

COLLEGE OF GEOSCIENCES  
TEXAS A&M UNIVERSITY  
**BACHELOR OF SCIENCE IN ENVIRONMENTAL GEOSCIENCES**  
**CATALOG 132**

STUDENT: \_\_\_\_\_ HOME DEPARTMENT: Environmental Programs, College of Geosciences

COURSE	#	SEM	SUBJECT	HRS
<b>ATMOSPHERIC SCIENCES</b>				
ATMO	201		Atmospheric Science	3
ATMO	202		Atmospheric Science Lab	1
<b>TOTAL HRS</b>				<b>4</b>

<b>GEOGRAPHY/GEOLOGY</b>				
GEOG/ GEOL	203 <i>or</i> 101		Planet Earth <i>or</i> Principles of Geology	4
GEOG	330		Resources and Environment	3
GEOL	420		Environmental Geology	3
<b>TOTAL HRS</b>				<b>10</b>

<b>GEOSCIENCES</b>				
GEOS	105		Intro Environmental Geosciences	3
GEOS	405		Environmental Geosciences	3
GEOS	481 <sup>1</sup>		Seminar <sup>1</sup>	1
<b>TOTAL HRS</b>				<b>7</b>

<b>OCEANOGRAPHY</b>				
OCNG	251		Oceanography	3
OCNG	252		Oceanography Lab	1
<b>TOTAL HRS</b>				<b>4</b>

<b>CHEMISTRY</b>				
CHEM	101/111		Fundamentals in Chemistry I	4
CHEM	102/112		Fundamentals in Chemistry II	4
<b>TOTAL HRS</b>				<b>8</b>

<b>MATHEMATICS AND STATISTICS</b>				
MATH	151		Engineering Math I	4
MATH	152		Engineering Math II	4
STAT	303		Statistical Methods	3
<b>TOTAL HRS</b>				<b>11</b>

<b>ENVIRONMENTAL POLICY ELECTIVES<sup>2</sup></b>				
				3
				3
				3
<b>TOTAL HRS</b>				<b>9</b>

<b>ENVIRONMENTAL THEME ELECTIVES<sup>3</sup></b>				
				3
				3
				3
				3
				3
<b>TOTAL HRS</b>				<b>15</b>

CRS	#	SEM	SUB/TRAN	HRS
<b>TECHNICAL ELECTIVES<sup>4</sup></b>				
				3
				3
				3
				3
				3
<b>TOTAL HRS</b>				<b>15</b>

<b>SCIENCE<sup>5</sup></b>				
				4
				4
<b>TOTAL HRS</b>				<b>8</b>

<b>COMMUNICATIONS<sup>6</sup></b>				
ENGL	104		Composition and Rhetoric	3
				3
<b>TOTAL HRS</b>				<b>6</b>

<b>CITIZENSHIP</b>				
HIST	105		History of the USA I	3
HIST	106		History of the USA II	3
POLS	206		American National Government	3
POLS	207		State and Local Government	3
<b>TOTAL HRS</b>				<b>12</b>

<b>KINESIOLOGY</b>				
KINE	198		Health and Fitness Activity	1
KINE	199 S/U		Required Physical Activity	1
<b>TOTAL HRS</b>				<b>2</b>

<b>SOCIAL AND BEHAVIORAL SCIENCES</b>				
GEOG	201		Intro to Human Geography	3
<b>TOTAL HRS</b>				<b>3</b>

<b>VISUAL AND PERFORMING ARTS<sup>7</sup></b>				
				3
<b>TOTAL HRS</b>				<b>3</b>

<b>HUMANITIES<sup>8</sup></b>				
				3
<b>TOTAL HRS</b>				<b>3</b>

**TOTAL HOURS FOR DEGREE** **120**

**Other requirements to be satisfied** (see Core Curriculum and Degree Information sections of catalog 131)

**Residency requirement**

**36 hours** of 300- and/or 400-level course work successfully completed in residence at TAMU

**Foreign language requirement**

**Two units** of the same foreign language in high school *or one year* in college or demonstrate proficiency by examination

**International and cultural diversity requirement**

**6 hrs.**, chosen from a list of approved courses, many of which also satisfy other core curriculum requirements

**Writing intensive course requirement**

At least **two** courses in the major; must be 900 section

## NOTES

1. GEOS 481 can be repeated up to four times in this degree plan. Ideally it should be taken in your junior and senior years, but can also be taken in your sophomore year.
2. To be selected in consultation with faculty academic advisor from AGECE 350; ECON 203, 323, 412, 435; GEOG 309, 360, 406, 430; GEOS 444\*; POLS 329, 331, 340, 342, 347, 440; RENR 420; SOCI 312, 328; URSC 301, 460. [\*GEOS 444 can *either* be taken as an environmental policy elective *or* an environmental theme elective, but not both]
3. Environmental theme electives. Select from list in consultation with faculty academic advisor (see below). Environmental themes include: coastal studies, water in the environment (air, land and ocean), human interaction with the land, and climate change. 15 hours of course work are taken in one of the thematic areas.
4. Select in consultation with faculty academic advisor.
5. Elect either PHYS 201 and 202 or BIOL 113/123 and BOTN 101. PHYS 201 and 202 are the appropriate science electives for the climate change theme.
6. Communication elective to be selected from the University Core Curriculum.
7. Visual and performing arts elective to be selected from the University Core Curriculum.
8. Humanities elective to be selected from the University Core Curriculum.

## ENVIRONMENTAL THEMES AND ELECTIVES

### Coastal Studies

ATMO 363	Intro to Atmospheric Chemistry and Air Pollution
GEOG 331	Geomorphology
GEOG 370	Coastal Processes
GEOL 321	Urban Geology
GEOL 440	Engineering Geology
GEOS 401	Polar Regions of the Earth
OCNG 410	Introduction to Physical Oceanography
OCNG 451	Mathematical Modeling of Ocean Climate

### Water in the Environment

ATMO 363	Intro to Atmospheric Chemistry and Air Pollution
ATMO 475	Radar and Mesoscale Meteorology
GEOG 324	Global Climatic Regions
GEOG 400	Arid Lands Geomorphology
GEOG 434	Hydrology and Environment
GEOL 410	Hydrogeology
GEOL 451	Introduction to Geochemistry
GEOP 413	Near-Surface Geophysics
GEOS 401	Polar Regions of the Earth
OCNG 410	Introduction to Physical Oceanography
OCNG 420	Introduction to Biological Oceanography

### Human Interaction with the Land

ATMO 363	Intro to Atmospheric Chemistry and Air Pollution
ATMO 489	Global Biogeochemical Cycles
GEOG 301	Geography of the United States
GEOG 305	Geography of Texas
GEOG 311	Cultural Geography
GEOG 320	The Middle East
GEOG 321	Geography of Africa
GEOG 323	Geography of Latin America
GEOG 325	Geography of Europe
GEOG 326	Geography of East Asia
GEOG 331	Geomorphology
GEOG 360	Natural Hazards
GEOG 400	Arid Lands Geomorphology
GEOL 320	Geology for Civil Engineers
GEOL 321	Urban Geology
GEOL 440	Engineering Geology
GEOS 401	International Polar Year
GEOS 444	The Science and Politics of Climate Change

### Climate Change

ATMO 363	Intro to Atmospheric Chemistry and Air Pollution
ATMO 324	Physical and Regional Climatology
ATMO 463	Air Pollution Meteorology
ATMO 464	Laboratory Methods in Atmospheric Sciences
ATMO 489	Global Biogeochemical Cycles
GEOG 324	Global Climatic Regions
GEOS 401	Polar Regions of the Earth
GEOS 410	Global Change
GEOS 411	Vegetation Response to Climate Change
GEOS 444	The Science and Politics of Climate Change
OCNG 410	Introduction to Physical Oceanography
OCNG 451	Mathematical Modeling of Ocean Climate