#### DEPARTMENT OF MATHEMATICS

Head of the Department: Professor Hudson

Professors: Cannon, DeAlwis, Golding, Hudson, Kabza, Li, Merino, Neuerburg, Pedersen, Reyes

Associate Professors: Acosta, O'Callaghan, R. Wills

Assistant Professors: Gurney, Walls, Wang

Instructors: Adelman, Busekist, Carona, Clifton, Dutsch, Guidroz, Kirkpatrick, Kuhn, Lorenzen, Mayeux, 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 a comprehensive degree program providing a solid background in many areas of Mathematics. When combined with the opportunities for undergraduate research, completion of the degree in Mathematics provides students with both computational skills and theoretical understanding necessary to make them ready for immediate employment in business, industry, and education, or for continued study at the graduate level. Students completing the minor in Mathematics will have a valuable knowledge of mathematics, providing them a broader skill set for use in future employment or study. 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, 177, or 241, depending upon their choice of major. Upon completion of Math 162, 163, 165, 177, 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 4<sup>th</sup> regular semester following the declaration of a major in Mathematics.

Students with exceptional circumstances must have an alternative progression plan approved by the 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.

#### HONORS DIPLOMA IN MATHEMATICS

For the Honors Diploma in Mathematics, majors must complete the following:	
English 210H, 291H or 292H <sup>1</sup>	3 hours
History 101H, 102H, 201H, or 202H	
Communications 211H	3 hours
General Biology 151H or 153H.	3 hours
Honors 191 <sup>2</sup>	3 hours
Senior Thesis	0 hours
Math 350, 360, 370, 380 <sup>3</sup>	6 hours
Math 490 <sup>4</sup>	3 hours
Total	24 hours

<sup>&</sup>lt;sup>1</sup>May be substituted for English 230, 231, or 232..

<sup>&</sup>lt;sup>2</sup>Sastifies Art Elective or Art/Music/Theatre/Dance requirement.

<sup>&</sup>lt;sup>3</sup>These hours must be completed as an H-Option.

<sup>&</sup>lt;sup>4</sup> The 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.

#### **MINORS**

<sup>1</sup>Math 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 SECOND SEMESTER FIRST SEMESTER S.H.†Mathematics 200 ...... 5 †Mathematics 201 ...... 5 Chemistry Laboratory 123......1 Biological Science Laboratory 152......1 15 SECOND YEAR Art Elective 3 THIRD YEAR Physics Laboratory 223 ......1 History Elective ......3 Computer Science (300- or 400-level) Elective or Math Science<sup>3</sup>.....4 Kinesiology Laboratory ...... 1 16 14 FOURTH YEAR †Mathematics 441 ...... 3 Electives .......6 Kinesiology Laboratory......1 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.

<sup>†</sup>Major course; grade of "C" or better required.

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

<sup>&</sup>lt;sup>2</sup> To be selected from the disciplines of Geography, Anthropology, Political Science, Psychology, or Sociology.

<sup>&</sup>lt;sup>3</sup>Must complete a one-year sequence by taking Biology 153/154, Chemistry 122/124, or Physics 222/224

Math 467 and Math 485 may not be used to satisfy this requirement.

<sup>&</sup>lt;sup>5</sup> Choose from GBio 153, Chem 122, Phys 222 (to complete a second science lecture sequence), or any 200-, 300-, or 400-level course in Botany, General Biology, Microbiology, Zoology, Chemistry, or Physics.

<sup>&</sup>lt;sup>6</sup>One of these courses must be taken at the 200 level or above.

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

	FIRST YEAR	
FIRST SEMESTER S.H.	SECOND SEMESTER	S.H.
†Mathematics 200 <sup>1</sup> 5	†Mathematics 201	
English 101 or 121H or 123H	Communication 210	
Computer Science 161	†English 102 or 122H or 124H	
Library Science 102 1	Biological Science 151/152	
Southeastern 101	Fine Arts <sup>2</sup>	3
Elective1		
15		18
	SECOND YEAR	
†Mathematics 223	†Mathematics 309	3
†Mathematics 312	†Mathematics 311	
English 230, 231, or 232	†Mathematics 360	
Physical Science <sup>3</sup>	Biological or Physical Science <sup>4</sup>	4
History 201 or 202	††Education 203 (Take with EDUC 212)	
•	††Education 212	1
16		16
	THIRD YEAR	
†Mathematics 370	†Mathematics Elective (400 level) <sup>5</sup>	3
†Mathematics 380	†Mathematics Education 385	4
†Mathematics 425	†Education 407	
†Educational Psychology 311	†Education 472	
Political Science 201	†Educational Psychology 315	
15		16
	FOURTH YEAR	
†Mathematics Elective (400 level) <sup>5</sup>	Education 486	9
†Mathematics 485		
†Education 490		
†Special Education 210		
15		9
13		,

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.

120

Total semester hours required

<sup>&</sup>lt;sup>1</sup>For placement in Mathematics 200, see Mathematics Placement in this catalogue.
<sup>2</sup> To be taken from Visual Art, Music, Dance, or Theatre.
<sup>3</sup> Must be taken from Chem 121/123 or Phys 221/223.

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

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

Must Chem 122/124, or Phys 222/224.

Must A67 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.