

OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC

	8888 University Drive, Burnaby, BC Canada V5A 1S6	TEL: 778.78 FAX: 778.78	avpcio@sfu.ca www.sfu.ca/vpacademic
MEMORANDUM			
ATTENTION FROM	Senate Mark Lechner, Acting Cl Senate Committee on		November 7, 2016 1/1
RE:	Undergraduate Studies Faculty of Environment		

## For information:

Acting under delegated authority at its meeting of November 3, 2016 SCUS approved the following curriculum revisions.

## 1. Department of Geography (SCUS 16-42b) effective Fall 2017

(i) Requirement changes to the Geography Programs

- Geography Major and Honours
- Environmental Specialty Major and Environmental Specialty Honours
- Physical Geography Major
- Spatial Information Systems Certificate

## 2. Department of Archaeology (SCUS 16-42c)

(i) Title change for ARCH 201 effective Summer 2017

- (ii) New Course Proposal: ENV 100-3, Great Ideas in Environment with B-Hum designation effective Fall 2017
- (iii) Requirement changes to the Certificate in Environmental Literacy effective Summer 2017

# SCUS 16-42



#### FACULTY OF ENVIRONMENT

TASC 2 Building, Room 8800 8888 University Drive, Burnaby, BC Canada V5A 1S6 TEL 778.782.8787 FAX 778.782.8788 fenv-info@sfu.ca www.fenv.sfu.ca

#### 

FROMAlex Clapp, Chair, FENV UCCRE:Faculty of Environment Curriculum Changes

DATE Oct 19th 2016

Please find attached the following submissions from the Faculty of Environment to SCUS. These items were approved by the Faculty of Environment Undergraduate Curriculum Committee on October 5th, 2016, with the exception of the first item, which was approved in June 2016.

- 2) Changes to Geography Programs: 400-level requirements
- 3) Archaeology 201 name change
- 4) ENV100 course proposal
- 5) Calendar Entry Change to the Certificate in Environmental Literacy

Thanks, Alex



OFFICE OF THE DEAN

#### MEMO

ATTENTION Gord Myers, AVPA
FROM Alex Clapp, Associate Dean, Undergraduate
RE Substitution exclusions
DATE April 15, 2016

The Faculty would like the following wording to be added to all of our programs to facilitate the proper working of the degree progess report on SIMS.

"Substitutions of program requirements, including courses deemed "equivalent" to these required courses, are not allowed without written permission from the program. Any of these courses taken without approval will not be applied to graduation requirements. Students should consult their academic advisor for details on obtaining permission for any substitutions."

Our programs: Archaeology: Major, Honours, Minor Development & Sustainability: Minor Environmental Resource Management: Major Environmental Science: Major, Honours Geography: Major, Honours, Minor, Extended Minor Geography-Environmental Specialty: Major, Honours Global Environmental Systems: Major Physical Geography: Major, Honours, Minor Resource and Environmental Management: Minor

Certificates: Cultural Resource Management Environmental Literacy Sustainable Community Development Urban Studies Spatial Information Systems

# SCUS 16-42b



FACULTY OF ENVIRONMENT Department of Geography

Robert C. Brown Hall, #7123 8888 University Drive, Burnaby, BC Canada V5A 1S6 **TEL 778.782.4599** FAX 778.782.5841 emccann@sfu.ca www.sfu.ca/~emccann

### To: Alex Clapp, Associate Dean, Faculty of Environment

From: Eugene McCann, Chair, Undergraduate Studies Committee, Geography

### Re: Changes to Geog Programs: 400-level requirements, various programs

Date: May 20 2016

Attached are changes to the Geography programs listed below. All changes are to the numbers of 400-level courses required in each program. These changes were approved by the Geography Undergraduate Studies Committee on May 16 2016 and by the Department meeting on May 20 2016.

Programs affected:

- BA Geography & BA Geography (Hons)
- BA Environmental Specialty & BA Environmental Specialty (Hons)
- BSc Physical
- SIS Certificate



Rationale for change:

To provide more flexibility for students to allow them to complete their programs as efficiently as possible and to provide more flexibility for the department when scheduling courses.

Effective term and year: Fall 2017

The following program(s) will be affected by these changes: Geography Major, Geography Honours

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Geography Major Bachelor of Arts Students must complete 120 units including 45 upper division units. [...] **Program Requirements** Students complete 120 units, as specified below. Lower Division Requirements [...] **Upper Division Requirements** Students complete 32 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete two of GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4)



GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 442 - City and Environment (4) GEOG 445 - Health Care Geographies (4) and any other courses from the full list of 400 level geography courses and any duer other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any due other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any due other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any due other courses from the full list of 300 and 400 level geography courses and any due other courses from the full list of 300 and 400 level geography courses and any due other courses (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 325 - Agriculture and the Environment (4) GEOG 328 - Regional Development and Planning (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - Global Biogeochemical and Water Cycles (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and		
GEOG 318 - Soils in Our Énvironment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 442 - Problems in Environmental History (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 445 - Health Care Geographies (4) and any one other courses from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any doitional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 385 - Agriculture and the Environment (4) GEOG 389 - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography-courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 422 - Industrial Change and Local Development (4)		GEOG 316 - Global Biogeochemical and Water Cycles (4)
GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography-courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 444 - City and Environment (4) GEOG 445 - Health Care Geographies (4) and any one other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any ditional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Tourism (4) GEOG 385 - Agriculture and the Environment (4) GEOG 385 - Agriculture and the Environment (4) GEOG 386 - Agriculture and the Environment (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography-courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 424 - Cities, Transportation, Infrastructure (4)		GEOG 317 - Soil Science (4)
and any three other courses from the full list of 300 level geography-courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) GEOG 448 - Health Care Geographies (4) and any-one-other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any dour other courses from the full list of 300 and 400 level geography courses and any duritional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 322 - World Resources (4) GEOG 322 - World Resources (4) GEOG 322 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 327 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 318 - Regional Development and Planning (4) GEOG 318 - Regional Development and Planning (4) GEOG 318 - Regional Development (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and any end GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 424 - Cities, Transportation, Infrastructure (4)		GEOG 318 - Soils in Our Environment (4)
and one of GEOG 420 - Cultural Geography (4) GEOG 422 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 442 - A World of Cities (4) GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) GEOG 449 - City and Environment (4) GEOG 446 - Health Care Geographies (4) and any one other courses from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 310 - Labour Geographies (3) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and any other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 319 - Landscape Ecology (4)
GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) GEOG 446 - Health Care Geographies (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any one other courses from the full list of 300 and 400 level geography courses and any defitional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 325 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		and any three other courses from the full list of 300 level geography courses
GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Citics, Space, and Politics (4) GEOG 442 - A World of Citics (4) GEOG 442 - City and Environment (4) GEOG 448 - City and Environment (4) GEOG 448 - Health Care Geographies (4) and any oeother courses from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 382 - Labour Geographies (3) GEOG 385 - Agriculture and the Environment (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		and one of
GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Citics, Space, and Politics (4) GEOG 442 - A World of Citics (4) GEOG 442 - City and Environment (4) GEOG 448 - City and Environment (4) GEOG 448 - Health Care Geographies (4) and any oeother courses from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 382 - Labour Geographies (3) GEOG 385 - Agriculture and the Environment (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 420 - Cultural Geography (4)
GEOG 441 - Cities, Špace, and Politics (4) GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) GEOG 449 - City and Environment (4) and any one other course from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 323 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 323 - Labour Geographies (3) GEOG 335 - Agriculture and the Environment (4) GEOG 338 - Regional Development and Planning (4) GEOG 316 - Global Boyeolopment and Planning (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 442 - A World of Cities (4) GEOG 449 - City and Environment (4) GEOG 486 - Health Care Geographies (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 325 - Labour Geographies (3) GEOG 385 - Agriculture and the Environment (4) GEOG 385 - Agriculture and the Environment (4) GEOG 388 - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 312 - Geographical Political Economy (4) GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 440 - Property, Land, Society (4)
GEOG 449 - City and Environment (4) GEOG 486 - Health Care Geographies (4) and any one other courses from the full list of 300 and 400 level geography courses and any dour other courses in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 325 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 328 - Agriculture and the Environment (4) GEOG 328 - Agriculture and the Environment (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 310 - Global Biogeochemical and Water Cycles (4) GEOG 311 - Bydrole Constrement (4) GEOG 312 - Geographical and Water Cycles (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 312 - Geographical Political Economy (4) GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 441 - Cities, Space, and Politics (4)
GEOG 486 - Health Care Geographies (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 323 - Industrial Location (4) GEOG 323 - Ceography of Tourism (4) GEOG 324 - Geography of Tourism (4) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 385 - Agriculture and the Environment (4) GEOG 311 - Hydrology (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 311 - Global Biogeochemical and Water Cycles (4) GEOG 312 - Geographical Political Economy (4) GEOG 314 - Theore courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 422 - Theories and Practices of Development (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 442 - A World of Cities (4)
and any one other course from the full list of 400 level geography coursesand any four other courses from the full list of 300 and 400 level geography coursesand any additional courses, in geography and across the University, to complete the requiredtotal of 45 upper division units.Resources, Economy, and Environment ConcentrationStudents choosing this concentration complete two ofGEOG 321 - Geographies of Global Capitalism (4)GEOG 322 - World Resources (4)GEOG 324 - Geography of Transportation (4)GEOG 327 - Geography of Transportation (4)GEOG 328 - Labour Geographies (3)GEOG 328 - Labour Geographies (3)GEOG 385 - Agriculture and the Environment (4)GEOG 311 - Hydrology (4)GEOG 312 - Geography of Natural Hazards (4)GEOG 313 - River Geomorphology (4)GEOG 314 - The Climate System (4)GEOG 315 - World Ecosystems (4)GEOG 316 - Global Biogeochemical and Water Cycles (4)GEOG 317 - Soil Science (4)GEOG 318 - Soils in Our Environment (4)GEOG 318 - Soils in Our Environment (4)GEOG 319 - Landscape Ecology (4)GEOG 318 - Soils in Our Environment (4)GEOG 421 - Geographical Political Economy (4)GEOG 422 - Theories and Practices of Development (4)GEOG 424 - Citties, Transportation, Infrastructure (4)		GEOG 449 - City and Environment (4)
and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 387 - Agriculture and the Environment (4) GEOG 310 - Hydrology (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 319 - Landscape Ecology (4) and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 486 - Health Care Geographies (4)
and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 422 - Theories and Practices of Development (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		and any one other course from the full list of 400 level geography courses
total of 45 upper division units. Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389 - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		and any four other courses from the full list of 300 and 400 level geography courses
Resources, Economy, and Environment Concentration Students choosing this concentration complete two of GEOG 321 - Geographics of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 322 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 383 - Agriculture and the Environment (4) GEOG 318 - Agriculture and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		and any additional courses, in geography and across the University, to complete the required
Students choosing this concentration complete two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Transportation (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 385 - Agriculture and the Environment (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		total of 45 upper division units.
GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		Resources, Economy, and Environment Concentration
GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 311 - Hydrology (4) GEOG 311 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		Students choosing this concentration complete two of
GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 321 - Geographies of Global Capitalism (4)
GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 322 - World Resources (4)
GEOG 327 - Geography of Tourism (4) GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 323 - Industrial Location (4)
GEOG 328 - Labour Geographies (3) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 324 - Geography of Transportation (4)
GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		GEOG 327 - Geography of Tourism (4)
GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - The Climate System (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		• • •
GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		· • • •
GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
<ul> <li>GEOG 318 - Soils in Our Environment (4)</li> <li>GEOG 319 - Landscape Ecology (4)</li> <li>and any three other courses from the full list of 300 level geography courses</li> <li>and one of</li> <li>GEOG 421 - Geographical Political Economy (4)</li> <li>GEOG 422 - Theories and Practices of Development (4)</li> <li>GEOG 424 - Cities, Transportation, Infrastructure (4)</li> <li>GEOG 426 - Industrial Change and Local Development (4)</li> </ul>		
<ul> <li>GEOG 319 - Landscape Ecology (4)</li> <li>and any three other courses from the full list of 300 level geography courses</li> <li>and one of</li> <li>GEOG 421 - Geographical Political Economy (4)</li> <li>GEOG 422 - Theories and Practices of Development (4)</li> <li>GEOG 424 - Cities, Transportation, Infrastructure (4)</li> <li>GEOG 426 - Industrial Change and Local Development (4)</li> </ul>		
and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4)		
GEOG 426 - Industrial Change and Local Development (4)		
GEOG 427 - Selected Topics in the Geography of Tourisin (4)		
	l	GLOG 427 - Selected Topics in the Geography of Tourisin (4)



GEOG 428 - World Forests (4) GEOG 445 - Resource Planning (4) GEOG 468 - Society and Environment in China (4) and any one other course from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 302 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 382 - Population Geography (4) GEOG 382 - Population Geography (4) GEOG 382 - Population Geography (4) GEOG 315 - Health Geography (4) GEOG 315 - Geography of Natural Hazards (4) GEOG 315 - Geography of Natural Hazards (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Environmental History (4) GEOG 318 - River Geomorphology (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Siol Science (4) GEOG 318 - Solis in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Cultural Geography (4) GEOG 441 - Cities, Space, and Politics (4) GEOG 442 - A World of Cities (4)						
GEOG 468 - Society and Environment in China (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 400 level geography courses and any doltional courses, in geography and across the University, to complete the required total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geographies of Consumption (4) GEOG 326 - Geography of Urban Built Environments (4) GEOG 327 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 312 - Geography and Gender (4) and one of GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 420 - Problems in Environment (4) GEOG 420 - Problems in Environment History (4) GEOG 420 - Problems in Environment History (4) GEOG 420 - Problems in Environment History (4) GEOG 440 - Property, Land, Society (4)						
and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 336 - Urban Planning and Policy (4) GEOG 382 - Ippultical Geography (4) GEOG 383 - Ippultical Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystem (4) GEOG 315 - World Ecosystem (4) GEOG 315 - World Ecosystem (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 420 - Problems in Environmental History (4) GEOG 420 - Problems in Environmental History (4) GEOG 420 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4)						
and any four other courses from the full list of 300 and 400 level geography courses and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Political Geography (4) GEOG 313 - River Geomorphology (4) GEOG 314 - Political Geography (4) GEOG 315 - World Ecosystem (4) GEOG 315 - World Ecosystem (4) GEOG 315 - Niver Geomorphology (4) GEOG 315 - Soils in Our Environment (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 420 - Problems in Environment History (4) GEOG 420 - Problems in Environment History (4) GEOG 440 - Property, Land, Society (4) GEOG 440 - Critics, Space, and Politics (4)						
and any additional courses, in geography and across the University, to complete the required total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 322 - Geographies of Consumption (4) GEOG 322 - Geography of Urban Built Environments (4) GEOG 332 - Urban Planning and Policy (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 382 - Population Geography (4) GEOG 311 - Political Geography (4) GEOG 312 - Geography and Gender (4) and one of GEOG 314 - The Climate System (4) GEOG 315 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment History (4) GEOG 318 - Soils in Our Environment History (4) GEOG 420 - Cultural Geography (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Crities, Space, and Politics (4)						
total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geographies of Consumption (4) GEOG 326 - Geography of Urban Built Environments (4) GEOG 327 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 317 - Soil Science (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 441 - Cities, Space, and Politics (4)		and any four other courses from the full list of 300 and 400 level geography courses				
total of 45 upper division units. Geography Honours Bachelor of Arts [] Lower Division Requirements [] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geographies of Consumption (4) GEOG 326 - Geography of Urban Built Environments (4) GEOG 327 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 317 - Soil Science (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 441 - Cities, Space, and Politics (4)		and any additional courses, in geography and across the University, to complete the required				
Bachelor of Arts         []         Lower Division Requirements         []         Upper Division Requirements         Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.         Society and Environment Concentration         Students choosing this concentration complete one of         GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4)         and two of         GEOG 325 - Geographies of Consumption (4)         GEOG 362 - Geography of Urban Built Environments (4)         GEOG 363 - Urban Planning and Policy (4)         GEOG 377 - Environmental History (4)         GEOG 381 - Political Geography (4)         GEOG 382 - Population Geography (4)         GEOG 382 - Population Geography (4)         GEOG 317 - Geography and Gender (4)         and one of         GEOG 311 - Hydrology (4)         GEOG 312 - Geography of Natural Hazards (4)         GEOG 313 - River Geomorphology (4)         GEOG 316 - Global Biogeochemical and Water Cycles (4)         GEOG 317 - Soil Science (4)         GEOG 318 - Soils in Our Environment (4)         GEOG 319 - Landscape Ecology (4)         and one of         GEOG 319 - Landscape Ecology (4)         GEOG 319 - Landscape Ecology (4)						
Bachelor of Arts         []         Lower Division Requirements         []         Upper Division Requirements         Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.         Society and Environment Concentration         Students choosing this concentration complete one of         GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4)         and two of         GEOG 325 - Geographies of Consumption (4)         GEOG 362 - Geography of Urban Built Environments (4)         GEOG 363 - Urban Planning and Policy (4)         GEOG 377 - Environmental History (4)         GEOG 381 - Political Geography (4)         GEOG 382 - Population Geography (4)         GEOG 382 - Population Geography (4)         GEOG 317 - Geography and Gender (4)         and one of         GEOG 311 - Hydrology (4)         GEOG 312 - Geography of Natural Hazards (4)         GEOG 313 - River Geomorphology (4)         GEOG 316 - Global Biogeochemical and Water Cycles (4)         GEOG 317 - Soil Science (4)         GEOG 318 - Soils in Our Environment (4)         GEOG 319 - Landscape Ecology (4)         and one of         GEOG 319 - Landscape Ecology (4)         GEOG 319 - Landscape Ecology (4)						
Bachelor of Arts         []         Lower Division Requirements         []         Upper Division Requirements         Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.         Society and Environment Concentration         Students choosing this concentration complete one of         GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4)         and two of         GEOG 325 - Geographies of Consumption (4)         GEOG 362 - Geography of Urban Built Environments (4)         GEOG 363 - Urban Planning and Policy (4)         GEOG 377 - Environmental History (4)         GEOG 381 - Political Geography (4)         GEOG 382 - Population Geography (4)         GEOG 382 - Population Geography (4)         GEOG 317 - Geography and Gender (4)         and one of         GEOG 311 - Hydrology (4)         GEOG 312 - Geography of Natural Hazards (4)         GEOG 313 - River Geomorphology (4)         GEOG 316 - Global Biogeochemical and Water Cycles (4)         GEOG 317 - Soil Science (4)         GEOG 318 - Soils in Our Environment (4)         GEOG 319 - Landscape Ecology (4)         and one of         GEOG 319 - Landscape Ecology (4)         GEOG 319 - Landscape Ecology (4)		Geography Honours				
Lower Division Requirements         []         Upper Division Requirements         Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.         Society and Environment Concentration         Students choosing this concentration complete one of         GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4)         and two of         GEOG 325 - Geographies of Consumption (4)         GEOG 362 - Geography of Urban Built Environments (4)         GEOG 363 - Urban Planning and Policy (4)         GEOG 381 - Political Geography (4)         GEOG 382 - Population Geography (4)         GEOG 387 - Geography and Gender (4)         and one of         GEOG 311 - Hydrology (4)         GEOG 312 - Geography of Natural Hazards (4)         GEOG 313 - River Geomorphology (4)         GEOG 315 - World Ecosystems (4)         GEOG 316 - Global Biogeochemical and Water Cycles (4)         GEOG 317 - Soil Science (4)         GEOG 318 - Soils in Our Environment (4)         GEOG 319 - Landscape Ecology (4)         and one of         GEOG 319 - Loudscape Ecology (4)         GEOG 319 - Loudscape Ecology (4)         GEOG 319 - Londscape Ecology (4)         GEOG 420 - Cultural Geography (4)         GEOG 422 - Problems in E						
[] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 336 - Urban Planning and Policy (4) GEOG 337 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)		[]				
[] Upper Division Requirements Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 336 - Urban Planning and Policy (4) GEOG 337 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 319 - Landscape Ecology (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)		Lower Division Requirements				
Upper Division RequirementsStudents complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.Society and Environment ConcentrationStudents choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two ofGEOG 325 - Geographies of Consumption (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 319 - Landscape Ecology (4) GEOG 312 - Power Strem the full list of 300 level geography courses and one of GEOG 312 - Soils in Our Environment (4) GEOG 313 - Siver Geology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 420 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 302 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) <b>md any three other courses from the full list of 300 level geography courses</b> and one of GEOG 420 - Cultural Geography (4) GEOG 420 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
following two concentrations. Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 362 - Geography of Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 410 - Problems in Environmental History (4) GEOG 420 - Cultural Geography (4) GEOG 440 - Problems in Environment History (4) GEOG 440 - Property, Land, Society (4)						
Society and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 432 - Problems in Environment History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 325 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 382 - Population Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 420 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 441 - Cities, Space, and Politics (4)						
and two of GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 325 - Geographies of Consumption (4) GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 420 - Cultural Geography (4) GEOG 420 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)		$\mathbf{U}$				
GEOG 362 - Geography of Urban Built Environments (4) GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) <b>and any three other courses from the full list of 300 level geography courses</b> and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 363 - Urban Planning and Policy (4) GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 377 - Environmental History (4) GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 381 - Political Geography (4) GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 382 - Population Geography (4) GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 386 - Health Geography (4) GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 387 - Geography and Gender (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 315 - Global Biogeochemical and Water Cycles (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
and any three other courses from the full list of 300 level geography courses and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
and one of GEOG 420 - Cultural Geography (4) GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 432 - Problems in Environmental History (4) GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 440 - Property, Land, Society (4) GEOG 441 - Cities, Space, and Politics (4)						
GEOG 441 - Cities, Space, and Politics (4)		• • •				
	L					



GEOG 449 - City and Environment (4) GEOG 486 - Health Care Geographies (4) and GEOG 491 - Honours Essay (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any further courses to achieve 50 upper division units in geography. Resources, Economy, and Environment Concentration Students choosing this concentration complete one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and two of GEOG 321 - Geographies of Global Capitalism (4) GEOG 322 - World Resources (4) GEOG 323 - Industrial Location (4) GEOG 324 - Geography of Transportation (4) GEOG 327 - Geography of Tourism (4) GEOG 383 - Regional Development and Planning (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and any three other courses from the full list of 300 level geography courses and one of GEOG 421 - Geographical Political Economy (4) GEOG 422 - Theories and Practices of Development (4) GEOG 424 - Cities, Transportation, Infrastructure (4) GEOG 426 - Industrial Change and Local Development (4) GEOG 427 - Selected Topics in the Geography of Tourism (4) GEOG 428 - World Forests (4) GEOG 445 - Resource Planning (4) GEOG 468 - Society and Environment in China (4) and GEOG 491 - Honours Essay (4) and any one other course from the full list of 400 level geography courses and any four other courses from the full list of 300 and 400 level geography courses and any further courses to achieve 50 upper division units in geography.

February 2016



Rationale for change:

To provide more flexibility for students to allow them to complete their programs as efficiently as possible and to provide more flexibility for the department when scheduling courses.

Effective term and year: Fall 2017

The following program(s) will be affected by these changes: Environmental Specialty Major, Environmental Specialty Honours

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Environmental Specialty Major Bachelor of Arts Students must complete 120 units, including 45 upper division units. Lower Division Requirements [...] **Upper Division Requirements** Students complete a minimum total of 32 upper division units, including four of the following core courses GEOG 322 - World Resources (4) GEOG 377 - Environmental History (4) GEOG 382 - Population Geography (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) REM 311 - Applied Ecology and Sustainable Environments (3) REM 356 - Institutional Arrangements for Sustainable Environmental Management (3) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 351 - Multimedia Cartography (4)

### PROGRAM MODIFICATION TEMPLATE



GEOG 352 - Spatial Analysis (4) GEOG 353 - Advanced Remote Sensing (4) GEOG 355 - Geographical Information Science II (4) GEOG 356 - 3D Geovisualization (4) and two one of GEOG 426 - Industrial Change and Local Development (4) GEOG 428 - World Forests (4) GEOG 432 - Problems in Environmental History (4) GEOG 445 - Resource Planning (4) GEOG 449 - City and Environment (4) GEOG 468 - Society and Environment in China (4) REM 445 - Environmental Risk Assessment (3) REM 471 - Forest Ecosystem Management (3) and additional upper division (300 and 400 division) units in geography to total the required 32 units minimum. **Environmental Specialty Honours** Bachelor of Arts [...] Lower Division Requirements [...] Upper Division Requirements Students complete a minimum total of 60 upper division units, including four of the following core courses GEOG 322 - World Resources (4) GEOG 377 - Environmental History (4) GEOG 382 - Population Geography (4) GEOG 385 - Agriculture and the Environment (4) GEOG 389W - Nature and Society (4) REM 311 - Applied Ecology and Sustainable Environments (3) REM 356 - Institutional Arrangements for Sustainable Environmental Management (3) and one of GEOG 300 - Possible Worlds: The Rise of Geographical Thinking (4) and one of GEOG 311 - Hydrology (4) GEOG 312 - Geography of Natural Hazards (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 318 - Soils in Our Environment (4) GEOG 319 - Landscape Ecology (4) and one of GEOG 351 - Multimedia Cartography (4)

### **PROGRAM MODIFICATION TEMPLATE**



SENATE COMMITTEE ON UNDERGRADUATE STUDIES

GEOG 352 - Spatial Analysis (4) GEOG 353 - Advanced Remote Sensing (4) GEOG 355 - Geographical Information Science II (4) GEOG 356 - 3D Geovisualization (4) and two one of GEOG 426 - Industrial Change and Local Development (4) GEOG 428 - World Forests (4) GEOG 432 - Problems in Environmental History (4) GEOG 445 - Resource Planning (4) GEOG 449 - City and Environment (4) GEOG 468 - Society and Environment in China (4) REM 445 - Environmental Risk Assessment (3) REM 471 - Forest Ecosystem Management (3) and GEOG 491 - Honours Essay (4) and any additional 300 or 400 level geography units to total 50 upper division units.



Rationale for change:

To provide more flexibility for students to allow them to complete their programs as efficiently as possible and to provide more flexibility for the department when scheduling courses.

Effective term and year: Fall 2017

The following program(s) will be affected by these changes: Physical Geography Major

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Physical Geography Major Bachelor of Science [...] **Program Requirements** Students complete 120 units, as specified below. Lower Division Requirements [...] **Upper Division Requirements Biogeophysical Science Stream** [...] Geoscience Stream [...] Physical Geography and Spatial Information Science Stream Students who choose this stream will complete a minimum total of 44 units, including five of the following (at least one of which must be at the 400 division) GEOG 310 - Physical Geography Field Course (4) GEOG 311 - Hydrology (4) GEOG 313 - River Geomorphology (4) GEOG 314 - The Climate System (4) GEOG 315 - World Ecosystems (4) GEOG 316 - Global Biogeochemical and Water Cycles (4) GEOG 317 - Soil Science (4) GEOG 319 - Landscape Ecology (4) GEOG 411 - Advanced Hydrology (4) GEOG 412W - Glacial Processes and Environments (4) GEOG 414 - Climate Change (4) GEOG 415 - Conservation Biogeography (4)



GEOG 417W - Advanced Soil Science (4)
and one of
GEOG 321 - Geographies of Global Capitalism (4)
GEOG 322 - World Resources (4)
GEOG 323 - Industrial Location (4)
GEOG 324 - Geography of Transportation (4)
GEOG 325 - Geographies of Consumption (4)
GEOG 327 - Geography of Tourism (4)
GEOG 362 - Geography of Urban Built Environments (4)
GEOG 363 - Urban Planning and Policy (4)
GEOG 377 - Environmental History (4)
GEOG 381 - Political Geography (4)
GEOG 382 - Population Geography (4)
GEOG 383 - Regional Development and Planning (4)
GEOG 385 - Agriculture and the Environment (4)
GEOG 386 - Health Geography (4)
GEOG 387 - Geography and Gender (4)
GEOG 389W - Nature and Society (4)
GEOG 440 - Property, Land, Society (4)
GEOG 462 - The Geography of the United States (4)
and three of and five of the following (at least one of which must be at the 400 division)
GEOG 351 - Multimedia Cartography (4)
GEOG 352 - Spatial Analysis (4)
GEOG 353 - Advanced Remote Sensing (4)
GEOG 355 - Geographical Information Science II (4)
GEOG 356 - 3D Geovisualization (4)
and two of
GEOG 451 - Spatial Modeling (4)
GEOG 453 - Theoretical and Applied Remote Sensing (4)
GEOG 455 - Theoretical and Applied GIS (4)
GEOG 457 - Geovisualization Interfaces (4)



Rationale for change:

To provide more flexibility for students to allow them to complete their programs as efficiently as possible and to provide more flexibility for the department when scheduling courses.

Effective term and year: Fall 2017

The following program(s) will be affected by these changes: Spatial Information Systems Certificate

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

Certificate: Spatial Information Systems
Program Requirements
Students complete the following courses (or their equivalents from another department or
institution) including all of
GEOG 251 - Quantitative Geography (3)
GEOG 253 - Introduction to Remote Sensing (3)
GEOG 255 - Geographical Information Science I (3)
and three five of the following (at least one of which must be at the 400 division)
GEOG 351 - Multimedia Cartography (4)
GEOG 352 - Spatial Analysis (4)
GEOG 353 - Advanced Remote Sensing (4)
GEOG 355 - Geographical Information Science II (4)
GEOG 356 - 3D Geovisualization (4)
and two of
GEOG 451 - Spatial Modeling (4)
GEOG 453 - Theoretical and Applied Remote Sensing (4)
GEOG 455 - Theoretical and Applied GIS (4)
GEOG 457 - Geovisualization Interfaces (4)

**				00001012
SFU	FACULTY OF ENVIRONMENT Department of Archaeology			
	Multi-Purpose Complex 9623 8888 University Drive, Burnaby, BC Canada V5A 186	TEL 778.782.3087 FAX 778.782.5666		rossjami@sfu.ca http://tinyurl.com/rossarchy
MEMORANDUM -				
ATTENTION	Alex Clapp, Associate Dean, Undergradu Faculty of Environment	ate, DATE	Oct 3rd, 2010	
FROM	Ross Jamieson, Undergraduate Curriculur	n		
RE:	Committee Chair, Archaeology Archaeology Undergraduate Calendar Ch	ange for Review and	Approval.	

SCUS 16-42c

### **Calendar Changes**

The following calendar change is submitted to the Chair of the Faculty of Environment Curriculum Committee for consideration, as needed, by the committee at its meeting on October 5th, 2016. Pending approval, the following calendar changes will be effective Spring term 2017 (1171).

### **Course Modification Forms**

• ARCH 201 Introduction to Archaeology (name change)

SFU		COMMITTEE ON Aduate studies			co	DURSE MODIFICATION FORM Page 1 of 1	
COURSE SU	BJECT	ARCH	NUMBER	201	TITLE	Introduction to Archaeology	
TYPE OF CH	IANCES	Please tripe (	V' for the an	propriato ro	wicion (c).		

**TYPE OF CHANGES.** Please type 'X' for the appropriate revision(s):

Course number	Credit	X Title	Description	Prerequisite
---------------	--------	---------	-------------	--------------

**WORDING/DESCRIPTION EDITS.** Indicate deleted or changed text using strike through, indicate added or new text using <u>underline</u>. If you need to enter more text than the box allows, drag the endpoint of the text box to make it bigger, as it will not automatically expand.

FROM: Introduction to Archaeology TO: <u>Reconstructing the Human Past</u>	

## **EFFECTIVE TERM AND YEAR FOR CHANGES**

Fall, Spring, Summer and year (please enter in textbox)

Spring 2017 (1171)

RATIONALE (must be included)

Title change better reflects the content of course.



#### SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL

1 OF 3 PAGES

COURSE SUBJECT ENV NUMBER 100					
course title LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation Great Ideas in Environment					
COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation Great Ideas in Environment					
CAMPUS where course will be normally taught: Burnaby Surrey Vancouver Great Northern Way Off campus					
<b>COURSE DESCRIPTION</b> — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.					
Examines great books and articles that have transformed human understanding of the environment. Students read classic works in their historical and scientific contexts and learn how the concepts they introduced changed human-nature relationships.					
REPEAT FOR CREDIT YES NO How many times? Within a term? YES NO					
LIBRARY RESOURCES NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that servwes as proof of assessment. For more information, please visit www.lib.sfu.ca/about/overview/collections/course-assessments. Library review done?					
To introduce first-year students to key advances that have shaped modern environmental thought,					

to expand the Faculty•s offerings and enrolments at the first year level, to recruit students from across the university to the Faculty•s programs, and to serve as an introduction to programs in humanities and the environment.

What makes a piece great varies from the natural sciences to the social sciences to the humanities, and from discipline to discipline within the Faculty. Great ideas can be found across the full range of the biophysical, social and built environments.

The course employs a 'great books' pedagogy, introducing students to a canon of literature within disciplines essential to understanding environmental issues. Topics and key readings will vary from year to year. The primary criterion for inclusion is that one of the instructors explain to the class why it is brilliant, original, seminal or influential.



#### SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW	COU	RSE	PR	OPO	SAL

2 OF 3 PAGES

### SCHEDULING AND ENROLLMENT INFORMATION

Term and year course would first be offered (e.g. FALL 2016) Fall 2017
Term in which course will typically be offered Spring Summer Fall
Other (describe)
Will this be a required or elective course in the curriculum? Required Elective
What is the probable enrollment when offered? Estimate: 80-100
UNITS Indicate number of units: 3 Indicate no. of contact hours: 3 Lecture 2 Seminar Tutorial Lab 1 Other; explain below
OTHER
One class hour per week will be used for group work, in-class assignments

#### FACULTY

Which of your present CFL faculty have the expertise to offer this course?

All FENV professors are possible instructors for this course because all FENV professors have unique and distinctive visions of the environment and the most significant advances in its understanding.

#### WQB DESIGNATION

(attach approval from Curriculum Office)

Designation as Breadth in Humanities will be sought.

### PREREQUISITE AND / OR COREQUISITE

None

#### EQUIVALENT COURSES

Does this course replicate the content of a previously-approved course to such an extent that students should not receive credit for both courses?

No



SENATE COMMITTEE ON UNDERGRADUATE STUDIES

#### FEES

Are there any proposed student fees associated with this course other than tuition fees?

			NO
--	--	--	----

YES

### COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)

Demonstrate knowledge of classic environmental texts in their intellectual and scientific contexts, and explain why and how they have changed human understanding of the environment;

Identify and explain key conceptual, analytical and ethical advances in environmental thought;

Understand the relationships and differences between approaches to the environment in the natural sciences, the social sciences and the humanities;

Help to develop critical thinking skills amongst students in evaluating different paradigms and perspectives on environment; and

Work effectively in a team to analyze, debate and present key concepts from classic environmental texts.

#### RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

None				
Final exam required VES NO Criminal Record Check required VES NO				
OVERLAP CHECK				
Checking for overlap is the responsibility of the Associate Dean.				
Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.				

#### Name of Originator

Alex Clapp, FENV Associate Dean



UNIVERSITY CURRICULUM AND INSTITUTIONAL LIAISON OFFICE OF THE VICE-PRESIDENT, ACADEMIC

	8888 University Drive, Burnaby, BC Canada V5A 186	TEL: 778.782.3 FAX: 778.782.5			
MEMORANDUM					
ATTENTION	Alex Clapp, Associate Dean, FENV	DATE	October 19, 2016		
FROM	Susan Rhodes, Director, University Curriculum & Institutional Liaison	PAGES	1		
RE:	ENV B approval				

The University Curriculum Office has approved **B-Hum** designation for the following proposed new course, effective Fall 2017 (1177):

ENV 100 Great Ideas in Environment

Please forward this memo to your Faculty UCC, SCUS and Senate for further approval.



## Calendar Entry Change Faculty of Environment, Certificate in Environmental Literacy

Rationale for change: ENV 222 will not be offered in the next two years; ENV 221 is an appropriate substitute for the Certificate's requirement that students take one course on the complexity and interdisciplinarity of environmental issues.

A minor typographical error has been fixed as well.

Effective term and year: Spring 2017

The following program(s) will be affected by these changes:

Certificate in Environmental Literacy

**Calendar Change:** "to" and "from" sections are not required. All deletions should be crossed out as follows: sample. All additions should be marked by a **bold**.

...

The program will require students to complete a total of 21 units, comprised of 12 lower division units and a minimum of nine lower and/or upper division units depending upon electives taken. These requirements include three introductory environmental courses (one physical, one ecological and one social science); one course introducing students to the complexity and interdisciplinarity of the environmental issues; and a minimum of 9 units of electives chosen from one of the three elective groups.

•••

### **Core Courses**

Students complete a minimum of 21 units, including all of

ENV 222 Environmental Controversy: An interdisciplinary study of environmental issues (3) ENV 221 – Systems Thinking and the Environment (3) GEOG 111 – Earth Systems (3)

•••

February 2016