



SUMMER 2011 SHORT COURSE SCHEDULE

SIPI will be offering several short courses between May and July, 2011.

All classes are free and open to tribal members or tribal employees, or those whom a tribe requests to be trained.

Attendees are responsible for their own transportation, housing and meals. There is no charge for the class unless you are taking the class for credit. Credit seeking students see note below.

May 11-13	Mobile Computing for Reclamation <i>Bob Welsh & Marcelo Calle, Trimble/TerraSync</i>	OSM 101
May 16-20	Introduction to GIS/GPS Technology <i>Margaret Porter, SIPI</i>	GIT 111
May 23-27	Advanced GIS/GPS with Applications <i>Margaret Porter, SIPI & RGIS Consortium</i>	GIT 121
June 6-10	Principles and Theory of GIS and GPS Applied <i>M. Porter & D. Rodriguez-Bejarano, SIPI</i>	GIT 201
June 13-17	Photogrammetry and Mapping <i>Clyde Hubbard, SIPI</i>	GIT 202
June 20-24	Remote Sensing <i>Dario Rodriguez-Bejarano, SIPI</i>	GIT 203
June 27-July 1	Special Topics: Field GPS for GIS <i>Garret Couch, Wind Environmental Services</i>	GIT 290

Attached are the registration form and descriptions for each course. If you choose to take one of the courses for college credit, or to complete the GIT certificate at SIPI, you must enroll through normal SIPI student enrollment. For details please visit the SIPI website, www.sipi.edu. **New and readmit student application deadline is April 15, 2011.** Student registration for classes is **May 12-16, 2011.**

Please share this information with your co-workers and anyone else who might benefit. Attached is the registration form. Please submit a registration form **for each course.**

Class size is limited, so register early!





SUMMER 2011 SHORT COURSE SCHEDULE

Students are encouraged to bring a project/problem and corresponding data to work with.

GPS for Mining Reclamation - OMS 101 - May 11-13

Mobile Computing for Reclamation

In this 2½-day class, participants will become proficient using the Trimble GeoXT with TerraSync software through reclamation-related classroom and field exercises. Mobile computing with the Trimble GeoXT and TerraSync combines a very capable GPS engine with powerful navigation and data collection software. Real-time corrections from the integrated WAAS/ EGNOS receiver typically are of sub-meter accuracy. Participants will process their field data using Pathfinder Office software. The use of background images in map display, including satellite imagery, aerial photos, and images is an important feature of the class. SIPI enrollment for this class is limited to five, so register early to get in.

Introduction to GIS/GPS Technology – GIT 111 – May 16-20

Pre-requisite: Basic computer knowledge

This course is designed to introduce students to the fundamental concepts and applications of Geographic Information Systems (GIS). It covers the structure and function of GIS, cartography, and supporting disciplines such as Global Positioning System (GPS). The basic GIS concepts such as map characteristics and projections, spatial data models, relational databases, and spatial analysis with emphasis on the nature and source of geographic data and the issues of data input, data quality and metadata will be covered.

Advanced GIS/GPS with Applications – GIT 121 – May 23-27

Pre-requisite: Introduction to GIS/GPS Technology (this may be waved for non-credit seeking students)

The first three days of the course will include a Certified ESRI short-course and the remaining class will cover more advanced GIS topics that are of interest to new users of ArcGIS software. The course instructor will be prepared to customize the second half of this course to meet the needs and interest of the students.

Principles and Theory of GIS and GPS Applied – GIT 201 – June 6-10

Pre-requisite: Advanced GIS/GPS with Applications

Applied GIS is a course that is designed to introduce the student to hands-on application of GIS principles. The class is designed to enhance GIS skills learned in the previous Introduction and Advanced GIS/GPS classes. Students are encouraged to bring data and GIS/GPS problems from work settings for solving in class. This is a hands on project oriented course. Projects can be provided, if none are available to the student.

Photogrammetry and Mapping – GIT 202 – June 13-17

Pre-requisite: Introduction to Digital Cartography

This course is an introduction to the fundamental principles of photogrammetry, with specialized applications in new technologies, and Geographic Information Systems (GIS).

Remote Sensing – GIT 203 – June 20-24

Pre-requisite: Introduction to GIS/GPS Technology

This course will provide students with the understanding of every day observation via human senses and their use when dealing with machine/instrument sensors. Emphasis will be placed on digital imagery interpretation, with an initial detour to analog (aerial photography) imagery interpretation. These elements will be exemplified with both aerial photographs and digital images, how they are acquired, analyzed and eventually converted into management elements (reports, tables, maps, images.)

Special Topics: Field GPS for GIS – GIT 290 – June 27-July 1

This class is an intensive study of GPS for GIS work using Trimble units, TerraSync software and ArcPad, and ArcMap software. Students will collect actual field data around the campus utilizing data dictionary, post-processing and importing all data to an ESRI geodatabase.



