Summer 2007

The University of Texas at Arlington

College of Engineering

Department of Civil and Environmental Engineering

CE 5300 – Pipeline Design and Construction

Meeting Dates: 5/29/2007 – 6/28/2007
Monday through Thursday, 3:30-5:30 PM – Room 111 Nedderman Hall
(3 Credit Hours)

TENTATIVE COURSE OUTLINE

Week	Day	Date	Topic	Instructor
One	Tuesday	May 29	Course Introduction & Principles of Asset Management and Pipeline Design and Construction	
	Wednesday	May 30	Comparison of Trenchless and Open-Cut Methods	
	Thursday	May 31	Fluid Principles	Dr. Max Spindler
Two	Monday	June 4	Pipe Soil Interactions for Open-Cut Construction	Mr. Shah Rahman
	Tuesday	June 5	Different Pipe Materials for Trenchless Technology	Mr. Ralph Carpenter
	Wednesday	June 6	Steel Pipe Design	Mr. Mike Sechelski
	Thursday	June 7	Concrete Pressure Pipe Principles	Mr. Sam Arnaout
Three	Monday	June 11	Pipe Mechanics 1. Ring analysis 2. Longitudinal analysis	Dr. Reynold Watkins
	Tuesday	June 12	Soil Mechanics 3. Pertinent soil properties 4. Soil pressures	Dr. Reynold Watkins
	Wednesday	June 13	Pipe-soil interaction 5. Failure conditions of the ring: ring collapse, ring compression, ring deflection 6. Longitudinal failure conditions and thrust restraints: stresses and resistance in pipe and joints.	Dr. Reynold Watkins
	Thursday	June 14	7. Minimum soil cover for: flotation, surface live loads, soil settlement, etc. 8. Parallel pipes and trenches.	Dr. Reynold Watkins
Four	Monday	June 18	Horizontal Directional Drilling	
	Tuesday	June 19	Auger Boring	Mr. Leo Barbera
	Wednesday	June 20	Pipe Bursting and Pipe Ramming	Mr. Collins Orton
	Thursday	June 21	Large Diameter Pipe Renewal	Dr. Tom Iseley
Five	Monday	June 25	Locating and Tracking Principles	Mr. Siggi Finnsson
	Tuesday	June 26	Manhole Renewal Methods	Mr. Bill Shook
	Wednesday	June 27	Principles of Drilling Fluids	Mr. Frank Canon
	Thursday	June 28	Final Exam	