UTD	**Course**	Essentials of Field Geologic Methods -GEOS 2306.001
	Professor	Dr. Prabin Shilpakar
	Term	Fall 2016
	Meetings	Fri 9:00 am to 11:45 am , CB3 1.314

Professor's Contact Information

Office Phone	972-883-2408
Other Phone	
Office Location	ROC 2.301L
Email Address	shilpakar@utdallas.edu
Office Hours	Tuesday 9:00 to 11:00, or by appointment
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Office Location	
Office Hours (TA)	TBA

General Course Information

Pre-requisites, Co-requisites	GEOS 1103 and GEOS 1303
Other Restrictions	
Course Description	Introduction to fundamental methods of field geologic investigations, including topographic, air photo, and geologic map interpretation and preparation and use of common field geologic tools (Brunton compass, hand-held GPS, and a field notebook). Applications of field methods in the Earth Sciences will be presented.
Learning Outcomes	Students will learn to read and construct geologic maps, correlate geologic data and present their findings in a professional manner.
Required Texts & Materials	Drafting supplies
Suggested Texts, Readings & Materials	Coe, A. L. (Ed.). (2010). *Geological field techniques*. John Wiley & Sons.

Assignments & Academic Calendar

Month	Date(s)	Topic, Assignment, Due Date(s), Exam Date(s)
August	26	General Information/ Topographic Maps
September	2	Lab 1: Topographic Maps
	9	Geological Structures
	16	Lab 2: Geological Structures
	23	Brunton Compass and Stereographic projection
	30	Lab 3: Brunton Compass/ Stereographic Projection
October	7	Geological Maps, Cross section and map interpretation
	14	Mid-Term Exam
	21	Lab 4: Geological Maps, Cross Section and map interpretation
	28	Rock Description /Geologic Field Notes and Photography
November	4	Field Trip
	11	Fundamentals of GNSS and Coordinate system/ Field trip report due
	18	Lab 5: Navigation using GNSS and Error Calculation
	25	Fall Break
December	2	Aerial Photo, Digital Elevation Model, Google Earth / Lab 6: Google mapping
	9	Final Exam (5:00 pm – 7:45 pm) Location CB3 1.314
Nov 4 – Nov 6 Mandatory Field Trip (Weekend)		

Course & University Policies	
Grading (credit) Criteria	Lab Work: 6 @ 5%=30%
	Midterm Examination: 25%
	Final Examination: 25%
	Field trip report: 20%
Make-up Exams	Will arrange if given prior notice
Late Work	Late work will not be accepted.
Score and Grade	Excellent (A): comprehensive understanding of concepts and factual information; able to integrate concepts/facts and rationally expand knowledge base in new conceptualizations; demonstrated ability to apply concepts to problems not explicitly addressed in class. Very Good (B): comprehensive understanding of concepts and factual information; general integration of concepts/facts. Good (C): general understanding of fundamental concepts and factual information; limited integration of concepts/facts. Fair (D): limited understanding of basic concepts and facts. Poor (F): poor grasp of fundamental concepts and substantial uncertainty in factual information.
Class Attendance	Strongly encouraged
Comet Creed	*This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:* *"As a Comet, I pledge honesty, integrity, and service in all that I do."*
UT Dallas Syllabus Policies and Procedures	*The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.* *Please go to http://go.utdallas.edu/syllabus-policies for these policies.*

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.