

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_

## BACHELOR OF ARTS GEOGRAPHY

GENERAL EDUCATION REQUIREMENTS				
<b>Competencies</b>				
<input type="checkbox"/> ♦ Basic College Math				
<input type="checkbox"/> ♦ Reading Comprehension				
<b>◆ General Education Categories (34-35 credits total)</b>				
◆FYS	First Year Seminar			3
◆W-I	Written Communication - Level I			3
◆OC	Oral Communication			3
PGR	Personal Growth & Responsibility			3
CEA	Creative Expression & Appreciation			3
WC	World Cultures			3
HP	The Human Past			3
CS	Contemporary Society			3
SR	Scientific Reasoning:	# Any SR course		3-4
		# SR Lab course		4
QR	Quantitative Reasoning			3
<b>‡ Written Communication (Level II and Level III)</b>				
W-II	Written Communication - Level II			<input type="checkbox"/>
W-III	Written Communication - Level III			<input type="checkbox"/>
<b>Required Minor: _____ (15-18 credits total)</b>				

COURSES IN MAJOR (33 credits total)				
<b>Major Core Courses (15 credits)</b>				
GPH	115	Global Climate Change		3
GPH	105	Introduction to Geography OR		3
GPH	110	World Regions		
GPH	140	Introduction to Maps & GIS		3
GPH	301	Intro to Quantitative Geography		3
GPH	302	Geographic Research		3
<b>Major Concentration Courses (18 credits)</b>				
†GPH				
††GPH				
††GPH				
GPH				
GPH				
GPH				
<b>Foreign Language (0-12 credits total)</b>				
<b>Free Electives (22 credits minimum)</b>				
May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.				

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

◆ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

# These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

† Regional Electives: GPH 110, 220, 221, 222, 229, 233, 234, 235, 236, 237, 238, 239.

†† GPH 300-level or GPH 400-level class.

◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS      ◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_

**BACHELOR OF SCIENCE  
 CARTOGRAPHY AND GIS**

**GENERAL EDUCATION REQUIREMENTS**

**Competencies**

<input type="checkbox"/> ♦ Basic College Math
<input type="checkbox"/> ♦ Reading Comprehension

♣ **General Education Categories (34-35 credits total)**

♦FYS	First Year Seminar			3	
♦W-I	Written Communication - Level I			3	
♦OC	Oral Communication			3	
PGR	Personal Growth & Responsibility			3	
CEA	Creative Expression & Appreciation			3	
WC	World Cultures			3	
HP	The Human Past			3	
CS	Contemporary Society			3	
SR	Scientific Reasoning:	# Any SR course		3-4	
		# SR Lab course		4	
QR	Quantitative Reasoning			3	

‡ **Written Communication (Level II and Level III)**

W-II	Written Communication - Level II			<input type="checkbox"/>
W-III	Written Communication - Level III			<input type="checkbox"/>

**Minor/Free Electives (43 credits minimum)**

May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.


**COURSES IN MAJOR (42 credits total)**

**Major Core Courses (15 credits)**

GPH	115	Global Climate Change	3	
GPH	105	Introduction to Geography OR World Regions	3	
GPH	110			
GPH	140	Intro to Maps & GIS	3	
GPH	301	Intro to Quantitative Geography	3	
GPH	302	Geographic Research	3	

**Major Concentration Courses (15 credits)**

GPH	245	Cartography	3	
GPH	340	GIS	3	
GPH	344	Remote Sensing	3	
GPH	446	Advanced GIS	3	
GPH	343	Air Photo Interpretation OR	3	
		Digital Image Processing		
GPH	444			

**Techniques Electives (6 credits)**

GPH	343	Air Photo Interpretation OR	3	
GPH	444	Digital Image Processing		
GPH	346	GIS and Business	3	
GPH	347	GIS Applications	3	
GPH	442	Geospatial Programming	3	

**Geography Electives (6 credits)**

GPH		Geography Elective	3	
GPH		Geography Elective	3	

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

♣ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

‡ These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

♦ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
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Exceptions in the timing of courses will be made for transfer students

**Total credits for graduation: 120**

**Effective: 9/2017**

## BACHELOR OF SCIENCE GEOGRAPHY

GENERAL EDUCATION REQUIREMENTS					
<b>Competencies</b>					
<input type="checkbox"/> ♦ Basic College Math					
<input type="checkbox"/> ♦ Reading Comprehension					
<b>♦ General Education Categories (34-35 credits total)</b>					
♦FYS	First Year Seminar			3	
♦W-I	Written Communication - Level I			3	
♦OC	Oral Communication			3	
PGR	Personal Growth & Responsibility			3	
CEA	Creative Expression & Appreciation			3	
WC	World Cultures			3	
HP	The Human Past			3	
CS	Contemporary Society			3	
SR	Scientific Reasoning: # Any SR course			3-4	
	# SR Lab course			4	
QR	Quantitative Reasoning			3	
<b>‡ Written Communication (Level II and Level III)</b>					
W-II	Written Communication - Level II				<input type="checkbox"/>
W-III	Written Communication - Level III				<input type="checkbox"/>

COURSES IN MAJOR (33 credits total)						
Major Core Courses (15 credits)						
GPH	115	Global Climate Change		3		
GPH	105	Introduction to Geography OR		3		
GPH	110	World Regions				
GPH	140	Intro to Maps & GIS		3		
GPH	301	Intro to Quantitative Geography		3		
GPH	302	Geographic Research		3		
Major Concentration Courses (18 credits)						
†GPH						
††GPH						
††GPH						
GPH						
GPH						
GPH						

**Minor/Free Electives (52 credits minimum)**  
 May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.


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♣ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

# These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

† Regional Electives: GPH 110, 220, 221, 222, 229, 233, 234, 235, 236, 237, 238, 239.

†† GPH 300-level or GPH 400-level course.

♦ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
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Exceptions in the timing of courses will be made for transfer students

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_

## BACHELOR OF SCIENCE GEOGRAPHY ENVIRONMENTAL SUSTAINABILITY CONCENTRATION

### GENERAL EDUCATION REQUIREMENTS

#### Competencies

<input type="checkbox"/>	◆ Basic College Math
<input type="checkbox"/>	◆ Reading Comprehension

#### ◆ General Education Categories (34-35 credits total)

◆FYS	First Year Seminar			3
◆W-I	Written Communication - Level I			3
◆OC	Oral Communication			3
PGR	Personal Growth & Responsibility			3
CEA	Creative Expression & Appreciation			3
WC	World Cultures			3
HP	The Human Past			3
CS	Contemporary Society			3
SR	Scientific Reasoning:	# Any SR course		3-4
		# SR Lab course		4
QR	Quantitative Reasoning			3

#### ‡ Written Communication (Level II and Level III)

W-II	Written Communication - Level II			<input type="checkbox"/>
W-III	Written Communication - Level III			<input type="checkbox"/>

#### Minor/Free Electives (40 credits minimum)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.


### COURSES IN MAJOR (45 credits total)

#### Major Core Courses (15 credits)

GPH	115	Global Climate Change	3
GPH	105	Introduction to Geography OR	3
GPH	110	World Regions	
GPH	140	Intro to Maps & GIS	3
GPH	301	Intro to Quantitative Geography	3
GPH	302	Geographic Research	3

#### Concentration Core Courses (12 credits)

GPH	171	Environmental Sustainability and Society	3
GPH	282P	Environmental Global Issues	3
GPH	375	Food, Drink & the Environment	3
IDS	366	Energy and the Environment	3

#### Concentration Planning Courses (6 credits)

##### Choose two:

ECO	319	Environment & Natural Resource Economics	3
GPH	373	Land Use Planning & Analysis	3
GPH	377	Environmental Assessment	3

#### Concentration Techniques Course (3 credits)

##### Choose one:

GPH	340	Geographic Info. Systems	3
GPH	344	Remote Sensing	3

#### Concentration Perspectives Courses (9 credits)

##### Choose three:

BIO	208	Environmental Problems	3
GPH	252	Native American Lands & Environment	3
GPH	315	Economic Geography	3
GPH	360	Globalization	3
GPH	376P	Conservation of Nat. Resources	3
GPH	379	Environmental Justice	3
GLS	237	Medical Geology	3
GLS	351	Economic Geology	3
PHL	224	Environmental Ethics	3
POL	304	Environmental Politics	3

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

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# These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
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Exceptions in the timing of courses will be made for transfer students

Total credits for graduation: 120

Effective: 9/2017

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

Date Admitted Into Major: \_\_\_\_\_

**BACHELOR OF SCIENCE  
GEOGRAPHY  
SUSTAINABLE TOURISM CONCENTRATION**

**GENERAL EDUCATION REQUIREMENTS**

**Competencies**

<input type="checkbox"/>	◆ Basic College Math
<input type="checkbox"/>	◆ Reading Comprehension

**◆ General Education Categories (34-35 credits total)**

◆FYS	First Year Seminar		3	
◆W-I	Written Communication - Level I		3	
◆OC	Oral Communication		3	
PGR	Personal Growth & Responsibility		3	
CEA	Creative Expression & Appreciation		3	
WC	World Cultures		3	
HP	The Human Past		3	
CS	Contemporary Society		3	
SR	Scientific Reasoning:	# Any SR course	3-4	
		# SR Lab course	4	
QR	Quantitative Reasoning		3	

**‡ Written Communication (Level II and Level III)**

W-II	Written Communication - Level II				<input type="checkbox"/>
W-III	Written Communication - Level III				<input type="checkbox"/>

**COURSES IN MAJOR (33 credits total)**

**Major Core Courses (15 credits)**

GPH	115	Global Climate Change	3	
GPH	105	Introduction to Geography OR	3	
GPH	110	World Regions		
GPH	140	Intro to Maps & GIS	3	
GPH	301	Intro to Quantitative Geography	3	
GPH	302	Geographic Research	3	

**Major Concentration Courses (6 credits)**

GPH	261	Intro to Travel and Tourism	3	
GPH	315	Economic Geography	3	

**Concentration Electives (12 credits)**

**Choose four of these courses:**

GPH	246	Parks and Protected Areas	3	
GPH	264	Recreation Geography	3	
GPH	317	Transportation Geography	3	
GPH	346	GIS in Bus. & Commun Develop.	3	
GPH	364	Special Events and Festivals	3	
GPH	402	Travel Seminar	3	
GPH	462	Exploring Tourism Destinations	3	
GPH	463	International Perspectives on Tourism	3	
GPH	464	Tourism Development	3	
†GPH		Regional Elective	3	

**Minor/Free Electives (52 credits minimum)**  
May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.


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- ♣ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- # These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.
- ‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.
- † Regional Electives: GPH 220, 221, 222, 229, 233, 234, 235, 236, 237..

◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
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Exceptions in the timing of courses will be made for transfer students

**Special Application Process Required**

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_



**COMBINED BACHELOR OF SCIENCE CARTOGRAPHY  
 AND  
 MASTER OF SCIENCE GEO-INFORMATION SCIENCE**

**GENERAL EDUCATION REQUIREMENTS**

**Competencies**

<input type="checkbox"/> ♦ Basic College Math
<input type="checkbox"/> ♦ Reading Comprehension

**◆ General Education Categories - 34-35 credits**

◆FYS	First Year Seminar			3
◆W-I	Written Communication - Level I			3
◆OC	Oral Communication			3
PGR	Personal Growth & Responsibility			3
CEA	Creative Expression & Appreciation			3
WC	World Cultures			3
HP	The Human Past			3
CS	Contemporary Society			3
SR	Scientific Reasoning:	# Any SR course		3-4
		# SR Lab course		4
QR	Quantitative Reasoning			3

**‡ Written Communication (Level II and Level III)**

W-II	Written Communication - Level II			<input type="checkbox"/>
W-III	Written Communication - Level III			<input type="checkbox"/>

**Minor/Free Electives (31 credits total)**

Additional free electives beyond the credits listed may be required based on the use of support courses to satisfy the General Education Category requirements.


**COURSES IN MAJOR (54 credits)**

**Major Core Courses (15 credits total)**

GPH	115	Global Climate Change	3
GPH	105	Introduction to Geography OR	3
GPH	110	World Regions	3
GPH	140	Introduction to Maps & GIS	3
GPH	301	Introduction to Quantitative Geography	3
GPH	302	Geographic Research	3

**Major Concentration Courses (27 credits)**

GPH	245	Cartography	3
GPH	340	GIS	3
GPH	344	Remote Sensing	3
GPH	446	Advanced GIS	3
GPH	343	Air Photos Interpretation OR	3
GPH	444	Digital Image Processing	3
GPH	903	Geographic Information Systems	3
GPH	909	Interpretation of Remote Sensing Imagery	3
GPH	942	Advanced Geographic Quantitative Methods	3
GPH	945	GIS Project Implantation	3

**Techniques Electives (6 credits)**

GPH	343	Air Photos Interpretation OR	3
GPH	444	Digital Image Processing	3
GPH	346	GIS and Business	3
GPH	347	GIS Applications	3
GPH	442	Geospatial Programming	3

**Geography electives (6 credits)**

GPH		Geography Elective	3
GPH		Geography Elective	3

**5<sup>th</sup> Year Courses (19 graduate credits)**

**Fall**

GPH	904	GIS for Research and Analysis	3
GPH	960	Software Design and Programming in GIS	3
GPH		Graduate Elective	3

**Spring**

GPH	952	Spatial Database Analysis and Design	3
GPH	876	Directed Study (thesis) OR	4
GPH	965	Seminar in GIS	3
GPH		Graduate Elective	3

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- ◆ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- ‡ These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline
- ‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
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Exceptions in the timing of courses will be made for transfer students

**Total credits for graduation: 120**

**The additional credits listed above are required for Graduate graduation**

**Effective: 9/2017**