

DEPARTMENT OF MATHEMATICS

Head of the Department: Professor Hudson
Professors: Cannon, DeAlwis, Golding, Hudson, Kabza, Li, Merino, Neuerburg, Pedersen, Reyes
Associate Professors: Acosta, Lewallen, O'Callaghan, R. Wills
Assistant Professors: Gurney, Walls, Wang
Instructors: Busekist, Carona, Clifton, Dutsch, Guidroz, Kirkpatrick, Lorenzen, D. Miller, E. Miller, Muller, Settoon, Simon, Svyeshnikova, Swaim, Szeto, Terranova, Waddell, A. Wills

The mission of the Department of Mathematics is to provide an appropriate mathematical course of study for all students enrolled in Southeastern Louisiana University. In addition to contributing to the broad cultural background of the general education student, the Department of Mathematics offers courses that lead to the mathematical proficiency of students desiring to continue in mathematics as graduate students, as competent users of mathematics in business, industry or government, or as teachers of mathematics at either the elementary or secondary level.

All students are required to take at least six hours of mathematics. Students should consult their major to determine the proper concentration to follow.

The Department of Mathematics offers credit examinations for Math 161, Math 162, Math 163, and Math 165. Students may take a credit exam for a particular course only once. For more information on credit exams, students should contact the Department of Mathematics.

In order to graduate with a major in mathematics, a student must have a grade of "C" or better in all mathematics courses taken.

PLACEMENT IN MATHEMATICS

Placement of entering freshmen in mathematics courses is based on the mathematics score on the ACT Assessment. Students are not permitted to register for mathematics courses until those scores are on file in the Office of Testing.

The ACT Assessment is used as a means of determining the degree of preparation in mathematics. The placement procedure, outlined below, ensures that each entering freshman will begin the study of mathematics at a level for which he or she is prepared.

1. A student whose ACT mathematics score is 18 or below is required to take Math 92: Transitional Mathematics. Students who are placed in Math 92 must pass the course before enrolling in Math 155.
2. Placement of beginning freshman according to ACT mathematics score:
Math 92: ACT mathematics score of 18 or below. Credit for Math 92 does not count towards graduation.
Math 155: ACT mathematics score of 19 or 20.
Math 161: ACT mathematics score of 21 or higher.
Math 165: ACT mathematics score of 25 or higher.
Math 200: ACT mathematics score of 28 or higher.
3. Advanced Placement – a student whose ACT mathematics score is 28 or above is eligible to be placed directly into Math 162, 163, 165, 167, or 241, depending upon their choice of major. Upon completion of Math 162, 163, 165, 167, or 241 with the grade "C" or better in the first attempt, the student will receive the Grade "P" in Math 161, with 3 credit hours. Upon completion of Math 200 with the grade "C" or better in the first attempt, the student will receive the grade "P" in Math 165, with 3 credit hours.

PROGRESSION POLICY

Students pursuing the degree of Bachelor of Science in Mathematics must meet both of the following progression standards.

- a. Students may not repeat any of the following courses more than once: MATH 200, MATH 201, MATH 312, MATH 223.
- b. Students must successfully complete MATH 200 with a grade of "C" or better by the end of the 4th regular semester following the declaration of a major in Mathematics.

Students with exceptional circumstances must have an alternative progression plan approved by the Department Head. Students who do not meet these standards will not be allowed to continue in the Mathematics major.

MAJOR IN MATHEMATICS

Majors in Mathematics in the College of Science and Technology must complete a minimum of forty-three (43) semester hours in Mathematics.*

HONORS DIPLOMA IN MATHEMATICS

For the Honors Diploma in Mathematics, majors must complete the following:

English 121H ¹	3 hours
English 122H ²	3 hours
History 101H ³	3 hours
History 102H ⁴	3 hours
English 291H, English 292H, History 201H, History 202H, Econ 201H, GBIO 151H, Math 161H, Honors 191, Honors 311, Honors 312, Honors 313, or Honors 314 ⁵	3 hours
Foreign Language 101	3 hours
Foreign Language 102	3 hours
Math 350, 360, 370, 380 ⁶	12 hours
Math 490 ⁷	3 hours
Honors 300 Senior Thesis	1 hour
Total	37 hours

¹English 121H can be substituted for English 101.

²English 122H can be substituted for English 102.

³History 101H can be substituted for History 101 or 201.

⁴History 102H can be substituted for History 102 or 202.

⁵Any of English 291H, English 292H, History 201H, History 202H, Econ 201H, GBIO 151H, Math 161H, Honors 191, Honors 311, Honors 312, Honors 313, or Honors 314 can be substituted for similar major requirements with the approval of the Department Head.

⁶These hours must be completed as an H-Option.

⁷The domain in which the student will complete the thesis project and the student's participation in the STAR program, service learning, internship, or international experience will be determined during the student's enrollment in Math 490.

*The required courses are listed within the various concentrations options.

MINORS

In order to minor in Mathematics, the student must complete a minimum of twenty-two semester hours. These hours are:

Math 200	5 hours
Math 201	5 hours
Math 223	3 hours
Math 312	3 hours
Math 309, 350, 360, 370 or 400 level Math courses (Choose 2) ¹	6 hours

¹Math 460 and Math 467 may not be used to satisfy this requirement

CURRICULUM IN MATHEMATICS LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

FIRST YEAR

FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
†Mathematics 200	5	†Mathematics 201	5
Chemistry 121	3	English 102 or 122H	3
Chemistry Laboratory 123	1	Communication 211	3
English 101or 121H	3	Biological Science 151.....	3
Computer Science 161	3	Biological Science Laboratory 152.....	1
Southeastern 101	2		

SECOND YEAR

†Mathematics 223	3	†Mathematics 350	3
†Mathematics 312	3	†Mathematics 360	3
History Elective.....	3	Computer Science 280	3
Foreign Language 101	3	Foreign Language 102	3
English 230, 231 or 232	3	Art Elective ¹	3
	15		15

THIRD YEAR

†Mathematics 370	3	†Mathematics Elective (400 level) ⁴	3
Physics 221	3	†Mathematics 380	3
Physics Laboratory 223	1	History Elective	3
Computer Science 319, 389, 391, 450, or 479	3	Science ³	4
Social Science Elective ^{2,6}	3	Kinesiology Laboratory	1
Elective	3		
	16		14

FOURTH YEAR

†Mathematics 417	3	†Mathematics 441	3
†Mathematics Elective (400 level) ⁴	3	†Mathematics Elective (400 level) ⁴	3
Economics 102, 201, or 202 ⁶	3	Electives	6
Science Elective ⁵	3	Kinesiology Laboratory	1
Elective.....	3		
	15		13

Total semester hours required 120

Southeastern 101 is not required of transfer or readmitted Southeastern students with 30 hours or more. Those students will replace Southeastern 101 with 2 hours of free electives.

†Major course; grade of "C" or better required.

¹To be taken from Art, Music, Dance, or Theatre.

²To be selected from the disciplines of Geography, Anthropology, Political Science, Psychology, or Sociology.

³Must complete a one-year sequence by taking Biology 153/154, Chemistry 122/124, or Physics 222/224

⁴Math 460 and 467 may not be used to satisfy this requirement.

⁵Any 200-, 300-, or 400-level course in Botany, General Biology, Microbiology, Zoology, Chemistry, or Physics; or use to complete a second science sequence.

⁶One of these courses must be taken at the 200 level or above.

CURRICULUM IN MATHEMATICS EDUCATION LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

FIRST YEAR

FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
†Mathematics 200 ¹	5	†Mathematics 201	5
English 101 or 121H	3	Communication 210	3
Computer Science 161	3	†English 102 or 122H	3
Library Science 102	1	Biological Science 151/152	4
Southeastern 101	2	Fine Arts ²	3
Elective	1		
	15		18

SECOND YEAR

†Mathematics 223	3	†Mathematics 309	3
†Mathematics 312	4	†Mathematics 311	3
English 230, 231, or 232	3	†Mathematics 360	3

Physical Science ³	3	Biological or Physical Science ⁵	4
History 201 or 202	3	††Education 203 (Take with EDUC 212.....)	2
		††Education 212.....	1
	16		16

THIRD YEAR

†Mathematics 370	3	†Mathematics Elective (400 level) ⁶	3
†Mathematics 380	3	†Mathematics Education 385	4
†Mathematics 425	3	†Education 407	3
†Educational Psychology 311.....	3	†Education 472	3
Political Science 201	3	†Educational Psychology 315.....	3
	15		16

FOURTH YEAR

†Mathematics Elective (400 level) ⁶	3	Education 486	9
†Mathematics 485.....	4		
†Education 490	6		
†Special Education 210.....	2		
	15		9

Total semester hours required 120

Southeastern 101 is not required of transfer or readmitted Southeastern students with 30 hours or more. Those students will replace Southeastern 101 with 2 hours of free electives.

¹For placement in Mathematics 200, see Mathematics Placement in this catalogue.

²To be taken from Visual Art, Music, Dance, or Theatre.

³Must be taken from Chem 121/123 or Phys 221/223.

⁴To be taken from Anthropology or Economics or Geography or Psychology or Sociology.

⁵Must complete a one year sequence by taking Gbio 153/154, Chem 122/124, or Phys 222/224.

⁶Math 467 may not be used to satisfy this requirement.

†Student must make a grade of "C" or better.

††Student must make a grade of "B" or better.