of high school algebra or who make less than 460 on the Quantitative Section of the SAT are typically placed in Mathematics 105 or Mathematics 105E/105L based on their chosen major. Mathematics 105 and Mathematics 105E/105L are also available to older students who are not recent high school graduates. Students who disagree with their placements in their initial mathematics course may see the department chair or his/her designee by the third day of the semester to schedule a Mathematics Placement Test.

Mathematics 105 and Mathematics 105E and 105L, while earning credit toward graduation, will not satisfy any of the six hours of Mathematics in the General Education Requirements.

Mathematics 170, 270, and 370 are designed for students seeking South Carolina Teacher Licensure in early childhood education or in elementary education or a B.G.S. in Educational Studies. It should be noted that a grade of C or higher in Mathematics 111 (or 111E) or a score of 540 or more on the Quantitative Section of the SAT is the prerequisite for Mathematics 170.

Many areas of concentration require completion of Mathematics 132 or 134 as preparation for certain applied courses.

Students who complete General Education Requirements for a B.A. by taking Mathematics 111 (or 111E/111L) and Logic should consider the restriction such selections place on future choices of a major.

Mathematics 134 is required for majors in business, nursing, middle level education, and medical technology and is recommended for majors in sociology, history, and psychology.

No student can later take for credit any mathematics course that was a prerequisite (or was in the prerequisite sequence) for a mathematics course for which he/she has already received credit UNLESS he/she is repeating that course in order to obtain a better grade or he/she obtains written permission from the department.

A student cannot receive credit for Mathematics 105, 105E/105L, 111, 111E/111L or 121 after receiving credit for any mathematics course numbered higher than 121. A student may repeat a course to raise a grade earned in that course.

MATHEMATICS COURSES (MATH)
105 College Algebra I (3) (Prerequisite: Placement Scores. A grade of C or higher in Mathematics 105 is required to advance to Mathematics 111, 111E/111L or 121). F, S, SU. The study of real numbers and their operations and properties; order of operations including exponents and roots; linear equations and inequalities in one and two variables, their systems and applications; introduction to functions and graphs; and the study of polynomials and their operations. Earns credit toward graduation but will not satisfy any of the six hours of Mathematics in the General Education Requirements. Credit cannot be given for both Mathematics 105 and Mathematics 105E.

105E College Algebra I with Extended Studio (3) (Corequisite: Mathematics 105L) A grade of C or higher in Mathematics 105 (or in Mathematics 105E) is required for the student to advance to Mathematics 111, 111E/111L or 121. Mathematics 105E is the equivalent of Mathematics 105 (see catalog description for MATH 105) with a studio component that complements learning experiences by providing additional individualized instruction and assistance with the development of course assignments, emphasizing process, and problem solving. Credit cannot be earned for both Mathematics 105 and Mathematics 105E.

105L Extended Studio (1:3) (Corequisite: Mathematics 105E) Extended studio time and space for students enrolled in Mathematics 105E. The studio component complements the Mathematics 105E learning experiences by providing additional individualized instruction and assistance with the development of course assignments, emphasizing process and problem solving.

111 College Algebra II (3) (Prerequisite: Grade of C or higher in Mathematics 105 or Mathematics 105E or placement scores. The grade of C or higher is required in Mathematics 111 (or 111E) to enroll in any higher numbered mathematics course for which Mathematics 111 (or 111E) is a prerequisite.) F, S, SU. The study of polynomials, their operations and factoring, operations with and simplifying rational expressions, roots and radicals, quadratic equations and inequalities, graphs of non-linear functions and the conic sections; exponents and logarithmic functions. Credit cannot be given for both Mathematics 111, 111E and 121.

111E: College Algebra II with Extended Studio II (3) (Prerequisite: Grade of C or higher in Mathematics 105 or 105E or placement scores. The grade of C or higher is required in Mathematics 111E to enroll in any higher numbered mathematics course for which Mathematics 111 is a prerequisite.) F, S, SU. Mathematics 111E is the equivalent of Mathematics 111 (see catalog description for MATH 111) with a studio component that complements learning experiences by providing additional individualized instruction and assistance with the development of course assignments, emphasizing process, and problem solving. Credit cannot be earned for both Mathematics 111, 111E, and 121.

111L Extended Studio II (1:3) (Corequisite: Mathematics 111E). Extended studio time and space for students enrolled in Mathematics 111E. The studio component complements the Mathematics 111E learning experiences by providing additional individualized instruction and assistance with the development of course assignments, emphasizing process and problem solving. Assessed as S (satisfactory) or U (unsatisfactory). To receive credit for Math 111L, students must receive a grade of C or higher in Math 111E; credit for Math 111L may only be earned once.