

# PRE-PHARMACY

## Associate of Science

This two-year program prepares the graduate for application to pharmacy school, a 4 year program leading to licensure as a pharmacist. The future of pharmacists is bright with growing demand and an increasing variety of practice settings. The individual selecting this program must be dedicated and self-motivated to excel at rigorous academic coursework for the two years of prerequisites at South Texas College and four years of pharmacy school.

Entering students, please note that the second year suggests MATH 2413 Calculus I. Students with a score of 980+ on the math portion of the TSIA2 Exam may test-out of MATH 2412 Pre-Calculus Math and enroll directly into MATH 2413 Calculus I after taking and passing the Calculus I Placement Exam provided by the Mathematics Department. Students who qualify and elect this option must contact and make arrangements with the Mathematics Department at 956-872-8327 no later than two (2) weeks prior to the start of the semester the students intends to enroll.

Students with an SAT score of 560+ (SAT II Math Level 1), 520+ (SAT II Math Level 2) or an ACT score of 28+ may also enroll directly into MATH 2413 Calculus I. Otherwise, it is recommended that students take the prerequisite MATH 2412 Pre-Calculus Math the summer prior to the start of the fall semester. Enrollment in MATH 2412 Pre-Calculus Math requires a prerequisite of MATH 1414 College Algebra or ACT scores of 25-27, SAT II Math Level I scores of 520-559, or SAT II Math Level 2 scores of 500-519.

Graduation from South Texas College does not guarantee acceptance into pharmacy school. South Texas College provides the opportunity for the student to develop a solid basic science knowledge base, complete prerequisites for pharmacy school, participate in essay and interview preparation sessions, review for the Pharmacy College Admission Test (PCAT), and advisement in the pharmacy school application process. Pharmacy schools select entering classes by student merit.

Due to a state mandated limit on credit hours for an Associate of Science degree, the student will be expected to complete some prerequisite courses on their own. There is time in the curriculum for the student to complete these courses during summer and second fall semesters.

Pre-Pharmacy Program Website: <https://ms.southtexascollege.edu/pre-pharmacy/index.html>

## Program Learning Outcomes

1. The student will solve problems utilizing inorganic chemical concepts (stoichiometry, colligative properties, acid/base).
2. The student will describe the structure, bonding, and reactivity of organic molecules.
3. The student will describe reaction mechanisms and synthesis of organic compounds.
4. The student will perform laboratory experiments involving a variety of chemical techniques and will communicate analysis of results in writing .

5. The student will describe microbial mechanisms of pathogenicity.
6. The student will describe cellular organization in tissues, organs, and organ systems.
7. The student will explain how organ systems function to regulate homeostasis.

## TSI LIABLE

### Field of Study - 18 credit hours

CHEM 1411	General Chemistry I	4
CHEM 1412	General Chemistry II	4
CHEM 2423	Organic Chemistry I	4
CHEM 2425	Organic Chemistry II	4
BIOL 2421	Microbiology for Science Majors <sup>1</sup>	4

### STC Core Curriculum - 42 credit hours

Complete 42 credit hours of required Core Curriculum including the following: <sup>2</sup>

#### Component Area Option

BIOL 2421	Microbiology for Science Majors <sup>1</sup>
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#### Mathematics

MATH 2413	Calculus I <sup>3</sup>
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#### Life and Physical Sciences

BIOL 1406	Biology for Science Majors I
BIOL 1407	Biology for Science Majors II

#### Language, Philosophy & Culture Elective

Select one of the following:

ENGL 2321	British Literature
ENGL 2326	American Literature
ENGL 2331	World Literature

**Total Credit Hours** **60**

<sup>1</sup> For BIOL 2421 Microbiology for Science Majors, 2 credit hours are scheduled for field of study and 2 credit hours are scheduled to meet the general core education requirements (Component Area Option).

<sup>2</sup> In addition to the courses in the Field of Study, the student is required to take 42 credit hours from the STC Core Curriculum. These courses must not duplicate courses taken to fulfill field of study requirements.

<sup>3</sup> For students to directly enroll in MATH 2413 Calculus I, they must earn 375+ on the TSI and successfully complete and exam administered by the MATH department or earn a 100 on the college-level Mathematics ACCUPLACER.

## TSI LIABLE

## Recommended Course Sequence

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
	Creative Arts Elective - Core Curriculum	3
CHEM 1411	General Chemistry I	4
ENGL 1301	Composition I	3
MATH 2413	Calculus I	4
<b>Credit Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 1406	Biology for Science Majors I	4
CHEM 1412	General Chemistry II	4
HIST 1301 or HIST 2327	United States History I or Mexican-American History I	3
ENGL 1302	Composition II - Rhetoric	3
<b>Credit Hours</b>		<b>14</b>

<b>Summer</b>		
HIST 1302 or HIST 2328	United States History II or Mexican-American History II	3
<b>Credit Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM 2423	Organic Chemistry I	4
BIOL 1407	Biology for Science Majors II	4
GOVT 2305	Federal Government	3
Social and Behavioral Sciences Elective - Core Curriculum		3
Recommended:		
PSYC 2301	General Psychology	
<b>Credit Hours</b>		<b>14</b>
<b>Spring</b>		
CHEM 2425	Organic Chemistry II	4
BIOL 2421	Microbiology for Science Majors	4
GOVT 2306	Texas Government	3
Component Area Option - Core Curriculum		1-3
<b>Credit Hours</b>		<b>12-14</b>
<b>Summer</b>		
Select one of the following:		3
ENGL 2321	British Literature	
ENGL 2326	American Literature	
ENGL 2331	World Literature	
<b>Credit Hours</b>		<b>3</b>
<b>Total Credit Hours</b>		<b>60-62</b>

<sup>1</sup> For BIOL 2421 Microbiology for Science Majors 2 credit hours are scheduled for field of study and 2 credit hours are scheduled to meet the general core education requirements (Component Area Option).

## Additional Courses Recommended to Satisfy Pharmacy School Prerequisites

Recommended by end of Fall Semester Second Year.

<b>Non-Curriculum Courses</b>		
MATH 1442	Elementary Statistical Methods	4
BIOL 2416	Genetics	4
PHYS 1401 or PHYS 2425	College Physics I University Physics I	4
SPCH 1315	Public Speaking	3
<b>Total Credit Hours</b>		<b>15</b>