### B.A. GEOGRAPHY / ENVIRONMENTAL TRACK (Academic Plan: ULASGEOEN)

MAJOR PROGRAM: 42 S.H.						
1. Core Requirements: 18 S.H.	<u>SH</u>	<u>GR</u>				
a. GEG 010 Elements of Physical Geog.						
b. GEG 020CD Elements of Cultural Geog.						
c. GEG 274CPQL Introduction to GIS						
d. GEG 330CPVL Cartography						
e. GEG 375 Research Methods in Geog.*						
f. GEG 380CTWI Sr. Seminar in Geog.‡						
+Core courses a through a must be completed prior to						

‡Core courses a. through e. must be completed prior to enrolling in GEG 380, Senior Seminar.

Category Requirements: 6 S.H.     One course from 2 of the following categories:				
a. GEG (Cultural or Regional)				
b. GEG (Economic)				
c. GEG (Physical)				
d. GEG (Techniques)				

### **CULTURAL GEOGRAPHY:**

GEG 210	<b>Environmental Conservation</b>
GEG 225CMCT	Spaces of Globalization
GEG 264	Medical Geography
GEG 335	Political Geography
GEG 338	Geography of Population

#### **ECONOMIC GEOGRAPHY:**

GEG 220	Economic Geography
GEG 223	Intro. to Transportation Geography
GEG 225CMCT	Spaces of Globalization
GEG 310WI	Urban Geography

### **GEOGRAPHIC TECHNIQUES:**

GEG 230	Map Reading and Interpretation
GEG 232	Field Methods in Geography
GEG 274CPQL	Introduction to GIS Lecture / Lab
GEG 330CPVL	Cartography
GEG 333	Advanced GIS
GEG 341	Environmental Planning
GEG 343	Land Use Planning
GEG 347	Remote Sensing Lecture / Lab
GEG 375	Research Methods in Geography

MA.	MAJOR PROGRAM (continued)					
	Environmental Track: 18 S.H. Select 5 of the following and GEG 394:	<u>SH</u>	<u>GR</u>			
a.	GEG 204/205 Meteorology/Lab					
b.	GEG 210 Environmental Conservation					
C.	GEG 232 Field Methods in Geography					
d.	GEG 304/305 Weather Analysis Lecture/Lab					
e.	GEG 322 Climatology					
f.	GEG 323 Global Warming					
g.	GEG 324/325 Geomorphology/Lab					
h.	GEG 341 Environmental Planning					
i.	GEG 343 Land Use Planning					
j.	GEG 347/348 Remote Sensing of the Env./Lab					
k.	GEG 394 Internship in Geography (required)†					
†Re	equires 2.5 GPA or better in Geography.					

ELECTIVES or MINOR: 18 S.H.	 
a.	
b.	
c.	
d.	
e.	
f.	

### \*Statistics Requirement Verification

Statistics is a prerequisite to GEG 375. Geography students must take a statistics course: MAT 140 or 150, or POL/PSY/SOC200. MAT 105 is a prerequisite for MAT 140. PSY 011 and MAT 017 or higher (excluding 040 and 045) are prerequisites for PSY 200.

#### **PHYSICAL GEOGRAPHY**:

GEG 040	Descriptive Oceanography
GEG 204	Meteorology Lecture / Lab
GEG 212	Geography of Natural Hazards
GEG 304	Weather Analysis Lecture / Lab
GEG 322	Climatology
GEG 323	Global Warming & Science of Climate Change
GEG 324	Geomorphology Lecture / Lab

#### **REGIONAL GEOGRAPHY:**

GEG 101	World Regional Geography
GEG 110	Geography of United States and Canada
GEG 112	Geography of Pennsylvania
GEG 120	Geography of Sub-Saharan Africa
GEG 140	Geography of Europe

Effective Date: 08/24/2015

Version: 2158

Check sheet revised 08/21/2015



### COLLEGE OF LIBERAL ARTS & SCIENCES • BA • GEOGRAPHY / ENVIRONMENTAL TRACK

Academic Plan: ULASGEOEN	(	GEN	IER	AL	EDUCATION Effective Date: 08/24/	/2015	(Ver	sion:	2158)
I. UNIVERSITY CORE (12 credits)	RC	CR	GR		III. COMPETENCIES ACROSS THE CURRICULUM	RC	CR	GR	CAC
A. Oral Communication: COM 10 or above				_	A. Writing Intensive (WI) (9 credits)	]	J.	0.1	0,10
COURSE:	3				COURSE:	3	1		WI
B. Written Communication: ENG 23, 24, or 25				_	COURSE:	3			wı
COURSE:	3				COURSE: GEG 380 CTWI Senior Seminar <sup>‡</sup>	3			WI
C.Mathematics: MAT 17 or above				_	B. Quantitative Literacy (QL) (3 credits) OR				
COURSE:	3			1	Computer-Intensive (CP) (3 credits)				
D.Wellness: Any 3-credit Wellness course		l		_	COURSE: GEG 274 CPQL Intro. to GIS <sup>‡</sup>	3			
COURSE:	3				C. Visual Literacy (VL) (3 credits) OR Communication-Intensive (CM) (3 credits)				
II. UNIVERSITY DISTRIBUTION (15 credits)	RC	CR	CB	CAC	COURSE: GEG 330 CPVL Cartography <sup>‡</sup>	3			
A. Natural Sciences: Any lab or non-lab course with prefix	, RC	CK	GK	CAC	D.Cultural Diversity (CD) (3 credits)				
AST, BIO, CHM, ENV, GEL, MAR, NSE, or PHY; or certain GEG courses (see note at right)	1				COURSE: GEG 020 CD Cultural Geography <sup>‡</sup>	3			CD
COURSE:	3				E.Critical Thinking (CT) (3 credits)				
B. Social Sciences: Any course with prefix ANT, CRJ, ECO, HIS, INT, MCS, POL, PSY, SOC, SSE, or SWK; or certain GEG courses (see note at right)		I.	l .		COURSE: GEG 380 CTWI Senior Seminar <sup>‡</sup>	3			СТ
COURSE:	3				A Competency Across the Curriculum (CAC) course is not rather an overlay that is "double counted" as fulfilling both t				
C.Humanities: Any course with prefix ENG, HUM, PAG, PHI, WGS, WRI, or Modern Language		<u> </u>		1	another requirement in either General Education (except for the major, or the minor. <sup>‡</sup> Suggested placement of required	or the L	Jniversi	ity Cor	
COURSE:	3				RC = Minimum required number of credits				
D.Arts: Any course with prefix ARC, ARH, ART, CDE, CDH, CFT, FAR, FAS, MUP, MUS, or THE					CR = Credits earned (fill in number of credits) GR = Grade earned (fill in letter grade) CAC = Competency Across the Curriculum (fill i	n desid	nation	)	
COURSE:	3								
E.Free Elective: Any course carrying university credit	1				<b>NOTE:</b> GEG courses with a lab and 40, 322, and 323 ma 40, 204, 274, 304, 322, 323, 324, 347, 380, and 394 may				
COURSE:	3				,,,,,,				
IV. COLLEGE DISTRIBUTION (33 credits)  A. Natural Science, Mathematics, and	RC	CR	GR	CAC	[0.11   11   (0.11   11 )	RC	CR	GR	CAC
Computer Science# (6 credits): Choose one	1				C. Humanities (6 credits): Choose one course in each subcategory.				
course in each subcategory.  1. Natural Science with Lab: AST, BIO, CHM, ENV.	1				1. Elective: ENG, HUM, PAG*, or WRI				
GEL, MAR, or PHY; or GEG (see note at right)			•		COURSE:	3			
COURSE:	3				2. Elective: (ARA, CHI, FRE, GER, MLS, SPA)* or PHI				
Elective: AST, BIO, CHM, CSC, ENV, GEL, MAR, MAT, NSE, PHY; or GEG (see note at right)		1		1	COURSE:	3			
COURSE:	3				D. Modern Languages (6 credits) (103 or above)				
B. Social Science (9 credits): Choose one course in each subcategory.					COURSE:	3			
Elective: ANT, GEG (see note at right), HIS, or POL					COURSE:	3	$oxed{oxed}$		
COURSE:	3				E. Free Electives (6 credits): Choose any university courses that count toward graduation.				

3

3

2. Elective: CRJ, PSY, SOC, or SWK

INT, POL, PSY, SOC, SSE, or SWK

3. Elective: ANT, CRJ, ECO, GEG (see note at right), HIS,

COURSE:

COURSE:

**NOTE:** GEG courses with a lab and 40, 322, and 323 may be used in II.A. GEG 40, 204, 274, 304, 322, 323, 324, 347, 380, and 394 may NOT be used in IV.B.

3

3

Check sheet revised: 08/21/2015

COURSE:

COURSE:

<sup>#</sup> Students in the College of Liberal Arts and Sciences are required to take at least one course in Biological Science (BIO) and at least one course in Physical Science (AST, CHM, ENV, GEL, MAR, PHY, GEG with lab, or GEG 40, GEG 322, or GEG 323), and at least one of which must be a lab (each course may be counted in either sections II.A or IV.A).

<sup>\*</sup> Excludes courses in language instruction, conversation, composition, linguistics, syntax, stylistics, and internship courses. Contact the Modern Language Studies Dept. for clarification.

		FIRST	YEAR		
	Fall Semester	1 11(01		Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 010	Elements of Physical Geography	3	GEG	Category Requirement 1/2	3
GEG 020	Elements of Cultural Geography	3	GEG	Track Course 1/5	3
GE I	University Core 1/3	3	GE I	University Core 2/3	3
GE IV	College Distribution 1/5	3	GE II	University Distribution 1/3	3
<u></u>	Free Elective 1/6	3	<u> </u>	Free Elective 2/6	3
Total		15	Total		15
		SECON	D YEAR		
	Fall Semester	0_00.		Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 2/5	3	GEG	Track Course 3/5	3
GEG 330CPVL	Cartography	3	PSY 011	General Psychology	3
MAT 017	Introduction to Math (or above)	3	GE I	University Core 3/3	3
BIO 010	Introduction to Biology (or above)	3	GE IV	College Distribution 2/5	3
	Free Elective 3/6	3		Free Elective 4/6	3
Total		15	Total		15
		THIRD	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 274CPQL	Introduction to GIS	3	GEG	Track Course 4/5	3
PSY 200QL	Statistics for Social & Behavioral Sciences	3	GEG	Track Course 5/5	3
SPA 011	Elementary Spanish I (or other Mod. Lang.)	3	SPA 012	Elementary Spanish II	3
GE II	University Distribution 2/3	3	GE IV	Non-BIO Natural Science	3
GE IV	College Distribution 3/5	3	GE IV	College Distribution 4/5	3
		15	Total		15
Total					
Total		FOURT	H YEAR		
Total	Fall Semester			Spring Semester	
Course	Title	FOURT	Course	Title	Credits
<b>Course</b> GEG	Title Category Requirement 2/2		Course GEG 380CTWI	Title Sr. Seminar in Geography	Credits 3
Course GEG GEG 375	Title Category Requirement 2/2 Research Methods	Credits 3 3	Course GEG 380CTWI GEG 394	Title Sr. Seminar in Geography Internship in Geography	3
Course GEG GEG 375 SPA 103	Title Category Requirement 2/2 Research Methods Intermediate Spanish I	Credits 3	Course GEG 380CTWI GEG 394 SPA 104	Title Sr. Seminar in Geography Internship in Geography Intermediate Spanish II	3
Course GEG GEG 375 SPA 103	Title Category Requirement 2/2 Research Methods	Credits 3 3	Course GEG 380CTWI GEG 394	Title Sr. Seminar in Geography Internship in Geography	3
Course GEG GEG 375 SPA 103 GE IV	Title Category Requirement 2/2 Research Methods Intermediate Spanish I	Credits   3   3   3   3	Course GEG 380CTWI GEG 394 SPA 104	Title Sr. Seminar in Geography Internship in Geography Intermediate Spanish II	3 3

		FIRST	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 010	Elements of Physical Geography	3	GEG	Category Requirement 1/2	3
GEG 020	Elements of Cultural Geography	3	GEG	Track Course 1/5	3
GE I	University Core 1/3	3	GE I	University Core 2/3	3
GE IV	College Distribution 1/5	3	GE II	University Distribution 1/3	3
	Free Elective 1/6	3		Free Elective 2/6	3
Total		15	Total		15
		SECON	D YEAR		
	Fall Semester	0_00		Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 2/5	3	GEG	Track Course 3/5	3
GEG 330CPVL	Cartography	3	PSY 011	General Psychology	3
MAT 017	Introduction to Math (or above)	3	GE I	University Core 3/3	3
BIO 010	Introduction to Biology (or above)	3	GE IV	College Distribution 2/5	3
	Free Elective 3/6	3		Free Electives 4/6	3
Total		15	Total		15
		THIRD	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 274CPQL	Introduction to GIS	3	GEG	Track Course 4/5	3
PSY 200QL	Statistics for Social & Behavioral Sciences	3	GEG	Track Course 5/5	3
SPA 011	Elementary Spanish I (or other Mod. Lang.)	3	SPA 012	Elementary Spanish II	3
GE II	University Distribution 2/3	3	GE IV	Non-BIO Natural Science	3
GE IV	College Distribution 3/5	3	GE IV	College Distribution 4/5	3
Total		15	Total		15
		FOURT	H YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Category Requirement 2/2	3	GEG 380CTWI	Sr. Seminar in Geography	3
GEG 375	Research Methods	3	GEG 394	Internship in Geography	3
SPA 103	Intermediate Spanish I	3	SPA 104	Intermediate Spanish II	3
GE IV	College Distribution 5/5	3	GE II	University Distribution 3/3	3
	Free Elective 5/6	3		Free Elective 6/6	3
		15			

		FIDST	YEAR		
	Fall Semester	FIRST	ILAN	Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 010	Elements of Physical Geography	3	GEG	Category Requirement 1/2	3
GEG 020	Elements of Cultural Geography	3	GEG	Track Course 1/6	3
GE I	University Core 1/3	3	GE I	University Core 2/3	3
GE IV	College Distribution 1/5	3	GE II	University Distribution 1/3	3
OL IV	Free Elective 1/6	3	OL II	Free Elective 2/6	3
Total	Free Elective 170	15	Total	1 Too Elective 270	15
		SECON	ID YEAR		
	Fall Semester	SECON	ID TEAK	Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 2/6	3	GEG	Track Course 3/6	3
GEG 330CPVL	Cartography	3	PSY 011	General Psychology	3
MAT 017	Introduction to Math (or above)	3	GEI	University Core 3/3	3
BIO 010	Introduction to Biology (or above)	3	GE IV	College Distribution 2/5	3
DIO 010	Free Elective 3/6	3	OL IV	Free Elective 4/6	3
Total	THE ELECTIVE OF C	15	Total	TIGO EIGGRAG 470	15
		THIRD	YEAR	1	
	Fall Semester	TTIIKE	/ ILAK	Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 274CPQL	Introduction to GIS	3	GEG	Track Course 4/6	3
PSY 200QL	Statistics for Social & Behavioral Sciences	3	GEG	Track Course 5/6	3
SPA 011	Elementary Spanish I (or other Mod. Lang.)	3	SPA 012	Elementary Spanish II	3
GE II	University Distribution 2/3	3	GE IV	Non-BIO Natural Science	3
GE IV	College Distribution 3/5	3	GE IV	College Distribution 4/5	3
Total	Ŭ.	15	Total	- J	15
		FOURT	H YEAR		
Fall Semester			Spring Semester		
Course	Title	Credits	Course	Title	Credits
GEG	Category Requirement 2/2	3	GEG 380CTWI	Sr. Seminar in Geography	3
GEG 375	Research Methods	3	GEG	Track Course 6/6	3
	Intermediate Spanish I	3	SPA 104	Intermediate Spanish II	3
SPA 103	College Distribution 5/5	3	GE II	University Distribution 3/3	3
SPA 103 GE IV					
	Free Elective 5/6	3		Free Elective 6/6	3

		FIRST	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 010	Elements of Physical Geography	3	GEG 101	World Regional Geography	3
GEG 020	Elements of Cultural Geography	3	GEG	Track Course 1/4	3
GE I	University Core 1/3	3	GE I	University Core 2/3	3
GE IV	College Distribution 1/5	3	GE II	University Distribution 1/3	3
	Free Elective 1/6	3	GE IV	College Distribution 2/5	3
Total		15	Total		15
			•		
		SECON	ID YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Regional Course 1/2	3	GEG	Track Course 2/4	3
GEG 330CPVL	Cartography	3	PSY 011	General Psychology	3
MAT 017	Introduction to Math (or above)	3	GE I	University Core 3/3	3
BIO 010	Introduction to Biology (or above)	3	GE II	University Distribution 2/3	3
GE IV	College Distribution 3/5	3		Free Elective 2/6	3
Total		15	Total		15
		THIRD	YEAR		
	Fall Semester	1		Spring Semester	
Course	Title	Credits	Course	Title	Credits
	Introduction to GIS	3	GEG	Track Course 3/4	3
PSY 200QL	Statistics for Social & Behavioral Sciences	3	GEG 225CMCT	Spaces of Globalization	3
SPA 011	Elementary Spanish I (or other Mod. Lang.)	3	SPA 012	Elementary Spanish II	3
GE IV	College Distribution 4/5	3	GE IV	Non-Bio Natural Science	3
	Free Elective 3/6	3		Free Elective 4/6	3
Total		15	Total		15
		EOUDT	H YEAR		
	Fall Semester	FOORT	HILAK	Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 4/4	3	GEG	Regional Course 2/2	3
GEG 375	Research Methods	3	GEG 380CTWI	Sr. Seminar in Geography	3
SPA 103	Intermediate Spanish I	3	SPA 104	Intermediate Spanish II	3
GE IV	College Distribution 5/5	3	GE II	University Distribution 3/3	3
<del></del>	Free Elective 5/6	3		Free Elective 6/6	3
Total		15	Total		15

		FIRST	YEAR		
	Fall Semester	1 11(0)		Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 010	Elements of Physical Geography	3	GEG	Category Requirement 1/2	3
GEG 020	Elements of Cultural Geography	3	GE I	University Core 2/3	3
GE I	University Core 1/3	3	GE II	University Distribution 1/3	3
GE IV	College Distribution 1/5	3	GE IV	College Distribution 2/5	3
OL IV	Minor Course 1/6	3	OL IV	Minor Course 2/6	3
Total	Initial Course I/C	15	Total	Miller Godice 210	15
		SECON	D YEAR		
	Fall Semester	SECON		Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 1/2	3	GEG 310WI	Urban Geography	3
GEG 330CPVL	Cartography	3	MAT 017	Introduction to Math (or above)	3
BIO 010	Introduction to Biology (or above)	3	PSY 011	General Psychology	3
GE IV	College Distribution 3/5	3	GEI	University Core 3/3	3
GE IV	Minor Course 3/6	3	GE II	University Distribution 2/3	3
Total	Millor Course 3/6	15	Total	University Distribution 2/3	15
TOLAI		15	TOLAT		15
		THIRD	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG 274CPQL	Introduction to GIS	3	GEG 310WI	Urban Geography	3
GEG 343	Land Use Planning	3	GEG 341	Environmental Planning	3
PSY 200QL	Statistics for Social & Behavioral Sciences	3	SPA 012	Elementary Spanish II	3
SPA 011	Elementary Spanish I (or other Mod. Lang.)	3	GE IV	College Distribution 5/5	3
GE IV	College Distribution 4/5	3		Minor Course 4/6	3
Total		15	Total		15
		FOURT	H YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
GEG	Track Course 2/2	3	GEG 380CTWI	Sr. Seminar in Geography	3
GEG	Category Requirement 2/2	3	GEG 394	Internship in Geography	3
GEG 375	Research Methods	3	SPA 104	Intermediate Spanish II	3
SPA 103	Intermediate Spanish I	3	GE II	University Distribution 3/3	3
		3	+	Minor Course 6/6	3
	Minor Course 5/6	3		IIVIII OI COUISE 0/0	J

		FIRST	YEAR		
	Fall Semester	1 11(01	ILAK	Spring Semester	
Course	Title	Credits	Course	Title	Credits
BIO 104	▲ Principles of Biology	4	BIO 106	Zoology (or 108 Botany in Fall)	4
ENV 100	Introduction to Environmental Science	3	CHM 100	▲ General Chemistry	4
GEG 010	▲ Elements of Physical Geography	3	GEG	Track Course 1/7	3
MAT	▲ 106, 115, or 181 (4 credits)	3 / 4	GE I	Univ. Core 1/3	3
GE II	Univ. Dist. 1/2	3	GE II	Univ. Dist. 2/2	3
Total		16/17	Total		17
		SECON	D YEAR		
	Fall Semester	SECON	IDTEAK	Spring Semester	
Course	Title	Credits	Course	Title	Credits
CHM 102	▲ General Chemistry II	4	ENV 220	Environmental Analysis (WI)	3
GEG 274	Intro. to Geographic Info. Systems (CP)	3	ENV 222	Environmental Biology (WI)	3
GEG 274	Track Course 2/7	3	GEG	Track Course 3/7	3
GEL 100	▲ Physical Geology	4	GE I	Univ. Core 2/3	3
GE IV	College Dist. Humanities 1/3	3	GE IV	College Dist. Humanities 2/3	3
Total	Consign Production and the	17	Total	0 0 10 90 2 10 11 10 11 10 11 10 27 0	15
			•	•	
		THIRD	YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credits
CHM	204 or 214 Organic Chemistry	4	ENV 210	Environmental Geology	3
GEG	Track Course 4/7	3	GEG	Track Course 5/7	3
PSY 011	Introductory Psychology	3	PSY 200	Statistics for Social & Behavioral Sci.	3
GE II	Univ. Dist. Elective (WI)	3	GE I	Univ. Core 3/3	3
GE IV	College Dist. Elective 1/2 (CD)	3	GE IV	College Dist. Elective 2/2	3
Total		16	Total		15
		FOURT	H YEAR		
	Fall Semester			Spring Semester	
Course	Title	Credits	Course	Title	Credit
GEG	Track Course 6/7 (VL)	3	ENV 380	Senior Seminar	2
GEG 375	Research Methods in Geography	3	GEG	Track Course 7/7	3
PHY 040	General Physics I	4	GEG 394	Internship in Geography	2/3
GE IV	College Dist. Humanities 3/3 (CT)	3	PHY 042	General Physics II	4
Total		13	Total		11 / 12
Note	: ▲ Indicates a Directed Course in General			Required Thematic Courses:	
	Education. Such courses are required for the			3 Writing Intensive (WI)	
	major, but are used to satisfy requirements of			1 Computer Intensive (CP)	
	General Education. The units for these			1 Visual Literacy (VL)	
	courses count only under General Education.			1 Cultural Diversity (CD)	
	councies countries, and control and additions			. Januaran 21101011 (02)	