



Southwestern Indian Polytechnic Institute
Geospatial Information Technology Program
9169 Coors Blvd. NW, Albuquerque, NM 87120
(505) 346-7714

SUMMER 2010 SHORT COURSE SCHEDULE

SIPI will be offering several short courses between May and August.

All classes are 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 18-20	GPS for Mining Reclamation <i>Bob Welsh, DOI Office of Surface Mining</i>	OSM 101
May 24-28	Digital Cartography <i>Kurt Menke, Bird's Eye View GIS</i>	GIT 101
June 7-11	Introduction to GIS & GPS <i>Margaret Porter, SIPI</i>	GIT 111
June 14-18	Advanced GIS/GPS <i>John Wilson, RGIS Consortium</i>	GIT 121
June 21-25	Applied GIS/GPS Project <i>Margaret Porter & Dario Rodriguez-Bejarano, SIPI</i>	GIT 201
June 28-July 2	Photogrammetry & Mapping <i>Clyde Hubbard, SIPI</i>	GIT 202
July 12-16	Introduction to Remote Sensing <i>Dario Rodriguez-Bejarano, SIPI</i>	GIT 203
July 19-23	Special Topics: Field GPS for GIS <i>Wetherbee Dorshow, Earth Analytics Inc</i>	GIT 290

Attached are the registration form and descriptions for each course. If you choose to take this course 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 at :www.sipi.edu.

New and readmit student application deadline is **April 16, 2010**. Student registration for classes is **May 11-15, 2010**. Please share this information with your co-workers and anyone else who might benefit

Attached is the registration form, please submit a form for each course.

Class size is limited, so register early!





Southwestern Indian Polytechnic Institute
Geospatial Information Technology Program
9169 Coors Blvd. NW, Albuquerque, NM 87120
(505) 346-7714

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

GPS for Mining Reclamation - OMS 101 - May 18-20

Mobile Computing for Reclamation

In this three 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 Digital Cartography - GIT 101 - May 24-28

Pre-requisites: MATH 120, COSC 107

The course provides the students with a vocabulary and comprehensive understanding of basic and fundamental mapping principles: design, projections, scales, thematic compilation, composition, symbolization and computer production.

Introduction to GIS/GPS Technology – GIT 111 – June 7-11

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 – June 14-18

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.

Applied GIS/GPS Project – GIT 201 – June 21-25

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.

Introduction to Photogrammetry and Mapping – GIT 202 – June 28 - July 2

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).

Introduction to Remote Sensing – GIT 203 – July 12-16

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 – July 19-23

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



Southwestern Indian Polytechnic Institute
Geospatial Information Technology Program
9169 Coors Blvd. NW, Albuquerque, NM 87120
(505) 346-7714

2010 GIT Short Course Registration Form

c/o Margaret Porter
PO Box 10146
Albuquerque, NM 87184
505.346.7714 voice
505.346.7733 fax

Name: _____
First Last

Tribe: _____

Agency: _____

Address: _____

_____ City State Zip

Contact Number(s): (____) _____ - _____

(____) _____ - _____

Work, office, or cell (circle one)

Fax Number: (____) _____ - _____

E-mail Address: _____

Course Selection: _____

(Each course requires its own form and registration fee)

