To view further details on a course, select the Course Number/Name hyperlink (underlined). If the "**Schedule Types:**" listed are underlined (hyperlink), select any type listed to view scheduled class sections for the term chosen.

### GES 100 - World Regional Geography

An introduction to the human and natural environments from a geographical perspective. The fundamental themes, of human and physical geography are examined by focusing upon global issues and regional patterns. \*Note: Students may receive credit for only one of GES 100 and GEOG 100.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 120 - Human Geography

Explanation of human placement in and interaction with the natural environment; assessment of concepts, processes, and patterns as related to distribution of human phenomena, including economic activity and settlement types. \*Note: Students may receive credit for only one of GES 120, GEOG 120, or GEOG 220.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: <u>Lecture</u>, Examination

Geography and Environmental St Department

### GES 121 - Physical Geography

The physical basis of geography; climate, landforms, and the geography of water, soil, and plants. Emphasis is placed on processes that account for the earth's natural landscapes and their geographic variability. \*Note: Students may receive credit for only one of GES 121, GEOG 121, or GEOG 221.\*

0.000 OR 3.000 Credit hours 0.000 OR 3.000 Lecture hours 0.000 OR 1.000 Lab hours

Levels: Undergraduate

Schedule Types: Lecture, Lab, Examination

All Sections for this Course

Course Attributes: Natural Science

### GES 200 - Introduction to Environmental Studies

This course focuses on environmental issues studied from a geographical perspective. It introduces students to the philosophical, socio-economic, physical, and technological foundations underlying contemporary environmental issues. \*\*\*Prerequisite: GES 120 and GES 121 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 200, ENST 200 or GEOG 226.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 203 - Introduction to Geographic Information Systems

This course offers an introduction to basic concepts and techniques of geographic information systems (GIS) used for descriptive geostatistical analysis and visualization of spatial data. Operational training in GIS is included; students should be very comfortable with Windows. \*\*\*Prerequisite: Any 100-level GES course or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 203 and GEOG 203.\* 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 207 - Basics of Map and Air Photo Interpretations

Introduction to the interpretation of various kinds of maps, air photos and satellite images.

\*\*\*Prerequisite: Any 100-level GES course or permission of the Department Head.\*\*\* \*Note:

Students may receive credit for only one of GES 207 and GEOG 207.\*

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

GES 210 - Canada

A systematic and regional geography of Canada. Elements of the natural environment; the human response in terms of territorial evolution, settlement, and economic activity. Regions, regional identities, and regionalism. \*\*\*Prerequisite: Any 100-level GES course or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only of GES 210 and GEOG 210.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 218 - United States of America

A systematic and regional approach to the geography of the United States, emphasizing population movements and distribution, the natural environment, economic geography, and regional studies. \*\*\* Prerequisite: Any 100-level GES course or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 218, GEOG 218, or GEOG 318.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 222 - Global Economies, Local Lives

An introduction to economic geography, tracing the processes of economic globalization and localization. Emphasis on the development of the global economy as it plays out in local places with particular histories and cultures. Focus on the crisis of Fordism and the restructuring of resource industries, manufacturing, services and finance. \*\*\*Prerequisite: GES 100 or GEOG 120 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 222, GEOG 222, or GEOG 322.\*

3.000 Credit hours3.000 Lecture hours

Levels: Undergraduate

Schedule Types: <u>Lecture</u>, Examination

Geography and Environmental St Department

# GES 232 - Geography of Recreation and Tourism

Employing multiple analytical approaches, this course examines the economic, social, cultural, and environmental factors and processes of recreation and tourism, and their implications on the

environment, space, and place, at a variety of geographical and temporal scales.

\*\*\*Prerequisite: GES 100 or GES 120, or permission of the Department Head.\*\*\* \*Note:

Students may receive credit for only one of GES 232, GEOG 232, or GEOG 332.\*

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 246 - Urban Geography

The course examines cities as systems viewed at global, national, and local levels. Economic and social patterns and linkages are stressed. Special emphasis is placed on the Canadian urban system and the urban geography of Regina. \*\*\*Prerequisite: GES 100 or GES 120 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 246, GEOG 246, or GEOG 324.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 255 - Geomatics Project 1

A combination of intellectual study and technical production commensurate with the course level. Projects require a review of the literature that highlights the main theme(s) or issue(s) being addressed, a discussion of the rationale for the selected data and analysis methods, detailed documentation of the applied analyses, and superior cartographic products. \*Note: Students may only receive credit for one of GES 255 or GEOG 255.\*

1.000 Credit hours 1.000 Lecture hours 1.000 Other hours

Levels: Undergraduate Schedule Types: Project

Geography and Environmental St Department

# GES 297 - Selected Topics in Physical Geography - an AA-ZZ series

Courses, typically in physical geography, designed as required for undergraduate students. 1.000 TO 3.000 Credit hours 3.000 Lecture hours

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

### GES 297AA - From Terrains to Taverns: The Geographies of Alcohol

An analysis of the Geographies of alcohol, including the interplay of cultural and physical forces which shape the production, distribution and consumption of alcohol at the global, regional and local scale. \*Note: Students may receive credit for only one of GES 297AA and GEOG 297AA.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 303 - Geographical Information Systems and Science

Concepts and theories behind spatial data analysis using geographic information systems (GIS). Topics include: spatial models, solving spatial issues using raster and vector analysis methods, geostatistics, and geovisualization. \*\*\*Prerequisite: GES 203 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 303, GEOG 303, or GEOG 405.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 307 - Digital Cartography

Introduction to digital map making: map projections, scale and generalization, methods of representing objects by symbols, map compilation, and planning of legends. \*\*\*Prerequisite: GES 207 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 307 and GEOG 307.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

# GES 309 - Introduction to Remote Sensing in Geography

Basic concepts of remote sensing, a review of sensors and their images, emphasis on image interpretation and analysis, and introduction to application areas in geographic studies.

\*\*\*Prerequisite: GES 203 or permission of the Department Head. GES 207 is strongly recommended.\*\*\* \*Note: Students may only receive credit for one of GES 309, GEOG 309, GEOG 331, or GEOG 391AB.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 310 - Geography of Saskatchewan

A systematic and regional approach to the geography of Saskatchewan, emphasizing climate, natural resources, population, settlement, economy and changes in the same. \*\*\*Prerequisite: 30 credit hours including GEOG 100 or GEOG 120, or permission of Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 310, GEOG 310, GEOG 320, GEOG 396AC, and GEOG 490AE.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 316 - Geography of the Third World

The so-called "Third World" is examined from a spatial perspective. Topics of investigation include imperialism, population growth, political boundaries, and economic transition.

\*\*\*Prerequisite: 30 credit hours including one of GES 100 or GES 120, or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 316 and GEOG 316.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 321 - Meteorology

The basic principles of meteorology with special attention to weather conditions on the Canadian prairies. \*\*\*Prerequisite: 30 credit hours including GES 121, or permission of the

Department Head.\*\*\* \*Note:Students may receive credit for only one of GES 321 and GEOG

321.\*

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 323 - Geomorphology

The study of landforms and the processes which create and modify them. Emphasis on the mechanics of geomorphic processes and how they relate to properties of earth materials.

\*\*\*Prerequisite: 30 credit hours including GES 121 or permission of Department Head.\*\*\*

\*Note: Students may only receive credit for one of GES 323 or GEOG 323.\*

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 325 - Biogeography

An examination of the geographic distributions of plants and animals and the historical, geologic, and contemporary processes underlying those distributions. The course will include study of the influence of climate change, continental drift, and human activity on spatial distribution of flora/fauna. \*\*\*Prerequisite: 30 credit hours including GES 121, or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 325 and GEOG 325.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 326 - Environment and Resource Management

A systematic analysis of geographical aspects of theory and methods of natural resource management. Focus is on the geographer's role in resource analysis and policy decisions with examples from agriculture, forestry, wildlife, energy, and parks. \*\*\*Prerequisite: GES 200 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 326 and GEOG 326.\*

3.000 Credit hours

#### 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 327 - Hydrology

Basic principles of hydrology and the geography of water. Emphasis on the surface components of the hydrological cycle, and on the collection and analysis of hydrometric data.

\*\*\*Prerequisite: 30 credit hours including GES 121 or permission of the Department Head.\*\*\*

\*Note: Students may receive credit for only one of GES 327 and GEOG 327.\*

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 329 - Soil Geography

Introduction to the properties and classification of soil. The geography of soil at local, regional, and global scales. Relationship of soil to geomorphology, climate, water, vegetation, and environmental change. \*\*\*Prerequisite: 30 credit hours including GES 121 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 329, GEOG 329 or GEOL 329.\*

0.000 OR 3.000 Credit hours 0.000 OR 3.000 Lecture hours 0.000 OR 3.000 Lab hours 0.000 OR 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Lab, Examination

All Sections for this Course

Geography and Environmental St Department

### GES 330 - Political Geography

The effect of political action on present-day geography, and of geography on political problems. \*\*\*Prerequisite: 30 credit hours including GES 100 or GES 120, or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 330 and GEOG 330.\*

3.000 Credit hours

3.000 Lecture hours

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 333 - Natural Hazards

Characteristics and human impacts of selected natural hazards. Risk evaluation and responses. General and case study approaches, with emphasis on atmospheric and geomorphic hazards in Canada and the developing world. \*\*\*Prerequisite: 30 credit hours including GES 120 or GEOG 121, or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 333 and GEOG 333.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

#### GES 336 - Cultural Geography

A survey of the sub-field of cultural geography, and its evolution over the last century. Core themes include the interpretation of cultural landscapes, representation, expressions of culture, and cultural politics. Emphasis is placed on works written after the "cultural turn" of the late 20th century. \*\*\*Prerequisite: 30 credit hours, including GES 100 or GES 120, or permission of the Department Head. \*\*\* \*Note: Students may receive credit for only one of GES 336 and GEOG 336.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 338 - Geography of Identities and Power

An examination and comparison of the fe/male use and perception of space and place by time-period, and culture, age, gender, race, ethnicity, class and sexuality: in homes, neighbourhoods, cities, rural areas, recreation, travel, environment, and politics, race, education and ethnicity.

\*\*\*Prerequisite: 30 credit hours, including GES 100 or 9 credit hours in GES, including GES 120, or permission of Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 338, GEOG 338, GEOG 396AA, and WGST 362.\*

3.000 Credit hours
3.000 Lecture hours

0.000 TO 3.000 Other hours

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

# GES 346 - Urban Planning

This course examines the classical roots of modern urban planning, the core concepts of planning theory, and the land-use plan. Emphasis is placed on urban planning in Canada and especially in Regina. \*\*\*Prerequisite: GES 100 or GES 120 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 346. GEOG 346, or GEOG 424 \*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 355 - Geomatics Project 2

A combination of intellectual study and technical production commensurate with the course level. Projects require a review of the literature that highlights the main theme(s) or issue(s) being addressed, a discussion of the rationale for the selected data and analysis methods, detailed documentation of the applied analyses, and superior cartographic products. The topic for this project must be distinct from the project completed in GES 255. \*Note: Students may only receive credit for one of GES 355 and GEOG 355.\*

1.000 Credit hours 1.000 Other hours

Levels: Undergraduate Schedule Types: Project

Geography and Environmental St Department

### GES 390 - Directed Reading and Research - an AA-ZZ series

Courses designed, typically in human geography, for individual students. \*\*Permission of the Department Head may be required to register in some offerings.\*\*

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

# GES 391 - Directed Reading and Research - an AA-ZZ series

Courses designed, typically in physical geography, for individual students. \*\*Permission of the Department Head may be required to register in some course offerings. \*\*

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Independent Study, Examination

Geography and Environmental St Department

# GES 391AA - Environmental and Applied Geomorphology

The course is designed around a series of field techniques and lab exercises. Particular emphasis is placed on the influence of varying environmental conditions on landscape development. Techniques for surveying, mapping, and interpretation of environmental conditions and landforms will be introduced. \*\*\*Prerequisite: GES 121 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 391AA and GEOG 391AA.\* 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Independent Study, Examination

Geography and Environmental St Department

# GES 396 - Selected Topics - an AA-ZZ series

Courses, typically in human geography, designed as required for groups of senior undergraduates. \*\*Permission of the Department Head may be required to register in some offerings.\*\*

1.000 TO 6.000 Credit hours 1.000 TO 6.000 Lecture hours 0.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

### GES 396AF - Meteorological Instrumentation

The gathering and manipulation of meteorological data are examined. Theory and practice in designing and operating instruments is addressed. Climatic dataset manipulation and analysis is included. \*Note: Students may only receive credit for one of GES 396AF and GEOG 396AF.\* 3.000 Credit hours

3.000 Lecture hours

3.000 Lecture nours

0.000 TO 3.000 Other hours

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

# GES 396AI - Geographies of Mining and Extraction

Examination of environmental, social, political and economic aspects of mining and resource extraction in particular sites and transnational spaces. Issues considered include: How does extraction shape local communities and environments? How have indigenous claims and resistance influenced corporate strategies and vice versa? Is resource wealth a blessing or a curse? \*\*\*Prerequisite: 30 credit hours including one of GES 120 or GES 100.\*\*\* \*Note: Students may receive credit for only one of GES 396AI and GEOG 396AI.\*
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 396AM - Climate Change Policy

This course will explore questions such as, what policy options are available to address climate change? What climate change policies have been introduced in Canada and around the world? How do we evaluate whether climate change policy has succeeded? \*\*\*Prerequisite: GES 200.\*\*\* \*Note: Students may receive credit for only one of GES 396AM and GEOG 396AM.\* 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 396AN - The Place of Craft Beer

Is craft beer a sustainable practice for building local community? Topics include the geography of craft beer, environmental impacts, economic development, labour market, gender, and relationships to the local. \*\*\*Prerequisite: 30 credit hours including one of GES 100 or GES 120, or permission from the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 396AN and GEOG 396AN.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

# Geography and Environmental St Department

# GES 396AT - (De)constructing Berlin: An Exploration of Urban Place and Time

This course offers a multidisciplinary approach to the history and human/urban geography of Berlin, Germany. Emphasis is placed on selected themes in the physical, historical, cultural, political, and economic development of the city. The course includes a field trip to Berlin, Germany. \*\*\*Prerequisite: Permission of the Department Head is required to register.\*\*\*
\*Note: Students may only receive credit for one of GES 396AT and GEOG 396AT.\*
6.000 Credit hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 397 - Selected Topics - an AA-ZZ series

Courses, typically in physical geography, designed as required for groups of senior undergraduates. \*\*Permission of the Department Head may be required to register in some offerings.\*\*

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 400 - Environmental Impact Assessment

This course gives students an opportunity to develop their skills in effectively analyzing, managing, and resolving natural resource conflicts. Students will be required to carry out a substantial piece of research work independently, develop knowledge of special interests, and build upon the experience gained. \*\*\*Prerequisite: GES 200 and any two of GES 325, PSYC 340, SOC 330.\*\*\* \*Note: Students may receive credit for only one of GES 400 and ENST 400.\*

3.000 Credit hours3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

GES 409 - Advanced Spatial Analysis and Visualization (GIS)

Advanced topics in geomatics exploring the coupling and integration of computer-assisted cartography, geostatistics and analysis, GIS, and remote sensing. Students will work in small groups to design geomatics solutions addressing selected planning, environmental management or research problems. \*\*\*Prerequisite: GES 303, GES 307, and GES 309 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 409 and GEOG 409.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 411 - Field Techniques in Physical Geography

Techniques for the acquisition and analysis of field data used in physical geographical research. \*\*\*Prerequisite: GES 121, and one of GES 321, GES 323, GES 325, GES 327 or GES 333 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 411 and GEOG 411.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 421 - Topics in Climatology and Meteorology

Weather and human activities. Response to weather hazards: hurricanes, thunderstorms, droughts. World climate regions. Climate change. Human impact of weather, weather forecasting and climatological information. Anthropogenic effects on the atmosphere.

\*\*\*Prerequisite: GES 321 or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 421 and GEOG 421.\*

3 000 Credit hours

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 423 - Advanced Geomorphology

An advanced course in landforms and the processes that create and modify them. Topics include glacial, periglacial and theoretical geomorphology, and the relationship between geomorphology and environmental change. \*\*\*Prerequisite: GES 323 or permission of the

Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 423, GEOG 423, or GEOG 423AB.\*
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 429 - Glacial and Periglacial Geomorphology

An advanced course relating to cold environments and their geomorphic processes. Topics cover glacial and periglacial processes and their resulting landforms. Special attention will be paid to the Canadian Arctic environment and the history of glaciation in Canada, particularly during the last glacial episode during the Wisconsin advance and retreat. \*\*\*Prerequisite: GES 323 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 429, GEOG 429, GEOG 423AA, or GEOL 429.\*

0.000 OR 3.000 Credit hours 0.000 OR 3.000 Lecture hours 0.000 OR 3.000 Lab hours 0.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Lab, Examination

Geography and Environmental St Department

# GES 431 - Climate Change Impacts, Adaptation and Vulnerability

This course focuses on the impacts of climate change on biophysical and and social systems, and the adjustments to policies and practices that will be required to minimize the negative impacts. It is intended for advanced undergraduates and graduate students with an interest in this emerging and important field of study. \*\*\*Prerequisite: GES 120 and GES 121.\*\*\* \*Note: Students may receive credit for only one of GES 431, GEOG 431, GEOG 831, or GEOG 491AB.\*

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

# GES 455 - Geomatics Project 3

A combination of intellectual study and technical production commensurate with the course level. Projects require a review of the literature that highlights the main theme(s) or issue(s)

being addressed, a discussion of the rationale for the selected data and analysis methods, detailed documentation of the applied analyses, and superior cartographic products. The topic for this project must be distinct from the project completed in GES 255 and GES 355.

\*\*\*Prerequisite: GES 355\*\*\* \*Note: Students may receive credit for only one of GES 455 and GEOG 455.\*

1.000 Credit hours 1.000 Other hours

Levels: Undergraduate Schedule Types: Project

Geography and Environmental St Department

### GES 490 - Directed Reading and Research - an AA-ZZ series

Courses, typically in human geography, designed for individual students. \*\*Permission of the Department Head may be required to register in some offerings.\*\*
1.000 TO 3.000 Credit hours

1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 491 - Directed Reading and Research - an AA-ZZ series

Courses, typically in physical geography, designed for individual students. \*\*Permission of the Department Head may be required to register in some offerings.\*\*
1.000 TO 3.000 Credit hours

1.000 TO 3.000 Credit flours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 491AD - Advanced Hydrology

A survey of advanced topics in hydrology, the study of water, with a specific focus on the surface water balance of the prairies and the impacts of climate change and variability. \*\*Permission of the Department Head is required to register.\*\* \*Note: Students may only receive credit for one of GES 491AD and GEOG 491AD.\*

3.000 Credit hours
3.000 Lecture hours
0.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

# GES 491AE - Environmental Geomorphology

Presentation of up-to-date research findings and the latest theories from geomorphology and environmental change researchers. The role of geomorphological research in real world applications by using case studies and data sets. \*\*\*Prerequisite: GES 305 and GES 323.\*\*\*
\*Note: Students may only receive credit for one of GES 491AE and GEOG 491AE.\*
3.000 Credit hours
3.000 Lecture hours
0.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

### GES 491AF - Hydrology II: Surface Water

The course explores the physical processes of lakes and rivers and associated landforms. The lakes and rivers of Saskatchewan, and of Canada more generally, are emphasized.

\*\*\*Prerequisite: GES 327 or permission of the Department Head.\*\*\* \*Note: Students may only receive credit for one of GES 491AF and GEOG 491AF.\*

3.000 Credit hours3.000 Lecture hours0.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Directed Reading, Examination

Geography and Environmental St Department

### GES 496 - Selected Topics - an AA-ZZ series

Courses, typically in human geography, designed as required for groups of senior undergraduates. \*\*Permission of the Department Head may be required to register in some offerings.\*\*

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

GES 496AE - Urban Heritage

This course examines the construction of heritage in Canadian urban settings. Focus is placed on the goals and objectives of the various stakeholders involved in the process of heritage management and the tensions that can ensue. \*\*\*Prerequisite: GES 246 or GES 346, or permission of the Department Head.\*\*\* \*Note: Students may receive credit for only one of GES 496AE and GEOG 496AE.\*

3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

# GES 497 - Selected Topics - an AA-ZZ series

Courses, typically in physical geography, designed as required for groups of senior undergraduates. \*\*Permission of the Department Head may be required to register in some offerings.\*\*

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Examination

Geography and Environmental St Department

### GES 499 - Honours Thesis - an AA-AC series

An exposition of a topic approved by the department. The thesis should draw some original conclusions on the topic concerned. \*\*\*Permission of the Department Head is required to register.\*\*\* \*Note: The required 6 hours may be taken in one semester (GES 499AC) or spread equally over two consecutive semesters (GES 499AA and GES 499AB).\*
3.000 OR 6.000 Credit hours

Levels: Undergraduate Schedule Types: Thesis

Geography and Environmental St Department

# GES 499AA - Honours Thesis - First Half

An exposition of a topic approved by the department. The thesis should draw some original conclusions on the topic concerned. \*\*Permission of the department head is required to register.\*\* \*Note: Students may only receive credit for one of GES 499AA, GEOG 499AA, GES 499AC, or GEOG 499AC.\*

3.000 Credit hours

Levels: Undergraduate

Schedule Types: Thesis

Geography and Environmental St Department

### GES 499AB - Honours Thesis - Second Half

An exposition of a topic approved by the department. The thesis should draw some original conclusions on the topic concerned. \*\*Permission of the department head is required to register.\*\* \*Note: Students may receive credit for only one of GES 499AB, GEOG 499AB, GES 499AC, or GEOG 499AC.\*
3.000 Credit hours

Levels: Undergraduate Schedule Types: Thesis

Geography and Environmental St Department

### GES 499AC - Honours Thesis

An exposition of a topic approved by the department. The thesis should draw some original conclusions on the topic concerned. \*\*Permission of department head is required to register.\*\* \*Note: Students may only receive credit for one of GES 499AC, GEOG 499AC, GES 499AB, GEOG 499AB, GES 499AA, or GEOG 499AA.\*
6.000 Credit hours

Levels: Undergraduate Schedule Types: Thesis