

# Geography

Geography is the study of phenomena and events on the earth's surface, including the activities of human beings. Technical skills in remote sensing, mapping, computer applications, GIS, survey research, and writing are the geographer's tools.

All terrestrial activities are subject to geographic analysis. Students in the program learn specific geographic techniques and their application on regional, national, and global levels. Studies in the field, and in effective communication and higher level problem-solving, further prepare students for immediate employment in entry level jobs and for graduate study.

Language study and a strong minor (such as computer science, applied public policy, international studies, space science, biology) enhance employment options for students with bachelor's degrees. Graduate study broadens employment opportunities.

#### Programs

- Geography, B.A. major
- Geography, B.S. (Geographic Information Systems Emphasis) major
- Geography, B.S. (Regional, Park, Recreational, and Land Use Planning)
   *major*
- Geography. B.S. (Traditional Emphasis) major
- Social Studies, B.A. (Geography Emphasis) major
- Wilderness Management and Outdoor Recreation Planning, B.A.S. major
- Geographic Information Systems minor
- Geography minor

#### **Career Directions**

Aerial Photo Interpreter

Cartographer

Digital Mapper

Geographic Consultant

Geographic Information Systems (GIS) Practitioner

Land Use/Recreation Planner

Market Analyst

Park Ranger/Planner

Park/Recreation Planner

Teacher

Urban/Regional Planner

Also: Graduate Study

#### Preparation

Recommended High School Courses

Algebra

Computer Science

English

Geography

Social Studies

Speech Communication

### Geography, B.A. major

Majors are encouraged to develop their writing skills by taking ENGL 3150 Writing in the Disciplines prior to their senior year.

Required Credits: 42 Required GPA: 2.25

#### I REQUIRED COURSES

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)

#### II REQUIRED ELECTIVES

#### SELECT 2 OF THE FOLLOWING COURSES:

- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography Of Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

#### SELECT 2 OF THE FOLLOWING COURSES:

• GEOG 3320 Regional Planning Methods (3 credits)

- GEOG 4110 Advanced Physical Geography (3 credits)
- GEOG 4120 Urban Geography (3 credits)

#### SELECT 2 OF THE FOLLOWING COURSES:

- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)

#### SELECT 6 SEMESTER CREDITS IN GEOGRAPHY

#### SUGGESTED SEMESTER SCHEDULE FOR GEOGRAPHY MAJORS

The following is a list of Geography Major courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible. Majors and minors in geography are strongly encouraged to meet with advisors in the Geography program prior to selecting courses.

#### Freshman

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
   GEOG 2300 Economic Geography (3 credits)
- Liberal Education requirements

#### Sophomore

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- Electives in Geography (select one GEOG 2500 Political Geography or GEOG 3300 Geography and Planning of Outdoor Recreation)
- Complete Liberal Education requirements

#### Junior/

#### Senior

- GEOG 3226 Cartography (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- or any course in the 3800 series, i.e., Europe, Asia, or Africa
- GEOG 4110 Advanced Physical Geography (3 credits)
- or GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)
- GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

### Geography, B.S. major

### Geographic Information Systems Emphasis

Required Credits: 55.0 Required GPA: 2.25

#### I REQUIRED CORE COURSES

#### COMPLETE THE FOLLOWING COURSES:

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)

#### GEOGRAPHIC INFORMATION SYSTEMS (GIS)

#### REQUIRED PLANNING CORE

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)

• GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 4910 Directed Independent Study (4 credits)
- GEOG 4970 Internship (4 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 4110 Advanced Physical Geography (3 credits)
- IT 1460 Technical Graphics (3 credits)

#### SUGGESTED SEMESTER SCHEDULE FOR GEOGRAPHY MAJORS

The following is a list of Geography Major courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible. Majors and minors in geography are strongly encouraged to meet with advisors in the Geography program prior to selecting courses.

#### Freshman

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- Liberal Education requirements

#### Sophomore

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- Electives in Geography (select one GEOG 2500 Political Geography or GEOG 3300 Geography and Planning of Outdoor Recreation)
- Complete Liberal Education requirements

#### Junior/

#### Senior

- GEOG 3226 Cartography (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- or any course in the 3800 series, i.e., Europe, Asia, or Africa
- GEOG 4110 Advanced Physical Geography (3 credits)
- or GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)
- GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

# Geography, B.S. major Regional Park Recree

## Regional, Park, Recreational, and Land Use Planning

Required Credits: 54 Required GPA: 2.25

#### I REQUIRED CORE COURSES

#### COMPLETE THE FOLLOWING COURSES:

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)

#### REGIONAL, PARK, RECREATIONAL, AND LAND USE PLANNING

### REQUIRED PLANNING CORE

#### COMPLETE THE FOLLOWING COURSE:

• GEOG 1400 World Regional Geography (3 credits)

#### ADDITIONAL REQUIRED COURSES

#### SELECT 1 OF THE FOLLOWING COURSES:

- ECON 3040 Environmental Economics (3 credits)
   or ENVR 3040 Environmental Economics (3 credits)
- BIOL 3630 Conservation Biology (3 credits)
   or GEOG 3630 Conservation Biology (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- GEOG 4110 Advanced Physical Geography (3 credits)

#### SELECT 2 OF THE FOLLOWING COURSES:

- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 3300 Geography And Planning Of Outdoor Recreation (3 credits)
- GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography Of Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

#### SUGGESTED SEMESTER SCHEDULE FOR GEOGRAPHY MAJORS

The following is a list of Geography Major courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion;

however, these are only suggestions and this schedule is flexible. Majors and minors in geography are strongly encouraged to meet with advisors in the Geography program prior to selecting courses.

#### Freshman

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- Liberal Education requirements

#### Sophomore

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- Electives in Geography (select one GEOG 2500 Political Geography or GEOG 3300 Geography and Planning of Outdoor Recreation)
- Complete Liberal Education requirements

#### Junior/

#### Senior

- GEOG 3226 Cartography (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- or any course in the 3800 series, i.e., Europe, Asia, or Africa
- GEOG 4110 Advanced Physical Geography (3 credits)
- or GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)
- GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

## Geography. B.S. major Traditional Emphasis

# Required Credits: 54

Required GPA: 2.25

# I REQUIRED CORE COURSES

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- COMPLETE THE FOLLOWING COURSES:
  - ENGL 3150 Writing In The Disciplines (3 credits)
     GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)

- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)

#### TRADITIONAL

#### **REQUIRED COURSES**

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 1400 World Regional Geography (3 credits)
- GEOG 3410 Geography of North America (3 credits)

#### REQUIRED GUIDED ELECTIVES

#### SELECT 2 OF THE FOLLOWING COURSES:

- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography Of Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 4110 Advanced Physical Geography (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)

#### SUGGESTED SEMESTER SCHEDULE FOR GEOGRAPHY MAJORS

The following is a list of Geography Major courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible. Majors and minors in geography are strongly encouraged to meet with advisors in the Geography program prior to selecting courses.

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- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 1400 World Regional Geography (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- Liberal Education requirements

#### Sophomore

- ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3320 Regional Planning Methods (3 credits)
- GEOG 3410 Geography of North America (3 credits)
- Electives in Geography (select one GEOG 2500 Political Geography or GEOG 3300 Geography and Planning of Outdoor Recreation)
- Complete Liberal Education requirements

#### Junior/

#### Senior

• GEOG 3226 Cartography (3 credits)

- GEOG 3800 Regional Geography (1-3 credits)
- or any course in the 3800 series, i.e., Europe, Asia, or Africa
- GEOG 4110 Advanced Physical Geography (3 credits)
- or GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)
- GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)
- GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

# Social Studies, B.A. *major* Geography Emphasis

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider completion a minor or a second major in that field. Such action may complement and increase the marketability of this major.

Required Credits: 48 Required GPA: 2.50

#### I REQUIRED CORE CURRICULUM

# CAPSTONE COURSE COMPLETE THE FOLLOWING COURSE:

• POL 4500 Thesis and Career Preparation (3 credits)

# ECONOMICS COURSES SELECT 1 OF THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

# GEOGRAPHY COURSES SELECT 1 OF THE FOLLOWING COURSES

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

# GEOGRAPHY COURSES SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography Of Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

# UPPER DIVISION WORLD HISTORY SELECT 1 OF THE FOLLOWING COURSES

- HST 2208 Greece and Rome, 1500 BCE-500 CE (3 credits)
- HST 2218 Medieval Europe (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 World Religions (3 credits)

- HST 2800 Reacting to the Past (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3169 History of the Vietnam War (3 credits)
- HST 3258 Foundations of the Western Legal Traditions (3 credits)
- HST 3268 The Roman Revolution, 200 BCE-CE 14 (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3449 Middle East (3 credits)
- HST 3459 Latin America (3 credits)

# UPPER DIVISION U.S. HISTORY SELECT 1 OF THE FOLLOWING COURSES

- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2617 Film and American History (3 credits)
- HST 2640 United States Diplomatic History (3 credits)
- HST 2650 Witchcraft and Magic in Early America (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 2800 Reacting to the Past (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Nineteenth-Century America (3 credits)
- HST 3137 Civil War and Reconstruction, 1844-1877 (3 credits)
- HST 3159 The World at War, 1931-1945 (3 credits)
- HST 3169 History of the Vietnam War (3 credits)
- HST 3178 American Intellectual History since 1877 (3 credits)
- HST 3187 American West (3 credits)

# POLITICAL SCIENCE COURSES SELECT 1 OF THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

# POLITICAL SCIENCE COURSES SELECT 1 OF THE FOLLOWING COURSES

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

#### **SOCIOLOGY COURSES**

#### SELECT 2 OF THE FOLLOWING COURSES:

- SOC 2200 Social Movements and Change (3 credits)
   or SOC 2210 American Culture: A Sociological Interpretation (3 credits)
- SOC 3010 Contemporary Sociological Theory (3 credits)

#### II REQUIRED FIELD OF EMPHASIS

SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM

#### GEOGRAPHY:

• GEOG\*\*\*\*

# SUGGESTED SEMESTER SCHEDULE FOR SOCIAL STUDIES MAJOR, B.A.

The following is suggested for logical and effective scheduling but can be interpreted as flexible for meeting requirements and a student's particular needs. Students should meet with the Social Studies coordinator and advisor as early as possible in their planning.

#### Freshman - Sophomore

- Geography and History constitute the "matrix" of Social Studies and students should complete required core courses in these subjects first.
- Complete Liberal Education requirements

#### Junior-Senior

- Complete remaining core course requirements and courses for area of emphasis.
- Complete Professional Education courses
- Students pursuing the B.S. Teacher Licensure in Social Studies should complete GEOG 3460 no sooner than their junior year, preferably just prior to their student teaching.

# Wilderness Management and Outdoor Recreation Planning, B.A.S. *major*

For students transferring to Bemidji State University with a Wilderness Management A.S. from Vermilion Community College.

Required Credits: 60 Required GPA: 2.25

#### I REQUIRED COURSES

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3300 Geography And Planning Of Outdoor Recreation (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)

#### II REQUIRED COURSES IN RELATED FIELDS

#### COMPLETE THE FOLLOWING COURSES:

- ANTH 1110 Cultural Anthropology (3 credits)
- BIOL 2610 General Ecology (3 credits)
- BUAD 3351 Management (3 credits)
- ENGL 2150 Technical Writing (3 credits)
   or ENGL 3150 Writing In The Disciplines (3 credits)
- SOC 1104 Social Issues (3 credits)

SPCM 1100 Public Speaking (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- ECON 3040 Environmental Economics (3 credits)
- ENVR 3040 Environmental Economics (3 credits)
- ED 3257 Introduction to Environmental Education and Interpretation (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3630 Conservation Biology (3 credits)
- BIOL 3630 Conservation Biology (3 credits)

SELECT 1 COURSE (3 SEMESTER CREDITS) IN THE \*\*\*\*2925 PEOPLE AND THE ENVIRONMENT:TOPIC SECTION:

#### III SUGGESTED ADDITIONAL ELECTIVES

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 1400 World Regional Geography (3 credits)
- GEOG 3410 Geography of North America (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES

- GEOG 4110 Advanced Physical Geography (3 credits)
- GEOG 4190 Field Geography (3 credits)

SELECT ANY 3 SEMESTER CREDIT GEOGRAPHY COURSE AT THE 3800 LEVEL:

# SUGGESTED SEMESTER SCHEDULE FOR WILDERNESS MANAGEMENT AND OUTDOOR RECREATION PLANNING MAJOR, B.A.S.

The following is a list of required courses, arranged by year, for the Wilderness Management and Outdoor Recreation Planning Major, B.A.S. This schedule is intended to help student plan their courses in an orderly fashion.

#### Freshman - Sophomore

• Wilderness Management A.S. degree from Vermilion Community College

#### Junior

- ANTH 1110 Cultural Anthropology (3 credits)
- ENGL 2150 Technical Writing (3 credits)
- or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3226 Cartography (3 credits)
- GEOG 3300 Geography And Planning Of Outdoor Recreation (3 credits)
- SOC 1104 Social Issues (3 credits)
- SPCM 1100 Public Speaking (3 credits)

#### Senior

- BIOL 2610 General Ecology (3 credits)
- BUAD 3351 Management (3 credits)
- ECON/ENVR 3040 Environmental Economics
- or ED 3257 Introduction to Environmental Education and Interpretation (3 credits)

- ENGL 2925 People and the Environment: American Nature Writers (3 credits)
- or XXXX2925
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)
- GEOG 3310 Land Use Analysis And Planning (3 credits)
- GEOG/BIOL 3630 Conservation Biology

### Geographic Information Systems minor

Required Credits: 21 Required GPA: 2.00

#### I REQUIRED COURSES

#### COMPLETE THE FOLLOWING COURSES:

- GEOG 1224 Introduction to Map Use (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2225 Aerial Photography And Remote Sensing (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3226 Cartography (3 credits)
- GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

### Geography minor

Required Credits: 21 Required GPA: 2.00

### I REQUIRED COURSES

### COMPLETE THE FOLLOWING COURSES:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2300 Economic Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)

#### COMPLETE THE FOLLOWING COURSE:

• GEOG 3800 Regional Geography (1-3 credits)

#### II REQUIRED ELECTIVES IN GEOGRAPHY

SELECT 6 SEMESTER CREDITS IN GEOGRAPHY

## Geography Courses

#### GEOG 1224 Introduction to Map Use (3 credits)

This course is designed for the liberal education program and provides an introduction to common characteristics and use of map media. Topographic maps will be used for physical analysis as well as to discern cultural and economic features of landscapes. Thematic maps, their use and applications will be presented. Includes some study out-of-doors with map and compass. Liberal Education Goal Areas 5 & 11.

#### GEOG 1400 World Regional Geography (3 credits)

A survey of physical, cultural, and economic aspects of world regions. An introduction to how constituent parts of the world differ from one another in their associated resources, cultures and economics. Attention is given to the interrelationships, interdependencies, and associations that bind together the diverse communities of the world. Liberal Education Goal Areas 7 & 8.

#### GEOG 2100 Introduction to Physical Geography (3 credits)

This course is designed for the liberal education program and provides an introduction to spatial patterns derived from earth system processes. The course provides a systematic survey of land forms, weather and climate, soils and vegetation. This course utilizes a combination of in class discussion and laboratory-like exercises to investigate these topics. Liberal Education Goal Area 3

#### GEOG 2200 Introduction to Human Geography (3 credits)

Emphasizes the study of geographical relationships and interactions of cultural, social, economic, ethnic, and political phenomena. Topical approach to population subgroups, religions, languages, urban and rural settlements, and other attributes of the cultural landscape. Liberal Education Goal Areas 7 & 8.

#### GEOG 2225 Aerial Photography And Remote Sensing (3 credits)

Development of understanding and skills necessary for interpreting air photos and remotely sensed images. Prerequisite: GEOG 1224.

#### GEOG 2231 Geographic Information Systems (3 credits)

Geographic Information Systems (GIS) enable data that traditionally exist in maps or tables to be used in a computerized environment. This allows faster, more accurate, and more complex uses to be made of the information. The course addresses functional aspects of such systems and social and policy oriented implications of this approach to geographical analysis. Practical experience provided. Prerequisite: GEOG 1224 or consent of instructor.

#### GEOG 2232 Techniques In Geographic Information Systems (3 credits)

A hands on approach to understanding both raster and vector based Geographic Information Systems. Prerequisites: GEOG 1224, GEOG 2231, or consent of instructor.

#### GEOG 2300 Economic Geography (3 credits)

Spatial structure of world economic activities; agriculture, forestry, fishing, mining, industry and trade. Liberal Education Goal Area 5.

#### GEOG 2400 Introduction to Planning (3 credits)

This course is designed for the liberal education program and provides information on the background and fundamentals of the community planning process. Includes discussion of contemporary issues in physical, environmental and social planning. Emphasis is on the local and subregional levels. Liberal Education Goal Areas 5 & 9.

#### GEOG 2500 Political Geography (3 credits)

This course utilizes "World Systems Theory" to investigate 1) theories of State formation and organization; 2) historical processes of imperialism, colonialism, and decolonization; 3) major issues of the emerging political economy; 4) historical and contemporary geopolitics; and 5) the political geography of everyday life.

### GEOG 2925 People and the Environment: Geography Perspective (3 credits)

An integrative study of the natural, social, value-based, and citizen-action contexts for environmental awareness. The disciplinary component surveys geographic approaches to and institutional settings for environmental problems and decision making, including our spatial behaviors as either sources or recipients of environmental impacts. Interdisciplinary perspectives are evaluated in light of different geographic concepts of spatial distributions, physical geography, and regional planning. Liberal Education Goal Area 10.

#### GEOG 3100 Weather And Climate (3 credits)

Weather elements and world climatic patterns.

#### GEOG 3226 Cartography (3 credits)

Construction and production of maps with an emphasis on computer-generated thematic maps and graphs. Lecture 3 hours, laboratory 2 hours. Prerequisite: GEOG 1224 or consent of instructor.

#### GEOG 3300 Geography And Planning Of Outdoor Recreation (3 credits)

An analysis of the use, perception, and planning of recreational resources and landscape amenities, with emphasis on geographical relationships and environmental stewardship. Includes some study out-of-doors. Prerequisite: GEOG 2400 or consent of instructor.

#### GEOG 3310 Land Use Analysis And Planning (3 credits)

An examination of the identification and inventory methods of land use analysis including the designing of land use models which are compatible with environmental, social, and economic goals. Prerequisites: GEOG 2100, GEOG 2400, or consent of instructor.

#### GEOG 3320 Regional Planning Methods (3 credits)

An examination of the basic planning process, including the development of strategic and comprehensive plans, plan implementation, pertinent legislation, and sources and techniques of funding. Prerequisite: GEOG 2200 or GEOG 2225 or GEOG 2300 or consent of instructor.

#### GEOG 3410 Geography of North America (3 credits)

A regional analysis of the physical, demographic, economic and cultural characteristics of the nations in North America.

# GEOG 3460 Teaching of Middle and Secondary School Social Studies (4 credits)

Objectives, activities, methods, and materials in teaching social studies in grades 5-12. Additional laboratory time is required. Prerequisite: ED 3110.

# GEOG 3520 Site and Resource Analysis in Outdoor Recreation Planning (3 credits)

Techniques and methods in the location, analysis, evaluation, and design of sites. Emphasizes techniques and methods for planning and management of outdoor recreation. Focuses on identifying use potentials and impact limitations for outdoor recreation planning and management. Extensive out-of-doors study. Prerequisites: ENGL 2150 or ENGL 2152 or ENGL 3150 or ENGL 3177 or ENGL 3179, GEOG 3226, and GEOG 3300 or consent of instructor. (Might not be offered every year)

### GEOG 3630 Conservation Biology (3 credits)

Methods and theory of conservation biology; species diversity, extinction rates, management of endangered species, and the economics of conservation strategies. Also BIOL 3630.

### GEOG 3800 Regional Geography (1-3 credits)

A regional and topical analysis of the cultural and physical features of a continent or major region of the earth. May be repeated provided different regions are involved. Note: Recommended for students in international studies, foreign languages, and for prospective teachers in the humanities or social studies.

#### GEOG 3810 Geography of Europe (3 credits)

A regional analysis of the cultural, economic, physical and landscape patterns of the European cultural region. NOTE: Recommended for students in Euro-Spring, International Studies, foreign languages, and prospective teachers. Liberal Education Goal Area 5.

### GEOG 3820 Geography Of Asia (3 credits)

A geographic analysis of the physical, economic and cultural aspects of the Asia. NOTE: Recommended for students in international studies, foreign languages, and prospective teachers. Liberal Education Goal Area 8.

#### GEOG 3840 Geography of Africa (3 credits)

Despite persistent bias about it, Africa's cultural complexity, social dynamism, and political/economic struggle have tremendous relevance for the study of global trends at the start of the twenty-first century. The central purpose of this course is to demonstrate that relevance by investigating the cultural, historical, economic, and political dimensions of change in Africa.

### GEOG 4110 Advanced Physical Geography (3 credits)

Study of the origin and distribution of land-form assemblages with emphasis on the effects of weather and climate on morphology and hydrology. Systematic. Prerequisite: GEOG 2100 or consent of instructor.

#### GEOG 4120 Urban Geography (3 credits)

Functions and distribution of cities. Urban sizes, hierarchies, and external relations with the countryside. The central place and other theories of the spacing of cities. Internal structures and functions of cities, the growth of cities, urban slums, urban sprawl, and city planning. Systematic. Prerequisite: GEOG 2200 or consent of instructor.

#### GEOG 4190 Field Geography (3 credits)

Field studies of selected geographic problems. Prerequisite: GEOG 3226 or consent of instructor.

GEOG 4200 Quantitative Procedures In Geographic Investigation (3 credits) Techniques of computer-aided analysis and quantitative methods related to spatial problems. Introduction to geographic source materials. Systematic. Prerequisites: GEOG 3226 or consent of instructor.

# GEOG 4210 The History and Development of Geographic Thought (3 credits)

Development of the discipline of Geography with emphasis on both the historical and recent developments in the field. Includes a critical analysis of writing of representative geographers. Note: Capstone course in the B.A. and B.S., option A. Prerequisite: Senior status geography major or minor.

#### GEOG 4233 Advanced Geographic Information Systems (GIS) (3 credits)

Intermediate and advanced topics in geographic information science and spatial analysis using GIS software. Greater understanding of GIS theory, technology, and applications. Emphasizes software applications in producing various quantitative and thematic maps. Exercises focus on development, management, and analysis of GIS data. (Lecture/Lab) Prerequisites: GEOG 2231 and GEOG 2232.

#### GEOG 4910 Directed Independent Study (4 credits)

Arranged individual study.

### GEOG 4970 Internship (4 credits)

Graded Satisfactory/Unsatisfactory only. Student internships may be either fulltime or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

#### GEOG 4990 Thesis (3 credits)

A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

#### **All-University Courses**

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS