

SYLLABUS CE 593P GEOSYNTHETICS

Spring Semester 2018

Department of Civil & Environmental Engineering, West Virginia University

Faculty: Dr. John Quaranta, Ph.D., P.E., Assistant Professor
ESB 349, Phone: (304) 293-9942

Office Hours: T/TH 2-4:00 pm; also by appointment

Text Book

Recommended: Koerner, Designing with Geosynthetics, Fifth Edition, Pearson 2005 (or later)

Schedule: T/TH 5:00 – 6:15 pm, ESB Room 501

Table 1: Course Schedule

Week #	Topic / Chapter(s)
1 T/TH	Ch 2 Designing w/ Geotextiles
2 T/TH	Ch 2 Designing w/ Geotextiles
3 T/TH	Ch 2 Designing w/ Geotextiles
4 T/TH	Ch 2 Designing w/ Geotextiles
5 T/TH	Ch 2 Designing w/ Geotextiles
6 T/TH	[Float] (Exam #1)
7 T/TH	Ch 3 Designing w/Geogrids
8 T/TH	Ch 3 Designing w/Geogrids
9 T/TH	Ch 3 Designing w/Geogrids,
10 T/TH	Spring Break
11 T/TH	Ch 4 Designing w/ Geonets
12 T/TH	Ch 4 Designing w/ Geonets; Exam #2
13 T/TH	Ch 5 Designing w/ Geomembranes
14 T/TH	Ch 5 Designing w/ Geomembranes
15 T/TH	Ch 6 Geosynthetic Clay Liners
16 T/TH	Ch 6 Geosynthetic Clay Liners & Exam #3

Special Class Dates:

Grading: Final grades will be based on 90%, 80%, 70%... corresponding to A, B, C,. The instructor reserves the right to curve up.

Table 2: Grade Percentage

Exam #1	30 %
Exam #2	30 %
Exam #3	30%
Design Project(s)	10 %
TOTAL	100%

Examinations: There will be four examinations approximately paced as indicated in Table 1, Course schedule.

Attendance: Your attendance at all classes is strongly encouraged.

Homework: The content of this course is to expose the student to design and analysis of geosynthetic materials used in geotechnical and geoenvironmental engineering applications. Geosynthetics is a changing field with new products and applications introduced continuously. Not all text information is able to be covered due to time; however the student is encouraged to read each chapter to gain depth and detail for completing homework assignments and exams.

DESIGN PROJECT(S)

These assignments will be graded individually and will be based on field type assessments of new designs or evaluations of existing sites for repairs. Grading will be based on an analytical and practical solution. Projects may include review of technical journal articles that will require the students to review and comment on technical literature dealing with topics of class study.

Late Material: Late material will lose 50% of the value of the assignment per workday late.

General Comment on Work Submission:

Students are expected to submit calculations / graphs / sketches which are reasonably neat, complete yet concise; orderly and well organized in format. Sketches should be used to illustrate and summarize the design. Calculations and sketches should be presented in pencil on either engineering quadrille paper or plain white paper measuring: 8-1/2" x 11". Multiple pages must be stapled. The assignment or answer cover sheet must be included with your name and date submitted.

As a general guideline of the quality of the work ask yourself the following questions:

First: does this work, upon initial inspection and review appear to be that of a professional or that of a disorganized high school student?

Second: upon more detailed inspection, could another engineer follow / review/ verify your work or do you feel confident that you could interpret this work if you looked at it in six weeks or six years?

Grading: For work submitted that does not meet the guidelines noted above, point deductions will be applied, or the assignment will be returned without a grade.

Food: is disruptive please don't bring to class.

Social justice statement:

West Virginia University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Disability Services (293-6700).