DEPARTMENT OF GEOGRAPHY

ANNUAL REPORT - 2008

UNIVERSITY OF CENTRAL ARKANSAS

Department of Geography
Annual Report – 2008

I. Statement of Mission and Purposes

The Department of Geography seeks to deliver to its students the best geography education in Arkansas. The Department offers a Bachelor of Arts Degree, a Bachelor of Science Degree, a minor in Geography, a minor in Geographic Information Science, and a Graduate Certificate in Geographic Information Systems. The Department strives to maintain the highest academic quality and to assure that its curriculum remains current and responsive to the needs of the students it serves. The Department's mission is expressed in its commitment to the personal, social, and intellectual growth of its students; its support for its faculty members' advancement of knowledge; and its service to the community.

The Department of Geography implements its mission through its emphasis on the following central purposes:

- To deliver excellent curricula in degree programs at the undergraduate and graduate levels,
- To support its programs with personnel of the highest quality and with optimal resources and facilities,
- To create a departmental community that supports students in their personal, social, and intellectual growth,
- To enhance interaction and understanding among diverse groups and to cultivate global perspectives,
- To foster learning and the advancement of knowledge of its faculty through research and other scholarly and creative activities, and
- To serve the public in ways appropriate to the mission and resources of the Department.

II. Updated Academic Plans

Goal 1: Maintain and Enhance Undergraduate/Graduate Curricula

Action Plans:

1. Propose a new junior-level course titled Geography of Africa and the Middle East
2. Propose a new junior-level course titled Geography of the U.S. and Canada

Projected Completion Date:

1. Fall 2009 – for each new course

Measures of Success:

1. Proposals submitted and approved by appropriate committees and councils

Resources Required:

1. None.

Goal 2: Increase the Number of Majors

Action Plans:

1. Devote time in appropriate courses to career options in geography
2. Expose students in appropriate courses to geospatial technology by assigning GIS exercises as homework
3. Host GIS Day
4. Participate in Majors' Fair

Project Completion Date:

1. Each semester
2. Each semester
3. November of each year
4. Fall semester each year

Measures of Success:

1a. Each faculty member will devote time to career options in geography in appropriate courses

1b. Each faculty member will declare that they have held career discussions in appropriate courses

2a. GIS exercises will be given as homework assignments in appropriate courses.

2b. Each faculty member will declare that GIS exercises were given as homework assignments in appropriate courses

3. A successful GIS Day is held each November

4. Successful participation in Majors' Fair

Resources Required:

1. None.
2. None.
3. $100 for supplies and food
4. $100 for give-aways

Goal 3: Increase Research/Publication Productivity of Geography Faculty.

Action Plans:

1. Encourage an established research and writing agenda
2. Review annual professional growth plans
3. Require interim reports to monitor and track professional growth activities

4. Review Performance Summaries to track professional growth activities

Projected Completion Date:
1. On-going
2. January, each year
3. April and September, each year
4. January, each year

Measures of Success:
1. Encouragement will be given during annual conferences
2. Professional growth plans will be reviewed each January
3. Interim reports will be received each April and September
4. Faculty Performance Summaries will be reviewed each January

Resources Required:
1. $500 annual travel budget for each faculty member
2. Reassigned time for professional growth activities
3. $2,600 for adjunct professor to enable reassigned time

Goal 4: Department will become involved in Undergraduate Research

Action Plans:
1. Faculty members will identify potential students early each semester
2. Faculty members will encourage those students to participate
3. Faculty members will consider partnering with appropriate students
4. Faculty will encourage participating students to attend and present at conferences

Projected Completion Date:
1. Each semester
2. Each semester
3. Each semester
4. Each semester

Measures of Success:
1. Faculty members will report that they have attempted to identify students
2. Faculty members will report that they have encouraged student participation
3. Faculty members will partner with appropriate students
4. Students will attend and present at conferences

Resources Required:
1. Copies of Undergraduate Scholar Program brochure
2. Travel funds for students to attend and present at conferences

Goal 5: Department will become involved in Academic Service Learning Activities

Action Plan:

1. Information about Academic Service Learning will be provided to each faculty member
2. At least two faculty members will agree to incorporate Academic Service Learning into one of their courses

Projected Completion Date:

1. Fall 2009
2. Spring 2010

Measures of Success:

1. Information will be provided to faculty members
2. Two faculty members will agree to incorporate Academic Service Learning into one course

Resources Required:

1. Brochure about Academic Service Learning - $100 for printing
2. Reassigned time for course development

Goal 6: Department will become more involved in study abroad experiences

Action Plan

1. Faculty members will be encouraged to explore study abroad options
2. Faculty members will be provided information from International Programs regarding study abroad applications
3. Faculty will apply for study abroad experiences

Project Completion Date:

1. Each semester
2. Each semester
3. Spring 2010

Measures of Success:

1. Encouragement will be given in department meetings
2. Information will be provided in department meetings
3. At least one faculty member will apply for a study abroad experience

Resources Required:

1. None
2. Information from International Programs
3. Reassigned time

III. Accomplishments

Curriculum

Undergraduate, online courses (GEOG 1300, 1305, and 2375), taught for the first time

Successful transition from WebCT to UCA Blackboard

Proposed four new graduate-level courses:

- GEOG 5312, Health Applications for GIS
- GEOG 5316, Remote Sensing for Teachers
- GEOG 5317, GIS for Teachers I
- GEOG 5318, GIS for Teachers II

GEOG 3300, World Regional Geography, taught for the first time

Curriculum-based Workshops Attended

Allender – WebCT design
Allender – AP Human Geography
Allender – China
Allender – Instructional Development Center
Passé-Smith – 10 ESRI technical workshops
Reynolds – Instructional Development Center

Professional Development

Conferences Attended

Allender – National Geographic Society Alliance Coordinators' Meeting
Allender – National Conference on Geographic Education
Allender – Arkansas Curriculum Conference
Allender - Asia
Green – National Conference on Geographic Education
Green – Regional Geography and Ecology
Green – National Geographic Society Alliance Coordinators' Meeting
Green – Arkansas Curriculum Conference
Passé-Smith – ESRI International Users Conference
Pearson – Applied Geography Conference
Pearson – America View Annual Meeting
Yoder – Southwest Division of the Association of American Geographers
Yoder – Center for Big Bend Studies Annual Meeting

Conference Presentations

Green – "Modeling Population Dynamics in Rural Russia," Ryazan', Russia
Passé-Smith – "Effect of Topography on Weak and Moderate Tornadoes," San Diego, California

Pearson – "Service Learning in the Secondary Math and Science Classroom with Geographic Information Systems and Remote Sensing," Wilmington, Delaware
Yoder – "The Geography of Maritime Ports: Globalization, Neoliberalism, and Evolving Landscapes of Trade," San Marcos, Texas
Yoder – "Landscapes of Industry and Transport in North-Central Mexico: Torreon, Gomez Palacia and Monclova," Alpine, Texas

Publications

Passé-Smith – "Effect of Topography on Weak and Moderate Tornadoes," online at http://gis.esri.com/library/userconf/proc08/papers/pap_1396.pdf
Passé-Smith – "Tornadoes," online *Encyclopedia of Arkansas History and Culture* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&ENTRYid=2377

Grants Funded

Allender/Green – National Geographic Education Foundation, $50,000
Green – UCA University Research Council, $350
Pearson – Arkansas Department of Higher Education, NCLB, $77,296
Yoder – UCA University Research Council, $2,121.80

Service

Department

Allender – Curriculum Committee
Allender – Search Committee
Passé-Smith – GIS Committee
Passé-Smith – Search Committee
Pearson – Search Committee
Pearson – Director, Minton Center
Pearson – Director, Graduate Studies
Reynolds – Curriculum Committee
Reynolds – Search Committee
Reynolds – Coordinator, Internship Program
Yoder – Curriculum Committee
Yoder – Search Committee

College

Allender – Asian Studies Committee
Allender – Curriculum Committee
Allender – Research Committee
Allender – Director, ENVR Planning and Administration track
Green – Southern and Arkansas Studies Committee
Passé-Smith – Director, Social Science Lab
Pearson – Grants Committee
Reynolds – Promotion/Tenure Committee
Reynolds – SEED Committee
Yoder – Research Committee, chair

University

Allender – Adjustments and Credentials Committee
Allender – Director, New Faculty Orientation
Allender – Plagiarism Committee
Allender – IEP Tuition and Scholarship Committee
Allender – Representative, Udall Scholarship Committee
Green – Undergraduate Council
Green – Search Committee, Director of AOEP
Green – Search Committee, Director of Sponsored Programs
Passé-Smith – IT Assessment Committee
Pearson – Faculty Salary Review Committee
Reynolds – Advisor, Environmental Alliance
Yoder – University Research Council

Community

Allender – Member, City of Conway Tree Commission
Allender – Local coordinator, State Geographic Bee
Allender – Co-coordinator, Arkansas Geographic Alliance
Green – Coordinator, Arkansas Geographic Alliance
Pearson – Arkansas Rush soccer coach
Pearson – Breakfast with Santa, Circle of Friends
Pearson – Congressional Affairs Liaison, ArksanasView
Reynolds – Member, Arkansas Earthquake Advisory Council
Reynolds – Member, Arkansas Pre-Disaster Mitigation Planning Committee
Reynolds – Category Judge, Arkansas High School State Science Fair
Yoder – Chair, Southwest Division of the Association of American Geographers
Yoder – Co-editor, *Journal of Social and Ecological Boundaries*

Statistics

Number of new programs: 0
Number of new courses approved: 4
Number of books published: 0
Number of books forthcoming: 0
Number of journal articles and book chapters forthcoming or published: 2
Number of other items published: 0
Number of international conferences where research was presented: 1
Number of national conferences where research was presented: 2
Number of regional conferences where research was presented: 2
Number of external grants funded: 2
Number of internal grants funded: 2
Number of faculty in Technology Associates: 4
Number of faculty teaching in the Residential College Program: 1
Number of faculty teaching in University College: 0
Number of courses taught in the Honors College: 0
Number of College of Liberal Arts committees faculty served on: 7
Number of UCA committees faculty served on: 12
Number of community organizations faculty participated in: 10
Number of professional organizations faculty involved with: 2
Number of student organizations and activities faculty participated in: 2

Geography Internship Report, 2008

Fourteen students participated in the Geography Internship Program during the Spring Semester 2008, Summer Sessions 1 & 2 2008, and Fall Semester 2008. Ten students enrolled in Geog 3399 and 4 students enrolled in Geog 3699. The participating agencies included Arkansas Highway and Transportation Department - Mapping and Environmental Divisions, Arkansas Natural Resources Commission, Arkansas Call One, The Nature Conservancy of Arkansas, Conway City Planning, Alaska Conservation Foundation, Pulaski County Public Works, and U. S. Army Corps of Engineers.

The list of participating agencies expanded with the addition of Arkansas Call One and Dogwood Alliance. Arkansas Call one is a state-wide call before you dig center that coordinates any type of excavation and Dogwood Alliance is a southern environmental activist organization located in Asheville, NC. The Dogwood Alliance position was identified and obtained through student initiative, as students are encouraged to locate internships on their own, especially those providing out-of-state travel opportunities and field data gathering experiences during the summer.

Skill requirements for the numerous positions ranged from mapping, GIS, and GPS to environmental education and research. Participating agencies continue to be impressed with the performance, knowledge, and abilities of the interns, as indicated by the

supervisor evaluations and the opportunity for some interns to work beyond their scheduled intern period as part-time employees. Interns also continue to obtain full-time skill related positions at both participating and non-participating public and private agencies.

Narrative Summary of Assessment

Objectives Assessed

The department conducts assessments each year: 1) an assessment of the General Education Elective, Principles of Geography; 2) an assessment of the General Education Elective, Geography of World Regions; and 3) a graduating geography major assessment.

The assessments conducted in 2008 were of the Principles of Geography sections, the sections of Geography of World Regions, and the graduating seniors.

How Were They Assessed?

Each year during the fall semester, a survey instrument is given to students enrolled in Principles of Geography and Geography of World Regions courses. That survey assesses students' knowledge of three objectives in the Behavioral and Social Science category, five objectives in the Information and Computer Literacy Skills category, and six objectives in the Attitudes/Values category. The results are tabulated to determine if assessed objectives are being met. The Geography Major Assessment is given to each graduating senior during the last week of the semester.

What Was Learned?

Regarding the Principles of Geography assessment, we learned that of the fifteen objectives assessed, all fifteen were successfully achieved. The percent who responded Strongly Agree and Agree (70% required) is noted below for each question.

After this course, I am better able to:

84% use a variety of concepts, principles, models, laws, and theories used to explain human behavior.

81% understand how the study of human behavior is founded on empirical/scientific observation.

94% recognize the effect of the environment on individual behavior, or recognize the effect of social institutions and processes on human interaction.

93% locate information from a variety of resources.

84% utilize technology to create written and graphic documents, and to retrieve and communicate information effectively and efficiently.

86% critically evaluate information and its sources.

91% incorporate information gained outside of textbooks into my knowledge base.

81% utilize technology skills to more effectively write, conduct research, and produce graphic representations.

84% understand ethical, legal, and social issues surrounding the use of information sources.

94% perceive and understand ongoing world events.

95% perceive and understand other peoples and cultures.

96% perceive and understand the forces and processes of nature.

94% perceive ongoing physical and cultural processes at the local, national, and global scales.

97% perceive and understand environmental concerns and problems.

97% understand the relationships between humans and their natural environment.

Regarding the Geography of World Regions assessment, we learned that of the fifteen objectives assessed, all twelve were successfully achieved. The two lowest scores are in the technology section of the evaluation. These lower scores indicate that more attention needs to be given to the technological elements of the course's intent. The percent who responded Strongly Agree and Agree (70% required) is noted below for each question.

<u>After this course, I am better able to</u>:

82% use a variety of concepts, principles, models, laws, and theories used to explain human behavior.

71% understand how the study of human behavior is founded on empirical/scientific observation.

95% recognize the effect of the environment on individual behavior, or recognize the effect of social institutions and processes on human interaction.

82% locate information from a variety of resources.

41% utilize technology to create written and graphic documents, and to retrieve and communicate information effectively and efficiently.

64% critically evaluate information and its sources.

77% incorporate information gained outside of textbooks into my knowledge base.

45% utilize technology skills to more effectively write, conduct research, and produce graphic representations.

76% understand ethical, legal, and social issues surrounding the use of information sources.

100% perceive and understand ongoing world events.

100% perceive and understand other peoples and cultures.

95% perceive and understand the forces and processes of nature.

100% perceive ongoing physical and cultural processes at the local, national, and global scales.

100% perceive and understand environmental concerns and problems.

95% understand the relationships between humans and their natural environment.

Graduating Geography Majors' Assessment

The Graduating Geography Major Assessment Exam was administered to four students scheduled for graduation during the previous year. The purpose of the exam is to assess the skills and acquired knowledge of graduating geography majors. This exit exam measures the simple cognitive processes of recall and knowledge as well as the higher level skills of comprehension, application, analysis, synthesis, and evaluation. The results of the Assessment Exam as it relates to the four departmental Intended Outcomes/Objectives are discussed below.

Intended Outcomes/Objectives 1:

Students completing the baccalaureate degree in geography will have competence in the understanding of geographic concepts, organization of physical and cultural attributes of place, increased environmental understanding of interconnections in a dynamic global environment, and will have demonstrated the ability to use various maps, geographic representations, and other geographic tools in data acquisition, analysis, and presentation.

Assessment Procedures and Criteria:

Ninety percent or greater of graduating geography majors will pass the Exit Assessment Exam on geography competence.

Results:

Of the four graduating majors completing the Graduating Geography Major Assessment Exit Exam, 3 students(75%) passed with a score of 60% or greater, the highest score 97 and the lowest 52.

Conclusions:

Ninety percent or greater of graduating geography majors did not pass the Exit Assessment Exam, although the number of graduating geography majors taking the exam was very small.

Intended Outcomes/Objectives 2**:**

Students completing the baccalaureate degree in Geography will express satisfaction with the program curriculum and general instruction in the discipline.

Assessment Procedures and Criteria A: (Item 26 on Exit Assessment Exam)

Ninety percent or greater of graduating geography majors will state they agree with the statement in the Exit Assessment Exam “I believe the geography program curriculum prepared me to understand the spatial relationships that exist between the physical and human environments of the world.”

Results:

All (100%) students agreed with the statement.

Conclusions:

Apparently, graduating geography majors feel that they are prepared to understand the geographical relationships of the physical and human environments.

Assessment Procedures and Criteria B: (Item 27 on Exit Assessment Exam)

Ninety percent of greater of the graduating geography majors will state they agree with the statement in the Exit Assessment Exam "I believe the geography program curriculum prepared me for geography-related employment."

Results:

All (100%) graduating geography majors agreed with the statement.

Conclusions:

It appears as though the geography program is effective in preparing students for careers in geography-related fields.

Intended Outcomes/Objectives 3.

Students seeking employment upon completing the baccalaureate degree in geography will be well prepared for the evolving employment market and will be able to find employment related to their acquired skills and abilities, or be able to quickly acquire the particular skills required for that employment.

Assessment Procedures and Criteria.

No formal assessment survey has been conducted since the Alumni Survey of 2000; however, the Geography Department maintains some contact with graduates informally and through the annual departmental newsletter. This informal contact provides valuable information on where our graduates are employed. The criteria states that 50% or greater of those seeking employment will find employment in geography related areas.

Results/Conclusions:

It should be noted that a vast majority of the Geography graduates are finding employment in geography-related areas in both the public and private sectors. The demand for majors and graduates skilled in GIS and related technology continues to be high, driven primarily by the demand for GIS specialists. Examples of agencies/companies where numerous UCA geography majors and graduates are employed include Arkansas Highway and Transportation Department(AHTD), Arkansas

Geographic Information Office, Pulaski County, Pulaski Area GIS, North Little Rock Community Planning, Conway City Planning, Southwestern Energy, and MetroPlan, to name a few in the central Arkansas area. The Geography Internship Program continues to be highly successful in placing students in geography-related positions prior to graduation to enhance skills development and marketability. This program also strengthens employment connections upon graduation, as numerous interns have been employed in full-time positions at the agencies participating in the internship program, especially at agencies such as AHTD.

From both formal and informal discussions with employers participating in the Internship Program and employers of graduates of the Geography Program, the following conclusions have been derived:

-UCA geography graduates are highly competitive for geography-related positions in the workplace.

-UCA geography graduates possess the skills and training necessary to secure geography-related career positions.

-UCA geography graduates are generally in demand, particularly in technologically related areas of the discipline.

Intended Outcomes/Objective 4.

Students desiring to continue their education beyond the baccalaureate level and meeting the admission criteria of graduate institutions and programs will be adequately prepared to perform effectively and successfully in these advance degree programs.

Assessment Procedures and Criteria:

Ninety percent or greater of the geography graduates desiring graduate-level study in geography or a geography-related discipline and meeting the admission criteria will be admitted into these programs. This information is obtained from the Exit Exam Assessment Item 28 and follow-up surveys.

Results:

One graduating geography major, at this time, has applied for advanced study into a graduate program, and has been accepted with a teaching assistantship. This student applied at 5 institutions and was accepted at all.

Conclusions:

Based on evidence primarily from previous years, the Geography Program graduates are usually admitted to the graduate programs of their choice, and are academically equipped with a fundamentally sound undergraduate experience that leads to successful advanced program completion.

Geography majors at UCA continue to be introduced to the program through the introductory courses, particularly Principles of Geography. Majors also discover geography through the Environmental Science major. Based on the student responses on the Exit Exam, general strengths of the program are the quality and diversity of the courses offered. Weaknesses identified included the need for more faculty members in upper division technical courses and a dedicated GIS computer lab that would allow students more time to work with the software. One student suggested providing greater emphasis on geographic theory and spatial statistics.

IV. Status of Current Goals

Category I: Maintain and Enhance Undergraduate/Graduate Curricula

1. Examine the possibility of adding additional regional courses.
   Not Completed

2. Begin to advertise the Master of GIS Degree.
   Not Completed

Category II: Increase the Number of Majors

1. Devote time in appropriate classes to career options in geography.
   Completed

2. Expose students in appropriate courses to geospatial technology by assigning GIS modules as homework.
   Completed

3. Host GIS Day in Technology Plaza.
   Not completed.

Category III: Increase Research/Publication Productivity of Geography Faculty

1. Encourage faculty members to have an established research and writing agenda.
   Completed, but on-going

2. Carefully review annual professional growth plans.
   Completed

3. Require interim reports to monitor and track professional growth activities.
Not Completed

4. Review Performance Summaries to track professional growth activities.
Completed

Category IV: EDGE (EDucating for Global Engagement

1. Proactively promote the increase in student interns
Completed

2. Be actively involved in Academic Service Learning
Completed (Four faculty member included ASL activities in their courses)

3. Proactively promote International Program participation
Completed

4. Nominate students to the Undergraduate Scholars Program
Completed

V. Goals for 2009

Goal 1: Maintain and Enhance Undergraduate/Graduate Curricula

Goal 2: Increase the Number of Majors

Goal 3: Increase Research/Publication Productivity of Geography Faculty

Goal 4: EDGE

1. Increase the number of student interns

2. Incorporate Academic Service Learning into courses

3. Promote student International Program participation

4. Nominate students to the Undergraduate Scholars Program

VI. Long-Range Goals

Curriculum

- Examine the possibility of creating a Master of Geography degree
- Add an additional tenure-track line
- Add additional regional courses

Research/Scholarship

- Geography faculty members submit manuscripts for publication at least once every two years

Service

- Increase the number of geography majors to 70

Technology

- Add a Sympodium to Irby 307

VII. Trends – Challenges/Opportunities

We have had a sound geography program for many years. When students leave our program, they leave very well prepared to enter the workforce or continue their education at the graduate level. Students in our program receive excellent instruction in our topical, regional, technical, and methods courses.

That does not mean, however, that there are not areas within the program where improvements can and need to be made. The four most important are: 1) the number of geography majors continues to be rather low, 2) professional growth levels remain rather low, 3) with the growing trend in the demand for graduate-level GIS grows, we may need to include additional faculty members in our online programs, 4) as the trend for the demand for greater environmental understanding grows, we may need to add more courses in that area with the appropriate number of tenure-track lines, and 5) we might consider developing a Center for Rural Studies and becoming the premier institution examining related issues.

First, we must do more to attract additional geography majors. That will be accomplished when we more proactively promote geography as an excellent career choice and become more visible on campus.

Second, it is important that all geography faculty members become more actively engaged in professional growth, particularly in research and publication. We have made small steps of improvement, but more needs to be demonstrated in 2009.

Third, Dr. Pearson's workload related to graduate student advising and online course instruction needs to be balanced with some students being advised by Dr. Conyers and with her playing a larger role in online course instruction. This may necessitate the rearrangement of existing curriculum and adding an additional tenure-track line.

Fourth, growing environmental awareness and associated issues must be dealt with by examining curricular offerings and adding at least one more tenure-track line. We also need to look carefully at the pros and cons of a possible joint appointment with the Department of Biology.

Fifth, there appears to be a lack of focus among the institutions of higher learning in the rural areas of Arkansas. With some curricular realignment, perhaps new courses, and perhaps a focused tenure-track line, we could play an important role in rural development in Arkansas.