# Department of Geography Annual Report – 2004

# I. Statement of Mission and Purposes

The Department of Geography seeks to deliver the best undergraduate 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. Accomplishments

# Curriculum

The Department was involved in a variety of curricular activities during the year. Several of the more important ones are noted below.

§ Two new GIS courses were approved. (Geog. 3309, GIS in Practice: Environmental Applications and Geog. 3307, GIS in Practice: Business and Social Science Applications).

- § GIS presentations were given to students in Management Information Systems
- § One faculty member completed ESRI online GIS courses.

## **Professional Development**

Several activities occurred during the year, which demonstrate that geography faculty members are involved in professional development. A selection of some of the more important activities is noted below.

- § One paper was presented at the ESRI International Users Conference.
- § Two papers were presented at the Arkansas Geographical Society meeting.
- § Three papers were presented at the Southwest Division of the Association of American Geographers meeting.
- § One grant proposal was funded (Fulbright-Hays Group Projects Abroad \$64,000).
- § Two additional grant proposals were submitted (International Research and Exchanges Board and Fulbright-Hays Group Projects Abroad).
- § One article was published in *ArcNews*.
- § One article was accepted for publication by *Transactions in GIS*.
- § One paper was published on ESRI's Website.
- § One review was published in the *Professional Geographer*.
- § One faculty member was an Editorial Reader for McGraw Hill Publishing Company.
- § One faculty member was a manuscript editor for *Society and Natural Resources*.
- § One faculty member attended the ESRI International Users Conference.
- § Three faculty members attended the Arkansas Geographical Society meeting.
- § Three faculty members attended the Southwest Division of the Association of American Geographers conference.

§ Three members attended the Arkansas GIS Users conference.

## Service

The faculty members of the department are involved in a variety of campus and community service activities. Representative of that activity are the items noted below.

- § One faculty member served as Chair of the City Planning Commission.
- § One faculty member served as a Co-Coordinator of the Arkansas Geographic Alliance.
- § One faculty member advised the Environmental Alliance.
- § One faculty member was the Project Director for the Trans-Siberian Seminar which traveled from Moscow to Vladivostok, Russia.
- § One faculty member conducted four workshops at Educational Coops.
- § One faculty member is the Director of the Environmental Science: Planning and Administration track.
- § All faculty members served on a variety of committees: Tenure, Promotion, Curriculum, Search, Mid-tenure Review, SEED, and GIS.
- § One faculty member is the Coordinator of the Latin American Studies Minor
- § One faculty member is the Director of New Faculty Orientation.
- § Two faculty members completed mapping projects for other colleges.
- § Two faculty members gave GIS presentations to the Business College.
- § One faculty member is the Director of the Department Internship Program.
- § One faculty member is the advisor to the Environmental Alliance.
- § One faculty member serves on the Local Emergency Planning, Arkansas Earthquake Advisory, and the Arkansas Disaster Mitigation Planning Committees.
- § One faculty member judged the State High School Science Fair.

- § One faculty member served as an officer in the Arkansas Chapter of the American Meteorological Society.
- § One faculty member served as the Secretary/Treasurer of the Arkansas Geographical Society.
- § One faculty member served as Head Judge at the State Geographic Bee.

## **Internship Report**

Twelve students participated in the Geography Internship Program during the Spring '04, Summer '04, and Fall '04. The agencies at which these students applied their skills and gained on-the-job experience included the following:

Arkansas Highway and Transportation Dept. (AHTD) - 5 interns Conway City Planning - 1 intern Conway Police Dept. - 1 intern Metroplan - 1 intern Urban Planning Associates - 1 intern Arkansas Game and Fish Commission - 1 intern Stanford, CA Linear Accelerator Center - 1 intern University of North Carolina, Dept. of Geography - 1 intern

The AHTD continues to serve as the predominant source of internship positions for our geography majors, providing experience in the Mapping Section and the Environmental Section. Three of the more unique positions included the positions with the Environmental Protection Dept. at Stanford U., the biogeography research assistant at the University of North Carolina, and a GIS based, crime analysis position with Conway Police Department. The participating agencies continue to be very impressed with the performance, knowledge, and abilities of the interns, as evidenced by AHTD hiring one intern into a temporary, full-time position, and another into a temporary, part-time position.

#### **Narrative Summary of Assessment**

#### **Objectives Assessed**

We conduct two assessments each year: 1) an assessment of our General Education Elective, Principles of Geography, and 2) an assessment of the level of knowledge attained by our graduating senior geography majors. The objectives assessed in the Principles of Geography assessment can be viewed on the attached outcomes of the assessment. The goal of the senior geography major assessment is to determine if our graduating majors have attained a certain level of geographic knowledge, and their feelings toward the program and its benefits to them. The results of that assessment are also attached.

#### How Were They Assessed?

Each year during the fall semester a survey instrument is given to students enrolled in Principles of Geography 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. This was an improvement over last year. Our focus is on improving technological skills of students, and it was in that area where the two objectives were not met last year, were met this year. We learned that paying more attention to those two objectives increased the percentage of students who marked that they Strongly Agreed or Agreed that they had learned something in those two categories.

Regarding the Graduating Major assessment, we learned that the vast majority of our graduating students continue to maintain that they have been well taught and have strong, positive feelings about the program.

#### Actions to be Taken

Regarding the Principles of Geography assessment, the initial action was to ensure that each member of the department knew that we had succeeded in all categories this year. As we prepare for the next academic year, we will continue to do what we have been doing so that success will continue in the future.

Regarding the Graduating Major assessment, each faculty member will be made aware of the results of the assessment. We will identify areas where improvements can be made and discuss a strategy that can be implemented to ensure that our goals are met.

# III. Status of Current Goals

## Curriculum

§ Complete the undergraduate certificate program

It was discovered that the State had not authorized certificate programs at the undergraduate level so this goal was dropped. § Post the entire certificate program on-line

This goal was more challenging that anticipated. By the end of the year, this goal had not been completed. As of today's date, only one course has been placed online.

§ Write and submit a "World Regional" general education course

That goal has not yet been completed. Submission in early 2005 is anticipated.

§ Write regional courses for Africa/Middle East, Asia and Europe/Russia

The course, Geography of Russia was submitted in early 2005. The other courses have yet to be written.

§ Incorporate GIS modules into appropriate courses

GIS modules were successfully incorporated into most Principles of Geography courses, but little headway was made in upper division courses.

§ Utilize Irby 307's "smart" facilities

Faculty members have enjoyed the use of 307's "smart" facilities. This goal was successfully met.

§ Plan a GIS Day in November

We had a very successful GIS Day in November. For the first time, the Jumbo Screen was utilized by a department on campus!

## **Research/Scholarship**

§ Submit 4 manuscripts for publication

This goal was successfully met.

§ Submit 4 grant proposals

This goal was successfully met.

#### Service

§ Increase the number of geography majors to 45

Our current count is 41. We believe, however, that a few other majors exist whom have not officially declare geography as their major. This goal was essentially met.

§ Train 5 additional UCA faculty in the use of GIS

No additional UCA faculty members received GIS training.

§ Provide GIS training for officials in Mayflower, Wooster, Lonoke, and Holland, Arkansas

This goal was successfully met as Dr. Thiam trained persons from these cities during the summer and fall.

## Technology

§ Obtain 2 new GPS receivers and associated software

This goal was not met.

§ Obtain a new color printer

This goal was met.

§ Pursue the Fall 2003 GIS Initiative

We continue to pursue the 2003 GIS Initiative.

# IV. Goals for 2005

#### Curriculum

- Add an additional General Education course
- Infuse geographic information system (GIS) technology more fully into upper division courses
- Hire a new GIS faculty member.
- Place all courses in the Graduate GIS Certificate Program on-line

## Scholarship

- Complete 3 book chapters
- Submit 4 manuscripts for publication
- Present 4 papers at geography conferences
- Submit 4 grant proposals

# V. Long-Range Goals

## Curriculum

- § Create a GIS course with applications designed for the College of Health and Applied Sciences
- § Add three regional courses Africa/Middle East, Asia, Europe
- § Integrate technology more completely into course instruction
- § Make Irby 311 a "smart" classroom
- § Add 1 additional faculty member
- § Plan an annual Geography Day each spring semester patterned after the National History Day
- § Geography faculty members continue to become more proficient in GIS

# **Research/Scholarship**

- § Geography faculty members submit manuscripts for publication once every two years
- § Complete existing projects (book, funded research, etc.)

## Service

- § Increase the number of geography majors to 70
- § Train additional UCA faculty in the use of GIS
- § Provide GIS training for community officials
- § Generate GIS-contract work for local communities

# **Technology and Other**

- § Upgrade computers in Social Science Lab
- § Upgrade printers in Social Science Lab
- § Develop a GIS Center
- § Secure annual funding for the ESRI license
- § Remodel Irby 302 to become 2 faculty offices and a GIS Center

# VI. Trends – Challenges/Opportunities

We have had a sound geography program for many years. That trend continues. When students leave our program, assuming effort on their part, 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, and technical 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:

First, the number of geography majors continues to be too low. That needs to change. Second, the geography faculty members have generally been stagnant in their professional growth. Improvement is being made in this area. The year 2005 will witness a significant change in this area. Third, we must continue to integrate GIS exercises into our upper division courses. Some progress is being made, but more is needed. Fourth, the geography faculty members need to continue to increase their own GIS skill level. Again, some improvement has been made, but more is needed.

The challenge, therefore, is four-fold. First, we must do more to attract additional geography majors. That will be accomplished when we: 1) improve the quality of instruction in Geography 1305, Principles of Geography, 2) be more proactive in recruiting students from Environment and Spatial Technology (EAST) programs, and 3) when we bring high school students to campus to participate in an annual Geography Day.

Second, the geography faculty must become more engaged in professional growth, particularly in research and publication. We have made two small, but significant, steps to improve these areas. First, each faculty member is now required to submit a manuscript for publication once every two years. Second, an April and September report is now required to monitor annual professional growth progress and to hold faculty members more accountable for their annual plans for professional growth. These two reports will help keep professional growth plans toward the forefront of faculty activities and force faculty members to report progress toward achieving their goals. We now have a much better opportunity, with a geographer as chair, to meet these and other challenges. Our location in the center of Arkansas and the fact that we are the only single-entity Department of Geography in Arkansas, places us in an advantageous position to become much better than we are.

Third, we need to be more aggressive in incorporating GIS exercises into courses other than the freshmen-level courses. Many of the upper division courses "beg" for the inclusion of some GIS. Our challenge is to be more proactive in this activity.

Fourth, our collective GIS skills need to continue to improve. We should not let former training slip into the background. As we complete existing selftraining modules, and prepare exercises for our upper division courses, our GIS skills will be enhanced and our overall expertise will improve.