



Joseph Nicollet, a French Geographer, mapped the Upper Mississippi River Basin in the 1830s and travelled across the present-day Gustavus campus. Statue by Paul Granlund.

# **Strategic Plan**

**Geography Department  
Gustavus Adolphus College**

**May 2009**

## GEOGRAPHY DEPARTMENT

### Section 1 Geography Department Description

#### 1.1.1 Overview of the Department

Participating Faculty: Bob Douglas (Professor), Mark Bjelland (Associate Professor and Chair), Anna Versluis (Assistant Professor)

Since the 1950s, the Department of Geography at Gustavus Adolphus College has helped students to better understand and appreciate their world. The department is staffed by three tenure-line positions, one full-time adjunct instructor, one active emeritus professor, and a shared administrative secretary. We offer courses to an average of 545 students per year and award 13 geography degrees and 13 geography minors in an average year. Our facilities include a GIS teaching laboratory, a GIS/Remote Sensing research laboratory, climatology laboratory, weather station, and a Map Library with approximately 100,000 maps. The Department of Geography at Gustavus Adolphus College is known among the academic geography community as a model program for small, private liberal arts colleges. The 2007 external examination team of Dr. Joy Mast of Carthage College and Dr. Robert Ostergren of the University of Wisconsin-Madison, wrote:

This is a hard working, collegial and well-led department, with an accomplished faculty that excels in teaching and advising its students. The curriculum is wide ranging, providing both service courses to the College at large as well as a solid grounding in the discipline to majors. We noted that the teaching is both energetic and innovative, with emphases on field experiences, service learning, and engagement with the local community.

Mission: The mission of the Gustavus Adolphus College Geography Department is to foster a critical appreciation of the earth as the home of humanity and equip students to help make the world a better and more just place to live. We seek to cultivate in our students an appreciation of the diversity of places and regions, a critical awareness of human-environment relationships, and an understanding of the varied dimensions of global change.

Vision: Our vision is to offer first-rate teaching and scholarship that integrates human and physical geography with a wide range of geographic research techniques. Specifically, we envision offering 1) engaging, eye-opening courses that combine global perspectives with local engagement, 2) a transformative major with a strong sense of community and identity that prepares geography majors for advanced graduate study and/or a wide variety of careers, and 3) service to the wider community through our expertise and geographic research skills. Our vision is that the Geography Department would play a major role in the college's mission of providing an education that is "international in perspective" while simultaneously modeling effective engagement with local communities.

Goals: Our first goal is to further internationalize our department's curriculum and extracurricular activities. A second goal is bring our instruction in geographic information science and technologies to the forefront among liberal arts colleges. A third goal is to strengthen student engagement and the sense of identity and community among our majors. A fourth goal is to become a more visible resource to the college and wider community.

## **1.2 Programs**

The Department provides general education courses to a wide cross-section of Gustavus students, offering nine courses that meet general education requirements and covering three of the nine general education areas within the college curriculum. We also offer a strong geography major that prepares students for a wide range of careers (cartography, geographic information systems, planning, business location and market analysis, international development), graduate schools in geography; and professional schools in urban and regional planning, landscape architecture, geographic information systems, or environmental management.

## **1.3 Support relationships**

The Geography Department played an important founding role for the interdisciplinary Environmental Studies (ES) program and continues to make major contributions to that program. One geography course—GEG-243: Water Resources is required for the ES major and our GIS course sequence is well used by ES majors, particularly those with concentrations in

geology or biology. Further, geography is one of the most common concentrations within the ES major. These mutually supportive relationships strengthen ES and bring talented students into our upper level geography courses.

The Geography Department contributes significantly to the preparation of education majors at Gustavus, with four of our courses meeting different requirements for their different majors. GEG-101 and GEG-102 are electives for the Elementary Education Major and are required for the Social Studies concentration; GEG-101, GEG-102 and GEG-236 are required for the Social Studies Teaching Major, and GEG-108 is required for the Earth and Space Science Teaching Major.

The Geology and Geography Departments have a long history of close interaction. We both share the lower level of Nobel Hall and share some facilities. For example, geography lab sections often meet in the Geology Teaching Laboratory and geologists frequently use the Geography Map Library. When a geomorphology position was created in the 1980s, it was a joint position shared equally between the Geology and Geography Departments. The continued legacy of that joint position is the cross-listing of GEO-246: Geomorphology in the Geography Department course listings. Double majors in geology and geography are common. Some geography students take GEO-111 and GEO-246 and most geology majors take GEG-340: Geographic Information Systems in the Geography Department. Geography professors often assist with the GIS aspects of geology senior thesis projects.

The GIS Lab and Map Library are probably the two most important facilities within the department. While the Map Library can be maintained with a student assistant and faculty oversight, the GIS lab requires more sophisticated knowledge of computing software. Without a GIS Lab Manager, the Geography Department has relied heavily on Gustavus Technology Services for help in maintaining the GIS Lab. Further, the Geography Department covers half of the site license for GIS software that is used campus-wide, including by the Geology Department

## **2.1 Strategic issues**

A major strength of the Geography Department is a committed faculty who are diverse in their regional specialties and their methodological and philosophical approaches to geography. Compared to other Midwest liberal arts college geography departments we offer more breadth in covering both human and physical geography and a range of regions outside the U.S. Another major strength of our department is its long history which means we have a well developed geography collection in the library, alumni who care deeply about the department and are happy to act as donors, connections for student internships and employment, sources of specialized geographic data, speakers for our seminar series and guides for field trips.

A major strategic challenge facing us is that our faculty is smaller than at other comparable geography departments. Our recent external review noted that we need a minimum of four tenure-track positions. Geography departments at most other Midwest liberal arts institutions have added new positions in the past few years while we have not received any new faculty lines since a full-time adjunct position was converted to tenure-track in 2003 and a second tenure-track position was added in 1973. Macalester College has five tenure-track faculty, two continuing full-time visiting positions, and a full-time GIS lab manager and lab instructor. Carthage College has recently added new positions to reach 5 FTE in geography. Augustana College' Geography Department has recently grown to four tenure-track positions. The University of St. Thomas Geography Department has three tenure-track positions, a full-time GIS lab manager and lab instructor, and an adjunct instructor. Recent additions at these institutions have focused on GIS and allowed them to offer greater depth in GIS than we do at present.

We have two professors who can teach GIS I (Mark Bjelland and Anna Versluis) but no one on the faculty to teach GIS II. Both Mark Bjelland and Anna Versluis have full teaching loads and teaching GIS I means not teaching another course that better uses their expertise. Dr. Versluis could teach a remote sensing or cartography course but the need to offer GIS I keeps her from doing so. Since we added the advanced GIS course (GIS II), we have relied on adjunct instructors the four times it has been offered. However, it has not been offered for two years because we have been unable to find an adjunct GIS instructor willing to commute to St. Peter.

Another strategic challenge facing Gustavus and all U.S. geography departments is that the discipline is often neglected in K-12 education in this country. Not only do incoming students not know the concepts and theories of geography—they don't even know what the discipline is about. Nearly all of our majors discover geography through a general education course and the few who come to Gustavus intending to major in geography have been geography bee winners, younger siblings of geography majors, or the lucky few who had an AP Human Geography course in high school. This means that many of our majors declare their major relatively late and we don't have time to develop as clear a sense of identity and community among our majors as we would like. Further, this creates challenges in achieving depth in upper level courses and supporting student research since our curriculum is focused on 100-level general education courses. Not surprisingly, our 2006 external reviewer identified the need for greater depth and a wider range of upper level courses.

While it is easy to focus on shortcomings, the presence of a geography department on campus is a real asset that not all of our competitor colleges can claim. An equal number of Midwest liberal arts institutions lack geography departments altogether. Instead, they offer just a few courses in geography taught by lone geographers, adjuncts, or faculty from other disciplines. Many nearby small private colleges have non-geographers teaching their GIS course—not considered good practice by the GIS community. We believe that the presence of a geography department could be a major selling point over St. Olaf, Luther, and Concordia-Moorhead, each of which talks about global perspectives in their curriculum but lacks the key perspectives of geographers.

## **2.2 Barriers**

A major barrier to realizing our goal of being at the forefront among liberal arts colleges in geographic information science education has been a lack of a new faculty line in GIS. Our 2006 external review recommended a new position focused on GIS. We requested that GIS position in 2007 and 2008 and were turned down both times.

**Section 3 Strategic Initiatives and Recommendations**

Goal 1: “further internationalize our department’s curriculum and extracurricular activities”

Initiative 1.1 Create several new endowed chairs with specializations in regions of special significance to society, the college and its constituencies. These endowed chair positions would provide on-campus regional expertise, and teach new regional courses. Given the rising importance of China and its historic connections to Swedish Lutherans, this would be a natural region to focus on. Similarly, Sub-Saharan Africa would also be a strategic region for the college. Thus, we can imagine endowed chairs in “East Asian Economic Geography” and “Contemporary Sub-Saharan Africa.”

Initiative 1.2 Develop and support a January Term course or semester-length program focused on the geography of a region outside the U.S.

Initiative 1.3 Incorporate global perspectives into existing and new topical geography courses.

Initiative 1.4 Contribute to campus-wide internationalization by bringing in geographers with regional expertise as guest speakers.

Initiative 1.5 Contribute to on-campus and off-campus international events

Goal 2: “bring our instruction in geographic information science and technologies to the forefront among liberal arts colleges.”

Initiative 2.1 Add a fourth tenure-track position focused on GIS and related geographic research methodologies.

Initiative 2.2: Add a GIS Lab Manager who would manage the GIS software and hardware, teach laboratory sections of GIS and cartography courses, and support our new Geographic Research Center (See Initiative 4.1)

Initiative 2.3 Develop a Minor in Geographic Information Science. This minor would qualify students for a number of jobs and scholarships.

Goal 3: “strengthen student engagement and the sense of identity and community among geography majors.”

Initiative 3.1 We envision using expanded field trip opportunities and field course requirements as a primary means of increasing student engagement as well as building the sense of identity and sense of community among geography majors. Like Canadian and British university geography departments and our sister school, Augustana College, we propose that two extended field trips be required for the major. One field trip would focus on physical geography and natural resource management issues. The second field trip would focus on human settlements and urban and regional planning issues. The first field trip could visit a region such as the Black Hills or North Shore of Lake Superior. The second field trip could focus on Chicago, Denver, or another metropolitan region. January term is not well-suited to our purposes because the most likely locations are cold and snowy in the winter and January term courses are not allowed to fulfill major requirements. Thus, we propose half credit courses that involve some classroom work and a short trip during spring break, immediately after graduation, or immediately before fall term begins. We would rely on department alumni for help in arranging speakers, accommodations, and possibly serving as field trip guides.

Initiative 3.2 Create an endowment to defray student costs to participate in field trips

Initiative 3.3 Work to attract students to Gustavus who are interested in geography. We believe we can achieve this by making connections with AP Human Geography

instructors at Midwest high schools and better communicating what we offer to the Admissions Department.

Initiative 3.4 Create scholarships and prizes for geography students in areas such as cartography, global perspectives, and field research.

Goal 4: “ become a more visible resource to the college and wider community”

Initiative 4.1: We propose the creation of a Geographic Research Center. This would be a center for mapping, spatial analysis, and cartography. It would be directed by a geography faculty member, supported by the GIS Lab Manager, and hire qualified work study students. It would not be a data archive but a resource to the Gustavus community, the college’s partners, and the local community. This center would do research projects with external or internal funding and pursue grant opportunities where appropriate. Projects could involve geocoding data for various clients, creating maps for publications, creating customized analyses and presentation of census data, remote sensing of land cover change, and spatial analysis. Recent examples of work done informally in the Geography Department give a sense of the possibilities:

- Analyzed bus routes for the City of Austin, Minnesota
- Mapped and analyzed crime data for Rochester, Minnesota
- Analyzed property value changes block by block in Olmsted County, Minnesota
- Mapped GACAC congregations for the Gustavus Church Relations office
- Created map of gender and employment for a Boston College publication.
- Mapped Gustavus staff residences and computed commuting distances for the Johnson Center for Environmental Innovation
- Mapped and performed spatial analysis on the location of 9,000 Lutheran households from 12 congregations for the Minneapolis Synod

- Compiled a land cover history from historic aerial photographs and created trail maps for the Ney Nature Center
- Performed geodemographic analysis of rural communities for the Center for Rural Policy Development
- Mapped Gustavus alumni for the Development Office's strategic planning
- Mapped rural development project locations for the USDA Three Rivers
- Developed a web-based map of development resources for Minnesota Rural Partners

#### ***Section 4      Assessment***

We will assess the further internationalization of our curriculum based on the number of students taking "non-western cultures" general education credits in our department. Enrollments, internship reports, and students finding jobs related to GIS will be our means of assessing success in coming to the forefront in geographic information technologies. We can assess the success in increasing engagement, sense of identity and community among geography majors by tracking the number of geography majors. We are convinced that a more distinctive geography major will be attractive and attract additional students. Finally, the success of a Center for Geographic Research will be measured by its outputs and the relationships it builds with local community partners and the various constituencies of the college.