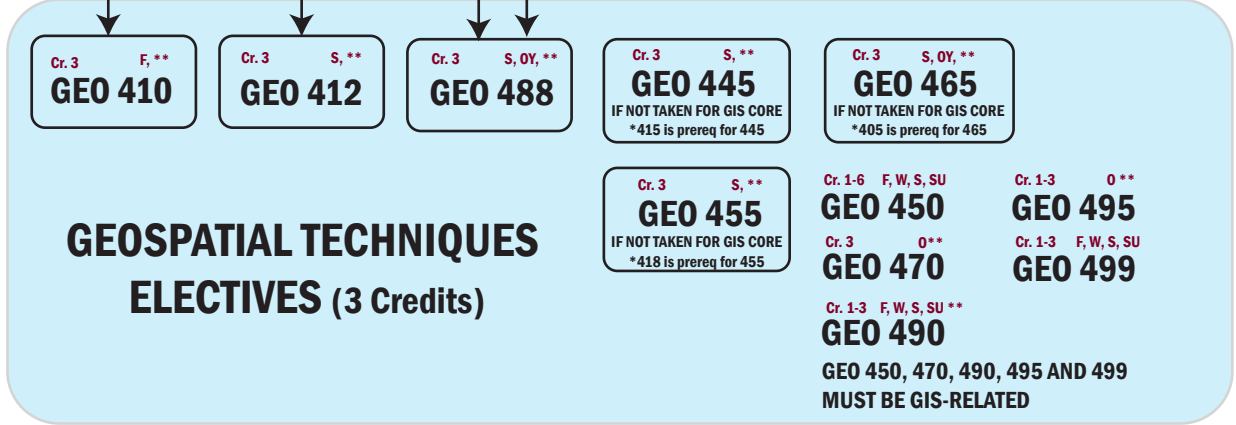
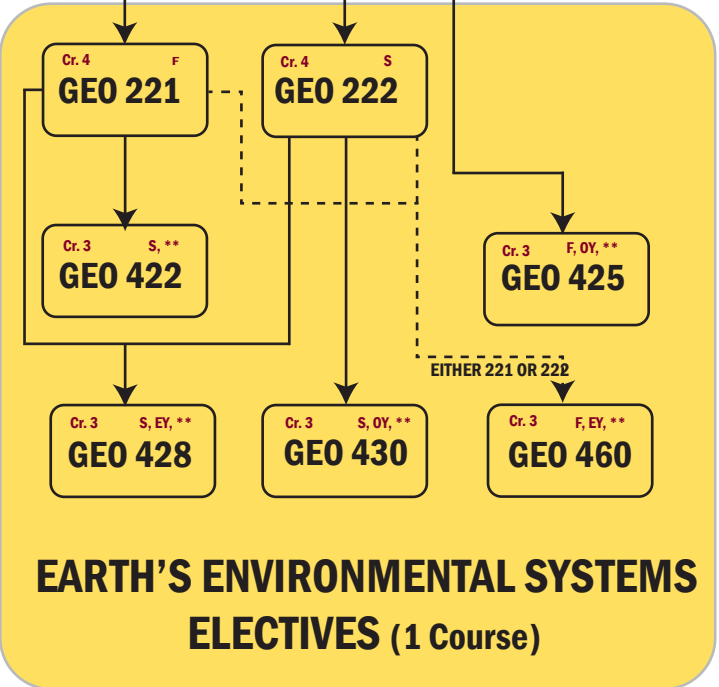
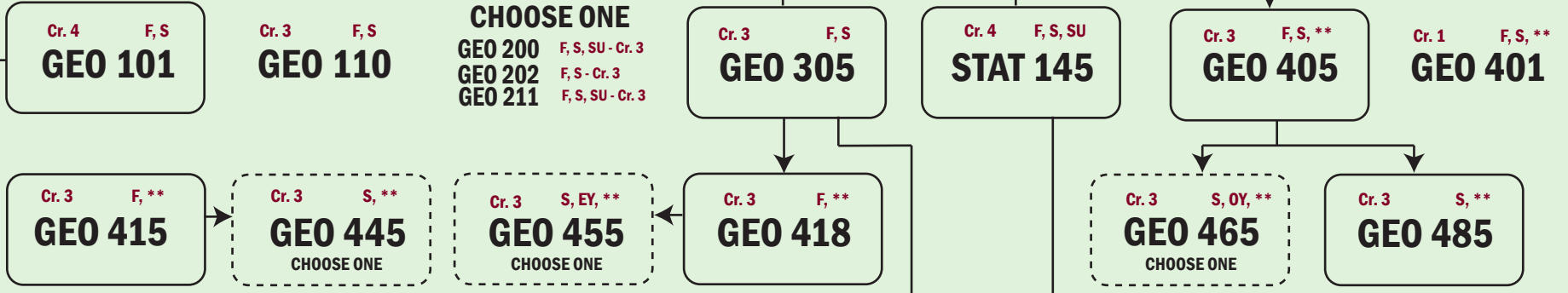
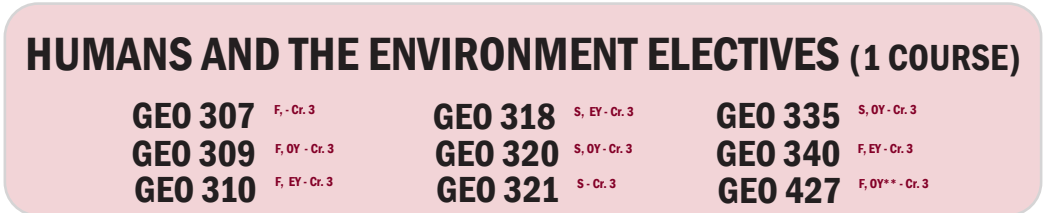


# GEOGRAPHY MAJOR: GEOGRAPHIC INFORMATION SCIENCE CONCENTRATION (B.S./B.A.)

## CORE REQUIREMENTS (11 Courses)



**GEO  
EXIT  
SURVEY**



**PREREQUISITES:** REQUIRED  
 MULTIPLE PREREQ OPTIONS

**LEGEND:**  
 F = FALL  
 S = SPRING  
 SU = SUMMER

\*\* = JR/SR STANDING  
 O = OCCASIONALLY  
 OY = ODD NUMBERED YEARS  
 EY = EVEN NUMBERED YEARS

**Geography Major: Geographic Information Science (GIS) Concentration (B.S./B.A.)**

**38 CREDITS**

**(42 CREDITS including STAT Requirement)**

**Core Requirements:**

Name	Credits	Description	Prerequisite	Offered
GEO 101	4	Earth Environments	-	F, S
GEO 110	3	World Cultural Regions	-	F, S
GEO 200 <b>OR</b> GEO 202 <b>OR</b> GEO 211	3	Conservation of Global Environments Contemporary Global Issues Global Climate Change	- - -	F, S, Su F, S F, S, Su
GEO 305	3	Geographic Information Systems and Science I	-	F, S
STAT 145	4	Elementary Statistics	-	F, S, Su
GEO 401	1	Capstone seminar in Geography and Environmental Science	Senior Standing	F, S
GEO 405	3	Geographic Information System and Science II	GEO 305; STAT 145	F, S
GEO 415	3	Remote Sensing of the Environment I	GEO 305	F
GEO 418	3	Map Design and Geovisualization	GEO 305	F
GEO 445 <b>OR</b> GEO 455 <b>OR</b> GEO 465	3	Remote Sensing of the Environment II <b>OR</b> Web Mapping Geospatial Automation	GEO 415 (for GEO 445) GEO 418 (for GEO 455) GEO 405 (for GEO 405)	S S-Even S-Odd
GEO 485	3	Geographic Information System and Science III	GEO 405	S

**Earth's Environmental Systems Electives (Choose 1 Course)**

Name	Credits	Description	Prerequisite	Offered
GEO 221	4	Weather and Climate	GEO 101	F
GEO 222	4	Earth Surface Processes and Landforms	GEO 101	S
GEO 422	3	Meteorology	GEO 221	S
GEO 425	3	Biogeography	GEO 101	F-Odd
GEO 428	3	Past Environmental Change	GEO 221 and GEO 222	S-Even
GEO 430	3	River Systems	GEO 222	S-Odd
GEO 460	3	Environmental Hazards	GEO 221 or GEO 222	F-Even

**Geospatial Techniques Electives (Choose 3 credits from the following)**

Name	Credits	Description	Prerequisite	Offered
GEO 410	3	Geospatial Field Methods	GEO 305	F
GEO 412	3	Geospatial Applications of Unmanned Aerial Systems	GEO 305	S
GEO 445	3	Remote Sensing of the Environment II ( <i>if not GIS core</i> )	GEO 415	S
<sup>1</sup> GEO 450	1-12	Internship in Geography and Environmental Science	-	F, W, S, Su
GEO 455	3	Web Mapping ( <i>if not GIS core</i> )	GEO 418	S-Even
GEO 465	3	Geospatial Automation	GEO 405	S-Even
<sup>1</sup> GEO 470	1-3	Special Topics in Geography/Environmental Science	-	O
GEO 488	3	Quantitative Methods in Geography ( <i>if not GIS core</i> )	GEO 305; STAT 145	S-Odd
<sup>1</sup> GEO 490	1-3	Independent Study	-	F, W, S, Su
<sup>1</sup> GEO 495	1-3	Seminar in Geography/Environmental Science	-	O
<sup>1</sup> GEO 499	1-3	Research in Geography and Environmental Science	-	F, W, S, Su

**Humans and the Environment Electives (Choose 1 Course)**

Name	Credits	Description	Prerequisite	Offered
GEO 307	3	Power, Space, and Global Change	-	F
GEO 309	3	Cities: Past, Present, and Future	-	F-Odd
GEO 310	3	Transportation Equity and Sustainable Communities	-	F-Even
GEO 318	3	The Geography of Latin America and the Caribbean	-	S-Even
GEO 320	3	Energy, the Environment, and Sustainability	-	S-Odd
GEO 321	3	Sustainable Development and Conservation	-	S
GEO 335	3	Islamic Asia: Cradle of Civilizations, Geographies of Conflict	-	S-Odd
GEO 340	3	Polar Environments	-	F-Even
GEO 427	3	Sustainable Water Resource Management	-	F-Odd

<sup>1</sup> GEO 450, GEO 470, GEO 490, GEO 495, and/or GEO 499 must be GIS related and a maximum of 3 credits of GEO 450, GEO 470, GEO 490, GEO 495, and/or GEO 499 may apply to the major.

\* During the student's last semester of enrollment, completion of the Department of Geography and Environmental Science exit survey is required to graduate.

\* Offered Codes: F = Fall; W = Winter; S = Spring; Su = Summer; O = Occasionally; F-Odd = Fall, Odd Years; F-Even = Fall, Even Years; S-Odd = Spring, Odd Years; S-Even = Spring, Even Years