

Division of Academic Affairs
Technology Fee – Project Proposal
2014

Proposal Deadline: Tuesday, January 21, 2014

Project Proposal Type

Instructional Technology Enhancement Project (ITEP)

Focused projects proposed by an individual or small team with the intention of exploring new applications of instructional technology. ITEPs will typically be led by a faculty “principal investigator.” ITEPs are time-limited projects (up to two years in length) and allocations of Technology Fee funds to these projects are non-recurring.

Project Title

GPS enabled photography for GIS

Total Amount of Funding Requested

\$1,350

Primary Project Coordinator

Nathan McKinney, GeoData Center Coordinator

Division of Academic Affairs
Instructional Technology Enhancement Project (ITEP) Proposals Template
2014

ITEP proposals must provide the following information:

1. Project description.

This proposal would fund the purchase of a quality still photography camera with an integrated Global Positioning System (GPS) for student use through the GeoData Center. This equipment would allow students to create high quality photographs that are readily integrated into Geographic Information Systems (GIS) and web mapping technologies.

2. Description of project alignment with UWF Strategic Plan.

Funding of this project would enhance student education opportunities by providing an introduction to Geographic Information Sciences through a simple, enjoyable and highly visible activity. G.I. Science is a highly in-demand STEM discipline that is used extensively in a very wide range of fields. Familiarity with this technology would be beneficial to the educational and professional success of the majority of UWF students.

3. Description of benefits provided:

Combining the purchased camera equipment with our existing GIS architecture will enhance the experience of both GIS students and those with no prior GIS training. The intended system would serve the dual purpose of introducing more students to Geo-Spatial technologies through capturing and displaying photographs spatially and provide students taking GIS courses with the ability to create higher quality and more attractive GIS projects and maps.

Students with no previous GIS experience will be able to use GeoData Center facilities to create visually appealing interactive web maps (such as <http://www.audubon.org/plover>) for courses or independent projects. It will also make submitting content to the Campus Web-GIS map [uwf.edu/gis/map] much simpler for individual students, organizations or courses.

The GPS camera system would be useful to a number of courses. Several courses in the Environmental Studies program would be enhanced by allowing students to quickly and accurately document a field study site or to make GIS projects more visually interesting to prospective students through incorporation of high quality photographs. Courses that could immediately take advantage of this equipment include GIS4071: Methods and Techniques, GIS 4930: GIS Special Topics, GEO4221: Coastal Morphology and GIS4035: Photo Interpretation and Remote Sensing.

While some of this functionality exists in current equipment and students' personal smartphones, the proposed equipment would provide a number of advantages. While

commonly used smartphones are capable to capturing geo-tagged images, they provide neither quality imagery nor accurate location information. Current GPS units for student use held by the GeoData Center have a camera with extremely poor quality and resolution and would be to use without training. Most importantly, the center would be able to create standard and easily followed documentation to walk a user through each step of the process.

The camera equipment will be available for student use through the GeoData Center. Though this unit is housed within the Environmental Studies department, its mission is to provide GeoSpatial support to the whole campus community. This equipment would be available to all UWF students and would be useful in building interest in more advanced GIS technologies.

4. How will success be measured? Provide metrics.

Project success can be measured by the number of students and courses using the equipment.

5. Description of resources for the project and projected ongoing resource needs (total cost of ownership for the life of the project) including:

Nikon D-5300 with Lens: \$1,200
Protective case and storage media: \$100
Extra Battery: \$50

6. Provide the proposed timeline for the project with major milestones and project end dates.

Project approval
+ 1 month – Equipment is purchased.
Project approval
+ 2 months – Equipment is setup and tested by GeoData Center staff and Environmental Studies students.
Summer semester 2014 – Documentation is created for use of equipment and how geotagged photos can be integrated with GIS software. A system for equipment checkout is devised.
Fall semester 2014 – Information is posted to GeoData Center website and equipment is available for use by all students, faculty and staff.

7. Include a plan for sustainability of the project beyond the initial project period if applicable.

No funds should be necessary to sustain the project beyond initial purchase of equipment. If unexpected hardware or software becomes necessary to operate the project as described then it will be funded through the GeoData Center budget.

- 8. Provide any resource matching which might be provided by organizations with appropriate commitment authority documentation.**

- 9. Indicate which individual or group will implement the project (to help determine any additional costs and resource restraints).**

Project will be implemented through the GeoData Center.

- 10. Indicate a lead person (“Principal Investigator”) for the project for all communications and overall responsibility for reporting and fund utilization.**

Nathan McKinney, GeoData Center Coordinator

- 11. Project proposals should be succinct and submitted to the Technology Fee Committee by the deadline with a notice of submission to the chair and the dean or appropriately designated leadership in the unit (Center Director, etc.).**