

# COLLEGE OF NATURAL AND SOCIAL SCIENCES GEOGRAPHY AND EARTH SCIENCE



## GEOGRAPHY AND GEOGRAPHICAL INFORMATION SCIENCE

Students majoring in geography and geographical information science will gain the technical background to gather data such as maps, satellite imagery, aerial photographs or digital elevation models using geographic information systems, remote sensing, computer cartography and global positioning systems. Apart from the basic courses of geography, you learn to identify, interpret and explain features and patterns in the world. This major is ideal for students seeking employment in technologically driven geographic fields. This program requires a minor or second major.

### Career opportunities

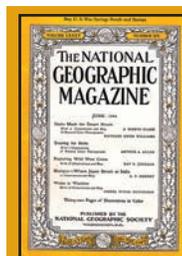
- GIS analyst/programmer
- Business location analyst
- Remote sensing analyst
- Geospatial data analyst
- GIS coordinator
- GIS technician

### Typical employers

- Local government
- Utility companies
- Police service
- Private companies
- GIS organizations
- Charities
- Environmental consultancies

### Why study geography at UNK?

- Students can establish relationships with faculty through classes, research and projects.
- Majors are encouraged to work with a faculty member in “hands-on training” doing geography research.
- Learning geography is fun and useful using advanced equipment and instrumentation.



The first issue of *National Geographic Magazine* was published in October 1888. The monthly publication includes articles on geography, history and world culture.

## Alumni profile

“One of my professors once said, ‘Geographers are made, not born.’ In other words, most geography students find their way into the major via another field, rather than arriving at college wanting to become geographers,” said Dr. Brett Chloupek, an assistant professor of geography at Northwest Missouri State University.



DR. BRETT CHLOUPEK

Chloupek’s first major at UNK was computer information systems, but his love for geography turned into a second major by the time he graduated in 2005.

In the geography department, Chloupek appreciated how involved the faculty members were with the students and how much they included the students in their work. “I went on a desert field study trip to the American Southwest with Professor Stan Dart, worked on a geomorphology project with Dr. Jeremy Dillon, and worked very closely with my adviser Dr. Paul Burger for several years on a number of GIS projects.”

UNK has been a family affair for Chloupek. “My parents met there, and virtually all of my family who went to college attended UNK, Kearney State College or Nebraska State Teachers College.”

## Did you know?

**Physical geographers** concentrate on the earth and topics such as weather, climate, soils, landforms and the natural environment.

**Human geographers** concentrate on people and their activities, such as culture, economics, political systems and history.

**GEOGRAPHY AND GEOGRAPHICAL INFORMATION SCIENCE**

**FOUR YEAR CLASS SCHEDULE: BACHELOR OF SCIENCE**

The schedule is a guideline for progress toward a degree. Consult with your academic adviser.

<p><b>Semester 1 (15 credits)</b></p> <p>GS ENG 102 Writing and Research                  GS core Oral Communication                  GS core MATH                  GS Portal 188 course (your choice)                  GS Aesthetics course</p>	<p><b>Semester 2 (14 credits)</b></p> <p>GS core Democracy in Perspective                  GS Humanities course                  GS Natural Sciences course with lab                  GEOG 101 Physical Geography I</p>
<p><b>Semester 3 (16 credits)</b></p> <p>GS Social Sciences course                  GS STAT 241 Elementary Statistics                  GEOG 102 Physical Geography II                  GEOG 104 World Regional Geography                  Minor or second major course</p>	<p><b>Semester 4 (15 credits)</b></p> <p>GS Humanities course                  GS Elective                  GEOG 106 Human Geography                  GEOG 206 Geography of U.S./Canada                  Minor or second major course</p>
<p><b>Semester 5 (15 credits)</b></p> <p>GS Social Sciences course                  GS Elective (2 credits)                  GEOG 310 Cartography                  GEOG 315 Geographic Info. Systems                  Minor or second major course</p>	<p><b>Semester 6 (15 credits)</b></p> <p>GS Natural Sciences course                  GEOG 316 GIS and Spatial Analysis                  Minor or second major course                  Minor or second major course                  Unrestricted elective</p>
<p><b>Semester 7 (15 credits)</b></p> <p>GS Capstone 388 course (your choice)                  GEOG 317 Remote Sensing                  GEOG 300-499 course (except 388)                  Minor or second major course                  Unrestricted elective</p>	<p><b>Semester 8 (15 credits)</b></p> <p>GEOG 416 Applications of GIS                  Minor or second major course                  Minor or second major course                  Unrestricted elective                  Unrestricted elective</p>

**Gamma Theta Upsilon**

Gamma Theta Upsilon, an international honor society, has a local chapter, Zeta Sigma, at UNK. Members in the organization welcome those who share an interest in geography. Activities support geography knowledge and awareness, such as Geography Awareness Week.

**Geography Student Fund**

The UNK Geography Department has an endowed scholarship fund to support students majoring in geography. Talk to the department for more information about additional scholarships.

**Undergraduate research opportunities**

You can be mentored one-on-one and build practical problem-solving skills that prove valuable later on the job or in graduate school by participating in research projects through:

- Upper-level geography courses
- Summer Student Research Program
- Undergraduate Research Fellows
- Honors program

**In the UNK GIScience lab, state-of-the-art computer technology with GIS, remote sensing and cartography software is available.**

**For more information, contact:**

H. Jason Combs, professor and chair  
 Copeland Hall, 203  
 University of Nebraska at Kearney  
 (308) 865-8605  
 combshj@unk.edu

**GEOG - 0415**



"I chose geography because I love learning about how, where and why people live, and tying it to the cultural aspects of geography. I picture my career as part of the planning process, working alongside architects and designers."

**Name: Kaitlyn Taylor from Omaha, Neb.**  
**Major: Geography and GIScience**  
**Minor: Management/Marketing**  
**Graduation: spring 2015**



"My favorite part about the UNK Geography Department is not only the diverse and stimulating course offerings, but especially the kindness and helpfulness of the professors. There are many career options for geography majors, and I value the guidance I have received to assist me in finding the right path."

**Name: Ashley Larsen from Lexington, Neb.**  
**Major: Geography and GIScience**  
**Minor: Sociology**  
**Graduation: spring 2016**