### **PHYSICS**

#### Associate of Science

The Associate of Science degree with a field of study in Physics offers students the opportunity to take a core curriculum of general education with an emphasis in Physics. Additionally, students can choose from pathways in general physics, geoscience/geospatial science, environmental science, and geophysics.

Physics students have a wide range of scientific and technical fields to choose from for their career. The student should bear in mind that most of these career areas require education or training beyond the Associate of Science degree.

Career fields available to the physics student include:

- Astronomy
- · Biophysics
- Chemistry
- · Computer Science
- · Elementary or Secondary Education
- · Engineering Civil, Electrical, Industrial
- Geophysics
- Hydrogeology
- Medicine
- Meteorology
- Patent Law
- Physics
- Seismology

The course listing for the Associate of Science degree with a field of study in Physics closely parallels the first two years of education that one would receive at most universities. Upon completion of this sequence, many students transfer to obtain a degree in one of the various physics fields. However, students intending to transfer should be aware of the transfer institution's requirements.

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.

Physics program webpage: https://www.southtexascollege.edu/physics

#### **Program Learning Outcomes**

- The student will solve problems using the principles of Classical Mechanics (particles, rigid bodies, waves).
- 2. The student will solve problems using the basic concepts of Thermodynamics.
- 3. The student will solve problems using the principles of electromagnetics.
- 4. The student will apply the principles of optics.
- The student will perform experiments using basic techniques and will communicate analysis in written reports.
- The student will apply calculus-based mathematical skills to solve physics related problems.

#### TSI Liable

#### Field of Study - 18 credit hours

MATH 2414	Calculus II	4
MATH 2415	Calculus III	4
MATH 2420	Differential Equations	4
PHYS 2426	University Physics II	4
COSC 1436	Programming Fundamentals I <sup>1</sup>	4

## Geoscience/Geo-Spatial Science Track - 18 credit hours

MATH 2414	Calculus II	4
GEOL 1403	Physical Geology	4
PHYS 2425	University Physics I	4
GEOL 1404	Historical Geology <sup>2</sup>	4
PHYS 2426	University Physics II	4
or COSC 1436	Programming Fundame	entals I

Students should speak with an advisor and check with the institution they intend to transfer in order to choose either PHYS 2426 or COSC 1436 for this track.

#### **Environmental Science Track - 18 credit** hours Calculus II Δ **MATH 2414** 4 **GEOL 1403 Physical Geology** PHYS 2425 University Physics I 4 4 **PHYS 2426** University Physics II **GEOL 1404** Historical Geology 2 4 Geophysics Track -18 credit hours MATH 2414 Calculus II 4 4 **GEOL 1403 Physical Geology** 4 PHVS 2425 University Physics I 4 **PHYS 2426** University Physics II Historical Geology 2 **GEOL 1404** 4

### STC Core Curriculum - 42 credit hours

Complete 42 credit hours of required Core Curriculum including the following:

#### Life and Physical Sciences

CHEM 1411	General Chemistry I <sup>3</sup>
PHYS 2425	University Physics I <sup>3</sup>
Mathematics	
MATH 2413	Calculus I

#### Total Credit Hours

60

42

<sup>1</sup> COSC 1436 Programming Fundamentals I is scheduled for 2 credit hours of field of study and 2 credit hours of general education requirements (Component Area Option).

<sup>2</sup> GEOL 1404 Historical Geology is scheduled for 2 credit hours of field of study and 2 credit hours of general education requirements (Component Area Option).

Physics majors pursuing the **General track** are required to take the sequence CHEM 1411 General Chemistry I and PHYS 2425 University Physics I to fulfill the Life and Physical Sciences component of the Core Curriculum, Physics majors pursuing the Geophysics track are required to take the sequence CHEM 1411 General Chemistry I and CHEM 1412 General Chemistry II to fulfill the Life and Physical Sciences component of the Core Curriculum. Physics majors pursuing the Environmental Science track are required to take CHEM 1411 General Chemistry I and BIOL 1406 Biology for Science Majors I to fulfill the Life and Physical Sciences component of the Core Curriculum. Physics majors pursuing the Geosciences/Geo-Spatial track are required to take CHEM 1411 General Chemistry I and GEOL 1445 Oceanography (or GEOL 1447 Meteorology) to fulfill the Life

1

and Physical Sciences component of the Core Curriculum.

#### TSI Liable

## Recommended Course Sequence - General Track

Course First Year	Title	Credit Hours
Fall		
MATH 2413	Calculus I	4
COSC 1436	Programming Fundamentals I <sup>1</sup>	4
ENGL 1301	Composition I	3
Creative Arts Elec	ctive - Core Curriculum	3
	Credit Hours	14
Spring		
ENGL 1302	Composition II - Rhetoric	3
CHEM 1411	General Chemistry I	4
MATH 2414	Calculus II	4
HIST 1301 or HIST 2327	United States History I or Mexican-American History I	3
	Credit Hours	14
Summer		
HIST 1302 or HIST 2328	United States History II or Mexican-American History II	3
	Credit Hours	3
Second Year		
Fall		
MATH 2420	Differential Equations	4
GOVT 2305	Federal Government	3
Social and Behav Core Curriculum	ioral Sciences Elective -	3
Recommende	ed:	
PSYC 2301	General Psychology	
PHYS 2425	University Physics I	4
	Credit Hours	14
Spring		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II	4
MATH 2415	Calculus III	4
Component Area Option - Core Curriculum		1-3
Summer	Credit Hours	12-14
Language, Philosophy & Culture Elective - Core Curriculum		
	Credit Hours	3
	Total Credit Hours	60-62

<sup>&</sup>lt;sup>1</sup> COSC 1436 Programming Fundamentals I is scheduled for 2 credit hours of field of study and 2 credit hours of general education requirements (Component Area Option).

#### TSI Liable

### Recommended Course Sequence - Geoscience/Geo-Spatial Science Track

Course	Title	Credit Hours
First Year		
Fall		
MATH 2413	Calculus I	4
GEOL 1403	Physical Geology	4
ENGL 1301	Composition I	3
Creative Arts Ele	3	
	Credit Hours	14
Spring		
ENGL 1302	Composition II - Rhetoric	3
CHEM 1411	General Chemistry I	4

MATH 2414	Calculus II	4
HIST 1301	United States History I	3
or HIST 2327	or Mexican-American	
	History I	
	Credit Hours	14
Summer		
HIST 1302	United States History II	3
or HIST 2328	or Mexican-American	
-	History II	
	Credit Hours	3
Second Year		
Fall		
PHYS 2425	University Physics I	4
GEOL 1404	Historical Geology <sup>1</sup>	4
GOVT 2305	Federal Government	3
Social and Behav Core Curriculum	3	
Recommende	ed:	
PSYC 2301	General Psychology	
	Credit Hours	14
Spring		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II 2	4
or	or Programming	
COSC 1436	Fundamentals I	
GEOL 1445	Oceanography	4
or	or Meteorology	
GEOL 1447		
Component Area Option - Core Curriculum 1-3		
	Credit Hours	12-14
Summer		
Language, Philos Core Curriculum	ophy & Culture Elective -	3
	Credit Hours	3
	Total Credit Hours	60-62

<sup>&</sup>lt;sup>1</sup> GEOL 1404 Historical Geology is scheduled for 2 credit hours of field of study and 2 credit hours of general education requirements (Component Area Option).
<sup>2</sup> Students should speak with an advisor and

#### TSI Liable

## Recommended Course Sequence - Environmental Science Track

Course First Year Fall	Title	Credit Hours
MATH 2413	Calculus I	4
GEOL 1403	Physical Geology	4
ENGL 1301	Composition I	3
Creative Arts Elec	ctive - Core Curriculum	3
	Credit Hours	14
Spring		
ENGL 1302	Composition II - Rhetoric	3
CHEM 1411	General Chemistry I	4
MATH 2414	Calculus II	4
HIST 1301 or HIST 2327	United States History I or Mexican-American History I	3
	Credit Hours	14
Summer		
HIST 1302 or HIST 2328	United States History II or Mexican-American History II	3
	Credit Hours	3
Second Year		
Fall		
PHYS 2425	University Physics I	4
BIOL 1406	Biology for Science Majors I	4
GOVT 2305	Federal Government	3

Students should speak with an advisor and check with the institution they intend to transfer in order to choose the best option.

of general education requirements (Component Area Option).

Social and Behavioral Sciences Elective - Core Curriculum		
Recommend	ed:	
PSYC 2301	General Psychology	
	Credit Hours	14
Spring		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II	4
GEOL 1404	Historical Geology <sup>1</sup>	4
Component Area	Option - Core Curriculum	1-3
	Credit Hours	12-14
Summer		
Language, Philos Core Curriculum	sophy & Culture Elective -	3
	Credit Hours	3
	Total Credit Hours	60-62

<sup>&</sup>lt;sup>1</sup> GEOL 1404 Historical Geology is scheduled for 2 credit hours of field of study and 2 credit hours of general education requirements (Component Area Option).

#### TSI Liable

Course

# Recommended Course Sequence - Geophysics Track

**Credit Hours** 

Title

Credit Hours 12- Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours	004.00		0.00.0
MATH 2413 Calculus I GEOL 1403 Physical Geology ENGL 1301 Composition I Creative Arts Elective - Core Curriculum  Credit Hours  Spring ENGL 1302 Composition II - Rhetoric CHEM 1411 General Chemistry I MATH 2414 Calculus II HIST 1301 or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II or HIST 2328 United States History II  Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  12- Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	First Year		
GEOL 1403 Physical Geology ENGL 1301 Composition I Creative Arts Elective - Core Curriculum  Credit Hours  Spring ENGL 1302 Composition II - Rhetoric CHEM 1411 General Chemistry I MATH 2414 Calculus II HIST 1301 Or Mexican-American History I  Credit Hours  Summer HIST 2328 United States History II Or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  12-  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	Fall		
ENGL 1301 Composition I Creative Arts Elective - Core Curriculum  Credit Hours  Spring  ENGL 1302 Composition II - Rhetoric CHEM 1411 General Chemistry I MATH 2414 Calculus II HIST 1301 United States History I or HIST 2327 Or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year  Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	MATH 2413	Calculus I	4
Creative Arts Elective - Core Curriculum  Credit Hours  Spring  ENGL 1302 Composition II - Rhetoric  CHEM 1411 General Chemistry I  MATH 2414 Calculus II  HIST 1301 United States History I  or HIST 2327 Or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II  or HIST 2328 United States History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective - Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology  Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	GEOL 1403	Physical Geology	4
Credit Hours  Spring  ENGL 1302 Composition II - Rhetoric  CHEM 1411 General Chemistry I  MATH 2414 Calculus II  HIST 1301 United States History I  or HIST 2327 Or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II  or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective- Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology  Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	ENGL 1301	Composition I	3
Spring ENGL 1302 Composition II - Rhetoric CHEM 1411 General Chemistry I MATH 2414 Calculus II HIST 1301 United States History I or HIST 2327 Or Mexican-American History I  Credit Hours  Summer HIST 1302 United States History II or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective-Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum Credit Hours  Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours  Credit Hours	Creative Arts Elec	ctive - Core Curriculum	3
ENGL 1302 Composition II - Rhetoric  CHEM 1411 General Chemistry I  MATH 2414 Calculus II  HIST 1301 Or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II Or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective-Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology I  Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours		Credit Hours	14
CHEM 1411 General Chemistry I  MATH 2414 Calculus II  HIST 1301 Or HIST 2327 Or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II Or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective-Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology I  Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	Spring		
MATH 2414 Calculus II HIST 1301 United States History I or HIST 2327 Or Mexican-American History I  Credit Hours  Summer HIST 1302 United States History II or HIST 2328 Or Mexican-American History II  Credit Hours  Second Year  Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology I Component Area Option - Core Curriculum Credit Hours  Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours  Credit Hours	ENGL 1302	Composition II - Rhetoric	3
HIST 1301 United States History I or Mexican-American History I  Credit Hours  Summer  HIST 1302 United States History II or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective - Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology I  Component Area Option - Core Curriculum  Credit Hours  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	CHEM 1411	General Chemistry I	4
or HIST 2327 or Mexican-American History I  Credit Hours  Summer  HIST 1302 Or Mexican-American History II Or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective - Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours  12-  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	MATH 2414	Calculus II	4
Summer HIST 1302 United States History II or Mexican-American History II  Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective-Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours  12: Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours		or Mexican-American	3
HIST 1302 United States History II or Mexican-American History II  Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours  12: Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours		Credit Hours	14
or HIST 2328 or Mexican-American History II  Credit Hours  Second Year  Fall  PHYS 2425 University Physics I  CHEM 1412 General Chemistry II  GOVT 2305 Federal Government  Social and Behavioral Sciences Elective - Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology 1  Component Area Option - Core Curriculum  Credit Hours  12-  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	Summer		
Credit Hours  Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum Credit Hours  12: Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours		or Mexican-American	3
Second Year Fall PHYS 2425 University Physics I CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology Component Area Option - Core Curriculum Credit Hours  12: Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours			3
CHEM 1412 General Chemistry II GOVT 2305 Federal Government Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology  Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours 12: Summer Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	Fall	Hairanita Physica I	4
GOVT 2305 Federal Government  Social and Behavioral Sciences Elective - Core Curriculum  Recommended: PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours 12:  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours			4
Social and Behavioral Sciences Elective - Core Curriculum Recommended: PSYC 2301 General Psychology Credit Hours  Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum Credit Hours 12- Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours		,	3
PSYC 2301 General Psychology  Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology   Component Area Option - Core Curriculum  Credit Hours 12:  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	Social and Behav		3
Credit Hours  Spring  GOVT 2306 Texas Government  PHYS 2426 University Physics II  GEOL 1404 Historical Geology   Component Area Option - Core Curriculum  Credit Hours 12:  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours  Credit Hours	Recommende	ed:	
Spring GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology  Component Area Option - Core Curriculum Credit Hours 12: Summer Language, Philosophy & Culture Elective - Core Curriculum Credit Hours	PSYC 2301	General Psychology	
GOVT 2306 Texas Government PHYS 2426 University Physics II GEOL 1404 Historical Geology  Component Area Option - Core Curriculum  Credit Hours 12: Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours		Credit Hours	14
PHYS 2426 University Physics II GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours 12: Summer Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	Spring		
GEOL 1404 Historical Geology <sup>1</sup> Component Area Option - Core Curriculum  Credit Hours 12: Summer Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	GOVT 2306	Texas Government	3
Component Area Option - Core Curriculum  Credit Hours 12:  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	PHYS 2426	University Physics II	4
Component Area Option - Core Curriculum  Credit Hours 12:  Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	GEOL 1404	Historical Geology 1	4
Summer  Language, Philosophy & Culture Elective - Core Curriculum  Credit Hours	Component Area		1-3
Language, Philosophy & Culture Elective - Core Curriculum Credit Hours			12-14
Core Curriculum  Credit Hours	Summer		
		ophy & Culture Elective -	3
Total Credit Hours 60		Credit Hours	3
Total orcalt Hours		Total Credit Hours	60-62

<sup>&</sup>lt;sup>1</sup> GEOL 1404 Historical Geology is scheduled for 2 credit hours of field of study and 2 credit hours