Department of Geography
Annual Report–2007

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
3. Propose a new sophomore-level course titled Research Methods in Geography

Projected Completion Date:

1. Fall 2008 – 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. $5,200 for adjunct professors 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 2008
2. Spring 2008

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 2009

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
Three courses approved for electronic delivery: Geography 1300, Geography 1305, Geography 2375
Two course titles changed: Geography of Russia to Geography of Europe and Russia; Geography of the Pacific Asia to Geography of China and East Asia
Major core courses reduced in number to allow more upper division electives
Minor core courses reduced in number to allow more upper division electives
New course approved: Geography of South Asia

Curriculum-based Workshops Attended
Allender – East/West Center workshop, India: Branson, MO
Allender – East/West Center workshop, Teaching Japan: UCA
Allender – AP Human Geography workshop, NCGE, Oklahoma City, OK
Kalra – ESRI workshop on Spatial Analysis, Santa Barbara, CA
Kalra – Wiley Geo-tools workshop
Kalra – ERDAS Imagine, Atlanta, GA
Passé-Smith – 3 ESRI workshops at ESRI User Conference, San Diego, CA

Professional Development

Conferences Attended

Allender – Southwest Association of American Geographers, Bryan, TX
Allender – National Council for Geographic Education, Oklahoma City, OK
Allender – National Geographic Alliance Network Meeting, Washington, DC
Butt – Southwest Association of American Geographers, Bryan, TX
Green – Arkansas Curriculum Conference, Little Rock, AR
Green – Religion and Reaction, Fort Smith, AR
Green – National Geographic Alliance Network Meeting, Washington, DC
Kalra – ESRI Education Conference, San Diego, CA
Kalra – Association of American Geographers, San Francisco, CA
Passé-Smith – ESRI Education Conference, San Diego, CA
Pearson – Applied Geography Conference, Indianapolis, IN
Pearson – AmericaView Annual Meeting, Fayetteville, AR
Reynolds – Southwest Association of American Geographers, Bryan, TX

Conference Presentations

Butt – "Unknown Title," SWAAG, Bryan, TX
Green – "Russian North: Taiga, Tundra, and Culture," Arkansas Curriculum Conference, Little Rock, AR

Kalra – "High Technology and Socio-Cultural Makeover of Bangaluru, India," AAG, San Francisco, CA
Passé-Smith – "Planning for Disaster by Pinpointing Populations Vulnerable to Hazards" ESRI International Users Conference, San Diego, CA
Pearson – "Deconstructing the Railway Mail Service Learning Maps of Frank H. Galbraith," Applied Geography Conference, Indianapolis, IN
Reynolds – "The Brownwood Subdivision: A Preview of the Consequences of and Adjustments to Global Warming in a Gulf Coastal Environment," SAAG, Bryan, TX

Publications

Kalra – "Language Dissemination in India: 1971 – 1991." In B. Thakur, et al. (eds) City, Society, and Planning, Delhi: 447 – 477.
Passé-Smith – "Planning for Disaster by Pinpointing Populations Vulnerable to Hazards," online and CD-ROM Proceedings (http://gis.esri.com/library/userconf/proc07/papers/papers/pap_1194.pdf
Pearson – Review of Literature, Mapping, and the Politics of Space in Early Modern Britain. By Andrew Gordon and Bernhard Klein, eds. Cartographic Perspectives 56 (Winter): 56 – 57.

Grants Funded

Allender – contributed to grants funded by Dr. Hui Wu and Dr. Brooks Pearson
Green – "Culture, Taiga, and Tundra: A Seminar on the Russian North." Fulbright-Hays Group Projects Abroad Program - $62,000

Service

Department

Allender – advise Environmental Science P and A track students; chair, curriculum committee; member, search committee; member, tenure and promotion committee
Butt – member, curriculum committee; member, search committee; chair, tenure and promotion committee
Green – department chair
Kalra – member, graduate committee; member, search committee
Passé-Smith – member, GIS committee; member, search committee
Pearson – Minton Center Director, Graduate Studies Director
Reynolds – member, curriculum committee; chair, search committee; coordinator, internship program

College

Allender – member, Asian Studies committee; member, college curriculum committee; member, college research committee; director, environmental science P and A track
Kalra – member, Asian Studies Curriculum and Assessment
Passé-Smith – director, social science lab
Pearson – member, grants committee
Reynolds – member, promotion and tenure committee; member SEED committee; advisor, environmental alliance

University

Allender – director, new faculty orientation; member, plagiarism committee; representative, Udall scholarship applications; member, IEP tuition and scholarship committee; advisor, Gamma Theta Upsilon; Fast Mover; IDC brown bag presentation
Green – member, undergraduate council; member, Academic Outreach dean search committee; created 6 maps for Factbook, Fall 2006; created 6 maps for Factbook, Fall 2007
Kalra – external reviewer for Sam Houston State University; member at large, regional development specialty group
Pearson – member, EAST committee; member, faculty salary review committee

Community

Allender – board member, City of Conway Tree Commission; co-coordinator, Arkansas Geographic Alliance
Green – coordinator, Arkansas Geographic Alliance; head judge, Arkansas Geographic Bee; directed four-week seminar in Russia to Moscow, Petrozavodsk, Murmansk, and St. Petersburg
Passé-Smith – mapping project for Rachel Kluender, Arkansas Economic Development Commission
Pearson – congressional affairs liaison, ArknasasView; nominated, Who's Who in America
Reynolds – member, local emergency planning committee; member, Arkansas Earthquake Advisory Council; member, Arkansas Pre-Disaster Mitigation Planning Committee; category judge, Arkansas High School State Science Far

Statistics

Number of new programs: 1 (MGIS)
Number of new courses approved: 3
Number of books published: 0

Number of books forthcoming: 1
Number of journal articles and book chapters forthcoming or published: 2
Number of other items published: 1
Number of international conferences where research was presented: 0
Number of national conferences where research was presented: 5
Number of regional conferences where research was presented: 2
Number of external grants funded: 1
Number of internal grants funded: 0
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: 5
Number of UCA committees faculty served on: 6
Number of community organizations faculty participated in: 8
Number of professional organizations faculty involved with: 3
Number of student organizations and activities faculty participated in: 2

Geography Internship Report, 2007

Thirteen students participated in the Geography Internship Program during the Spring Semester-2007, Summer Sessions 1 & 2 - 2007, and Fall Semester - 2007. The participating agencies included Arkansas Highway and Transportation Department; Arkansas Geographic Information Office; Conway, AR City Planning Dept.; FTN Associates; The Nature Conservancy of Arkansas (TNC); U. S. Army Corps of Engineers (USACE); Carr Creek Lake, Sassafras, KY; Alaskan Conservation Foundation (ACF), Fairbanks, AK; and McHenry County Conservation District (MCCD), Woodstock, IL.

The list of participating agencies continues to expand with the addition of TNC, UCACE, ACF, and MCCD. All of these positions were 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. This was the theme of the annual Fall Geography Internship Forum in which the students in the self-obtained positions shared their search and internship experiences.

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.

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 2007 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 are noted below for each question.

After this course, I am better able to:

80% use a variety of concepts, principles, models, laws, and theories used to explain human behavior.

82% understand how the study of human behavior is founded on empirical/scientific observation.

81% recognize the effect of the environment on individual behavior, or recognize the effect of social institutions and processes on human interaction.

85% 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.

84% critically evaluate information and its sources.

87% incorporate information gained outside of textbooks into my knowledge base.

83% utilize technology skills to more effectively write, conduct research, and produce graphic representations.

81% understand ethical, legal, and social issues surrounding the use of information sources.

88% perceive and understand ongoing world events.

89% perceive and understand other peoples and cultures.

86% perceive and understand the forces and processes of nature.

85% perceive ongoing physical and cultural processes at the local, national, and global scales.

86% perceive and understand environmental concerns and problems.

82% 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 fifteen were successfully achieved. The percent who responded Strongly Agree and Agree are noted below for each question.

After this course, I am better able to:

92% use a variety of concepts, principles, models, laws, and theories used to explain human behavior.

87% understand how the study of human behavior is founded on empirical/scientific observation.

87% 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.

91% utilize technology to create written and graphic documents, and to retrieve and communicate information effectively and efficiently.

94% critically evaluate information and its sources.

92% incorporate information gained outside of textbooks into my knowledge base.

87% utilize technology skills to more effectively write, conduct research, and produce graphic representations.

89% understand ethical, legal, and social issues surrounding the use of information sources.

99% perceive and understand ongoing world events.

99% perceive and understand other peoples and cultures.

97% perceive and understand the forces and processes of nature.

90% perceive ongoing physical and cultural processes at the local, national, and global scales.

97% perceive and understand environmental concerns and problems.

93% understand the relationships between humans and their natural environment.

Graduating Geography Majors' Assessment

The Graduating Geography Major Assessment Exam was administered to six 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 six graduating majors completing the Graduating Geography Major Assessment Exit Exam, all students(100%) passed with a score of 60% or greater, the highest score 98 and the lowest 72.

Conclusions:

Although the number of graduating geography majors taking the exam was somewhat small, it appears as though the graduating geography majors have achieved the necessary geographical competence.

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%) of the 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%) of the 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.

<u>Intended Outcomes/Objective 4.</u>

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 research assistantship.

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. 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 greater structure in upper division technical courses (e.g. GIA and remote sensing) and a dedicated GIS computer lab that would allow students more time to work with the software. One student suggested offering a lower division technical writing course as preparation for Research Seminar.

IV. Status of Current Goals

Category: Maintain and Enhance Undergraduate/Graduate Curricula

1. Examine the possibility of adding additional regional courses.
   Completed

2. Begin to advertise the Master of GIS Degree.
   Completed

Category: 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: 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.
   Completed

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

Increase Departmental Visibility on Campus

1. Provide GIS workshops.
   Not Completed

2. Commemorate GIS Day.
   No Completed

3. Participate in Majors Fairs, Career Fairs, and Bear Facts Days.
   Completed

Improve Community Outreach

1. Provide GIS Workshops to community officials.
   Not completed

2. Train community officials in GIS technology.
   Not Completed

3. Hold GIS Seminars for community officials.
   Not Completed

V. Goals for 2008

Curriculum

- Proposed two new regional courses: Africa and the Middle East, U.S. and Canada
- Request a new tenure-track line
- Implement 3 online courses: Geography 1300, 1305, 2375

Scholarship

- Submit 3 items for publication
- Present 6 papers at geography conferences
- Submit 2 grant proposals

VI. Long-Range Goals

Curriculum

§ Examine the possibility of creating a Master of Geography degree
§ Add additional electives in the MGIS Degree program

Research/Scholarship

§ Geography faculty members submit manuscripts for publication once every two years

Service

§ Increase the number of geography majors to 70
§ Initiate the Abney-Bradley Scholarship

Technology

§ Purchase GPS receivers
§ Replace existing plotter in 213
§ Add computer and sympodium to Irby 307

VII. Trends – Challenges/Opportunities

We have had a sound geography program for many years. That trend continues. 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 two most important are:

First, the number of geography majors continues to be rather low. That needs to change. Second, professional growth levels remain rather low. That also needs to change.

The challenge, therefore, is two-fold. First, we must do more to attract additional geography majors. That will be accomplished when we: 1) more proactively promote geography as an excellent career choice, and 2) 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 significant steps to improve these areas, but little improvement was demonstrated in 2007. With more effort, increased activity will be seen in 2008.