



# Where in the World are Furman Students?



A project by: Tracy O'Brien Furman University, Greenville, SC

## Introduction:

Each year, hundreds of students from Furman University in Greenville, South Carolina venture into the world to participate in one of the university's 16 study abroad programs (Source: [www.engagefurman.com/academics/studyabroad](http://www.engagefurman.com/academics/studyabroad)). As a prospective student, one may wonder where and how long these students journey. As a study abroad student, one may desire an interactive spatial representation of their country of choice in preparation for his or her trip. As a faculty member, one may debate over the importance of Winter Term to Furman's study abroad programs. At present, however, Furman does not possess visual representations of these topics. This project is developed out of these needs and aims to aid any Furman community member that possesses a vested interest in the university's international affairs.

## Abstract:

Project **Where in the World are Furman Students?** was completed in two simultaneous sections. The first, "Destination: World," compiled study abroad statistics from Fall 2002-Spring 2005 and compared them by number and term to survey results about student study abroad preferences. Over the past three years, 41.84% of study abroad students traveled during the Winter Term. Survey results indicate that an even larger percentage of students, 50.18%, would prefer to study abroad in the Winter. The survey results also demonstrate a demand for an Australian program during the Winter Term as 30 of the 140 Winter Term respondents (21.43%) desired travel to Australia. Using Geographic Information Systems (GIS), "Destination: World" also created a convenient visual representation of Furman's wide-spread study abroad programs by term of travel. The second section, "Focus on China," aimed to create a comprehensive resource on China that would be useful for students preparing to study abroad in China, along with on campus courses about China and various outreach programs. Through the implementation of GIS, the Asian Studies Department now has access to an interactive and personalized map of China, which includes cities, roads, hydrology, railroads, and street maps, that can be used for a wide range of applications. The enthusiasm engendered by the product of this section demonstrates the utility and necessity of such a resource for other study abroad destinations.

## Methods:

The methods undertaken during the course of this project are summarized in the chart below:



For "Destination: World," two simultaneous yet parallel processes took place. To assess the past three years of study abroad students, I first obtained the rosters for each of the programs from the Financial Services Office. I then entered the information into a simple Microsoft Excel spreadsheet containing information on each country and the number of students that traveled each term (Fall, Winter, Spring), and the FIPS country code for each destination. This standardized country code allowed me to join my tabular data with that of a world map layer upon importing my table into ArcMap. I then used the Thematic Classification feature of ArcMap to characterize each country by the number of students that have traveled there in the past three years. I followed a similar process to assess Furman students' study abroad preferences. Instead of obtaining rosters, however, I implemented the following survey using the online survey service, [www.opinionpower.com](http://www.opinionpower.com), and received 279 responses:



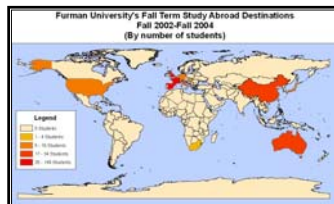
For "Focus on China," I first collaborated with the Asian Studies department to determine the necessary information that the map should include to make it most useful to their department. After determining these needs, I utilized online GIS databases to locate the necessary layers to import into ArcMap.

## Methods Continued:

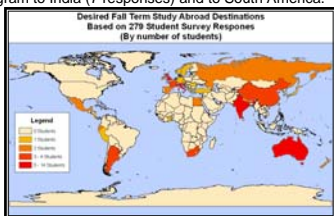
After deciding on the proper projection for each layer, I queried and sorted each layer's information in order to decrease the clutter and increase the readability of the map. I then began the process of attaching hyperlinks to each of the cities visited by study abroad students. These hyperlinks contain city street maps, pictures, and other pertinent information; four of the cities currently contain their respective street maps.

## Results "Destination: World":

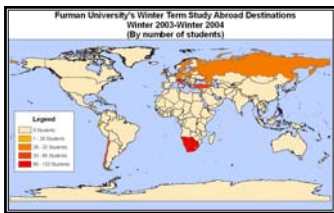
### Fall Term-



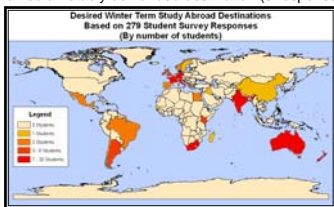
By comparing the past trips (above) to the survey preferences (below), the most notable results were interest in a Fall program to India (7 responses) and to South America.



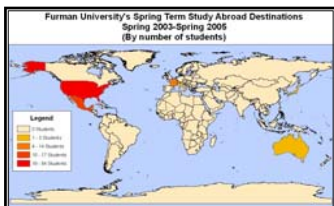
### Winter Term-



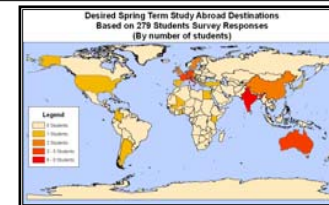
An interesting trend surfaced in contrasting past trips (above) with preferences (below). Many of the most requested destinations for the Winter Term were places to which Furman has programs, either in the Fall or Spring. Australia (30 responses) and Italy (18 responses) are the best examples. Like the Fall results, India remained a notably demanded destination (9 responses).



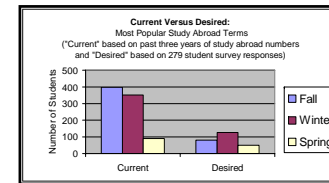
### Spring Term-



Again, Italy (8) and India (6) gained the most support for Spring destinations (continued on top right).



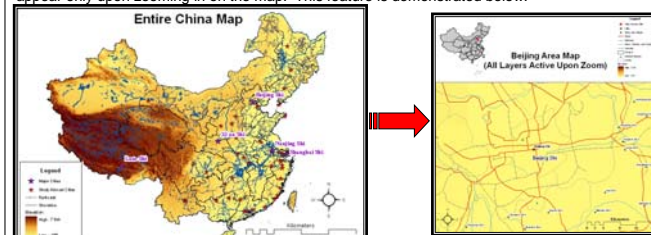
Finally, I was especially interested in which term students most preferred studying abroad. The numerical results of the survey are graphed below in comparison with the current numbers:



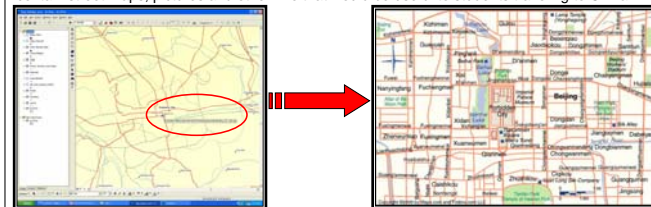
Over half of the responses indicated that Winter Term is the most preferred term in which to study abroad. These numbers are especially essential in assessing the importance and functions of Winter Term.

## Results "Focus on China":

Rather than numerical or comparative, the results for this section of **Where in the World are Furman Students?** are more abstract. As pictured below, I have created a visual database of China including Buddhist Temples, Cities, Towns, Rivers, Roads, Railroads, Counties, Provinces and Elevation. To avoid clutter, I have set specific parameters so that some layers, such as Towns, appear only upon zooming in on the map. This feature is demonstrated below:



I also created a layer entitled "Study Abroad Cities" in which I identified each of the places visited by Furman study abroad programs to China. Each of these destinations contain hyperlinks that will contain street maps, pictures and other info that would be useful to students traveling to China.



## A Continued Effort...

Over the summer, I plan on expanding and perfecting the two "databases" that I have created. For "Destination: World," one of the goals expressed by the International Studies Office was to include student opinions on each of the programs. I have collected these "student blurbs" and plan on attaching them as hyperlinks to the maps of Furman's programs. This feature will be especially helpful for prospective and current students in deciding whether a program would be an appropriate fit for them.

For "Focus on China," I plan on completing the hyperlinks for each of the Study Abroad Cities to include pictures, maps, and other information from the Asian Studies Department. I also look to add historical layers, such as dynastical boundaries and the Silk Road route. These layers would be advantageous for professors to incorporate into their lectures on China.

I also hope that my project will set a precedent at Furman University to utilize GIS for evaluative and instructional purposes. A resource like "Focus on China" would be beneficial to any study abroad program or department at Furman.

## Acknowledgements:

**Where in the World are Furman Students?** was made possible through collaboration with: Furman's International Studies Office (Dr. Bill Lavery), Furman's Financial Services Office (Janie Burton and Dr. Willard Pate), Furman's Asian Studies Department (Dr. Jan Kiely and Yancey Greene), University of Michigan's China Data Center, and Harvard's China Historical GIS Center.