

# NWFP University of Engineering & Technology Peshawar

## CE-317 GIS/RS Application to Civil Engineering

Spring 2011

Lecturer: Engr. Faisal ur Rehman

[faisal@nwfpuet.edu.pk](mailto:faisal@nwfpuet.edu.pk) [fslurrehman@hotmail.com](mailto:fslurrehman@hotmail.com)

Office: # CE-B106 Tel Off : 9216796 (3079) , 0314-5193495

### 1. Objective

The purpose of this course is to learn the basic concept and introduction to Geographic Information System and Remote Sensing (GIS/RS). Also student can apply it to Civil Engineering.

### 2. Books

#### Text:

*GIS Basics by Shahab Fazal*

#### Reference:

*GIS for Dummies by Michael N. DeMers*

*Understanding GPS Principles and Applications, Second Edition by Elliott D.*

*Remote Sensing and GIS Integration Theories, Methods, and Applications by*

### 3. Hourly Schedule of Lectures

Week	Topics	Contact Hours
1	Introduction to GIS	2
2	Data Models	2
3	Advance Data Models	2
4	Coordinate Systems	2
5	Source of Geographic Data	2
6	Geographic Query and Analysis	2
7	Geo-computation	2
8	Geo-referencing and Geo-coding	2
	<b>Mid Term Exam</b>	
9	GPS	2
10	GPS Types and Error	2
11	RS	2
12	Photogrammetry Survey	2
13	Image Processing Techniques	2
14	Case Studies	2
15	Mini Project Submission and Final Term Prep.	2
16	<b>Mini Project</b>	2
	<b>Total Contact Hours</b>	<b>32</b>

**Assignment Schedule:**

Assignment # 1	Week 1
Assignment # 2	Week 3
Assignment # 3	Week 5
Assignment # 4	Week 9
Assignment # 5	Week 11
Assignment # 6	Week 13

**Quiz Schedule:**

Quiz # 1	Week 2
Quiz # 2	Week 4
Quiz # 3	Week 6
Quiz # 4	Week 10
Quiz # 5	Week 12
Quiz # 6	Week 14
+ 3 Surprise Quiz	

**Mini Project: \***

Project Completion:	Week 15
Project Presentation:	Week 16

**Marks**

	<b>%age</b>
Assignment	5
Quiz	7
Mini Project	8
Class Participation / Attendance	5
Mid Term Quiz	25
Final Term Viva-Voce	50

**Total = 100**

---