#### LIBERAL ARTS AND SCIENCES: BACHELOR OF SCIENCE **GEOLOGY**

VI. MAJOR PROGRAM: 44 s.h.		
A. REQUIRED COURSES: 38 S.H.	Gr.	S.H.
GEL 100 Physical Geology		4
GEL 102 Historical Geology		4
GEL 200VL Field Geology		3
GEL 220CT Mineralogy		4
GEL 230WI Paleontology		3
GEL 304CT Structural Geology		4
GEL 316VL Petrology & Geochemistry		4
GEL 346WI Sedimentology &		4
Stratigraphy		4
GEL 358CI Geophysics		3
GEL 362QL Hydrogeology		3
GEL 380WI Senior Seminar		2
B. ELECTIVE: 6 S.H.		
GEL 210 Environmental Geology		3
GEL 302 Economic Geology		3
GEL 324 Geomorphology		3
GEL 366 Marine Geology		3
GEL 368 Research in Geology I		1-3
GEL 369 Research in Geology II		1-3
GEL 371-373 Selected Topics		1-6
GEL 390 Internship in Geology		1-4
GEL 398 Honors Suppl. Research		1-3
TOTAL SEMESTER HOURS		
VII. CONCOMITANT COURSES: 26-29 S.H.		
A. CHEMISTRY: 8 S.H.	Gr.	S.H.
CHM 100 General Chemistry I		4
CHM 102 General Chemistry II		4
B. PHYSICS: 8 S.H.		
PHY 040 <b>OR</b> PHY 100		4
PHY 042 <b>OR</b> PHY 102		4
C. MATHEMATICS: 6-9 S.H.		
>>>Option 1		
MAT 105 College Algebra		3
MAT 106 Trigonometry		3
MAT 171 Calculus I		3
>>>Option 2		
MAT 115 Precalculus		3
		3
MAT 171 Calculus I		
>>>Option 3		
>>>Option 3  MAT 171 Calculus I		3
>>>>Option 3  MAT 171 Calculus I  MAT 172 Calculus II		3
>>>Option 3  MAT 171 Calculus I		

VIII. GRADUATION CLEARANCE						
A. Cumulative Q.P.A.						
D. Total Compater House						
B. Total Semester Hours a. General Education						
b. Major Program						
c. Concomitant						
GRAND TOTAL						
C. Comprehensive Exam Passed yes no						
Advisor's Signature						
Date						
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NOTES
*GEG 274 is strongly recommended to fulfill
this category.
**PSY 011 & SOC 010 are prerequisites to most
other courses in their respective disciplines.
***GEG Non-laboratory courses only allowed
in this category.
A minimum of 120 s.h. are required for
graduation.
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Program Code: ULASGEOS Effective Date of Program: Fall 2011 Reviewed: 2/2011



#### **COLLEGE OF LIBERAL ARTS & SCIENCES • BS • GEOLOGY**

Program Code ULASGEOS Effective Date: 08/29/2011

#### **GENERAL EDUCATION**

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)				
COURSE:	3				COURSE:	3			WI
B. Written Communication: ENG 23, 24, or 25				_	COURSE:	3			WI
COURSE:	3				COURSE:	3			WI
C.Mathematics: MAT 17 or above					B. Quantitative Literacy (QL) (3 credits)				
COURSE:	3				Computer-Intensive (CP) (3 credits)				
D.Wellness: Any 3-credit HEA course				1	COURSE:	3	ш		
COURSE:	3				C.Visual Literacy (VL) (3 credits) Communication-Intensive (CM) (3 credits)				
				_	COURSE:	3			
. UNIVERSITY DISTRIBUTION (15 credits)	RC	CR	GR	CAC	D.Cultural Diversity (CD) (3 credits)				
A. Natural Sciences: Any lab or non-lab course with prefix AST, BIO, CHM, ENV, GEL, MAR, NSE, or PHY; or certain GEG					COURSE:	3			CD
courses (see note at right)					E. Critical Thinking (CT) (3 credits)	l			
COURSE:	3				COURSE:	3			СТ
B. Social Sciences: Any course with prefix ANT, CRJ, ECO, HIS, INT, MCS, PSY, POL, SOC, SSE, or SWK; or certain GEG courses (see note at right)					A Competency Across the Curriculum (CAC) course is r rather an overlay that is "double counted" as fulfilling bo	iot a se	parate	cours	se, but
COURSE:	3				another requirement in either General Education (excep	t for th	e Unive	ersity (	Core),
C.Humanities: Any course with prefix ENG, HUM, PAG, PHI, WRI, WGS, or Modern Language					the major, or the minor.				
COURSE:	3				RC = Minimum required number of credits CR = Credits earned (fill in number of credits)				
D.Arts: Any course with prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE					GR = Grade earned (fill in letter grade) CAC = Competency Across the Curriculum (fill in desig	nation)	)		
COURSE:	3							_	
E.Free Elective: Any course carrying university credit					<b>NOTE:</b> GEG courses with a lab and 40, 322, and 323 n in II.A. and GEG courses 40, 204, 274, 304, 322, 323, 323, 324, 325, 325, 326, 327, 328, 329, 329, 329, 329, 329, 329, 329, 329				
COURSE:	3				380, and 394 may NOT be used in II.B.				
V. COLLEGE DISTRIBUTION (33 credits)	RC	CR	GR	CAC		RC	CR	GR	CAC
A. Natural Science, Mathematics, and					C. Humanities (9 credits): Choose one course in each subcategory.				
Computer Science# (6 credits): Choose one course in each subcategory.					1. Elective: PAG*, ENG, WRI, or HUM	-			
1. Natural Science with Lab: AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)					COURSE:	3			
SEE, , or wiret, or SEO (SEO HOLE OF HIGH)									1

IV. COLLEGE DISTRIBUTION (33 credits)	RC	CR	GR	CAC
A. Natural Science, Mathematics, and Computer Science# (6 credits): Choose one course in each subcategory.				
1. Natural Science with Lab: AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)				
COURSE:	3			
Elective: MAT, CSC, AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)				
COURSE:	3			
B. Social Science (9 credits): Choose one course in each subcategory.				
1. Elective: HIS, ANT, GEG (see note at right), or POL				
COURSE:	3			
2. Elective: PSY, SOC, CRJ, or SWK				
COURSE:	3			
3. Elective: ANT, HIS, ECO, GEG (see note at right), PSY, POL, SOC, CRJ, or SWK				
COURSE:	3			

	RC	CR	GR	CAC
C. Humanities (9 credits): Choose one course in each subcategory.				
1. Elective: PAG*, ENG, WRI, or HUM				
COURSE:	3			
2. Elective: Modern Language (103 or above) or PHI				
COURSE:	3			
3. Elective: PAG*, ENG, WRI, HUM, Modern Language (103 or above), or PHI				
COURSE:	3			
D. Free Electives (9 credits): Choose any university courses that count toward graduation.				
COURSE:	3			
COURSE:	3			
COURSE:	3			

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

<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, PHY, MAR, 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 PAG 011 and PAG 012

### Geology Course Plan - Option A

		<u> </u>	,
Fall 2010		Spring 2011	
Physical Geology	4	Historical Geology	4
Chemistry 100	4	Chemistry 102	4
MAT105 College Algebra	3	→ MAT106 Trigonometry	3
Composition 023	3	General education class (easy one)	3
	14		14
Fall 2011		Spring 2012	
Mineralogy <sup>1</sup>	4 -	→ Petrology/Geochemistry	4
Physics 040	4 —	Physics 042	4
Calculus MAT171	3	Bio104	4
Speech	3	General education class (easy one)	3
General education class	3	·	
	15		15
Fall 2012		Spring 2013	
Geophysics	3	Hydrogeology	3
Field Methods	3	Structural Geology	4
Intro to GIS (category IIIC)	3 🗕	→ Advanced GIS (category IIID)	3
General education class	3	General education class	3
General education class	3	Health	2
		PE	1
	15		16
Fall 2013		Spring 2014	
Geomorphology	3 -	Sed/Strat	4
Paleontology	4	Geology Elective	3
General education class	3	Geology Senior Seminar	2
General education class	3	General education class	3
General education class	3	General education class	3
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Bold = lab class

= prerequisite for this course

 $<sup>^{1}</sup>$  Mineralogy involves application of chemistry to geology, so having it under your belt early might help.

## Geology Course Plan - Option B

Fall 2010		Spring 2011	
Physical Geology	4	Historical Geology	4
MAT105 College Algebra	3 -	→ MAT106 Trigonometry	3
Composition 023	3	General education class	3
General education class	3	Bio104	4
General education class	3		
	16		14
Fall 2011		Spring 2012	
Mineralogy <sup>2</sup>	4 -	→ Petrology/Geochemistry	4
Chemistry 100	4 -	Chemistry 102	4
Calculus MAT171	3	Geology Elective	3
General education class	3	General education class (easy one)	3
P.E.	1		
	15		14
	_		
Fall 2012		Spring 2013	
Field Methods	3	Structural Geology	4
Physics 040	4 -	Physics 042	4
Intro to GIS (category IIIC)	3 -	→ Advanced GIS (category IIID)	3
Speech	3	General education class	3
General education class	3	Health	2
	15		16
Fall 2013		Spring 2014	
Geophysics	3	Hydrogeology	3
Geomorphology	3 -	> Sed/Strat	4
Paleontology	4	Geology Senior Seminar	2
General education class	3	General education class	3
General education class	3	General education class	3
	16		15

Bold = lab class

= prerequisite for this course

<sup>&</sup>lt;sup>2</sup> Taking Mineralogy and Chemistry 100 can be beneficial because the courses complement each other

## Geology Course Plan - Option C

Fall 2010			Spring 2011	
Physical Geology	4 -	1	Historical Geology	4
MAT105 College Algebra	3 -	1	MAT106 Trigonometry	3
Composition 023	3		Speech	3
General education class	3		Bio104	4
General education class	3			
	16			14
Fall 2011			Spring 2012	
Chemistry 100	4	1	Chemistry 102	4
Geomorphology	3 -	1	Sed/Strat	4
Calculus MAT171	3		Geology Elective	3
General education class	3		General education class (easy one)	3
Health	2			
P.E.	1			
	16			14
Fall 2012 <sup>3</sup>			Spring 2013	
Mineralogy	4 -	1	Petrology/Geochemistry	4
Physics 040	4 -		Physics 042	4
Field Methods	3		General education class	3
Intro to GIS (category IIIC)	3 -	1	Advanced GIS (category IIID)	3
General education class (easy!!)	3			
	17			14
Fall 2013			Spring 2014	
Geophysics	3		Hydrogeology	3
Paleontology	4		Structural Geology	4
General education class	3		Geology Senior Seminar	2
General education class	3		General education class	3
General education class	3		General education class	3
	16			15

Bold = lab class

= prerequisite for this course

<sup>&</sup>lt;sup>3</sup> This is a tough semester - make sure that's a really easy general education class!

### Geology Course Plan - Option D

Fall 2010		Spring 2011	
Physical Geology	4 -	→ Historical Geology	4
MAT105 College Algebra	3 -	→ MAT106 Trigonometry	3
Composition 023	3	General education class (easy one)	3
General education class	3	Bio104	4
General education class	3		
	16		14
Fall 2011		Spring 2012	
Chemistry 100	4 -	Chemistry 102	4
Field Methods	3	Structural Geology	4
Paleontology	4	General education class	3
Calculus MAT171	3	General education class	3
		Health	2
	14		16
Fall 2012		Spring 2013	T
Physics 040	4 -	Physics 042	4
Geomorphology	3	Sed/Strat	4
General education class	3	Geology Elective	3
General education class	3	General education class	3
Speech	3	PE	1
	16		15
Fall 2013		Spring 2014	
Geophysics	3	Hydrogeology	3
Mineralogy <sup>4</sup>	4 -	→ Petrology/Geochemistry	4
Intro to GIS (category IIIC)	3 -	→ Advanced GIS (category IIID)	3
General education class	3	General education class	3
General education class	3	Geology Senior Seminar	2
	16		15

Bold = lab class

= prerequisite for this course

<sup>&</sup>lt;sup>4</sup> Mineralogy involves application of chemistry to geology, so having it under your belt early might help.

# Prerequisites

To take this course	You must have this pre-requisite
GEL102 - Historical Geology	GEL100 - Physical Geology
GEL200 - Field Geology	GEL102 - Historical Geology
GEL210 - Environmental Geology	GEL100 - Physical Geology
GEL220 - Mineralogy	GEL100 - Physical Geology
GEL302 - Economic Geology	GEL100 - Physical Geology
GEL304 - Structural Geology	GEL102 - Historical Geology
GEL316 - Petrology and Geochemistry	GEL220 - Mineralogy and CHM100
GEL320 - Paleontology	GEL102 - Historical Geology
GEL324 - Geomorphology	GEL100 - Physical Geology
GEL346 - Sedimentology and Strat.	GEL102 - Historical Geology or GEL366 Marine Geology
GEL358 - Geophysics	PHY040 or PHY100 - Physics
GEL362 - Hydrogeology	PHY040 or PHY100 - Physics + 2 Geology classes
GEL366 - Marine Geology	GEL100 - Physical Geology