

COURSE OUTLINE

TTE 5837 PAVEMENT MANAGEMENT SYSTEMS

Fall 2019

INSTRUCTOR: Mang Tia, 245M Weil Hall, 392-9537 X1463, e-mail: tia@ce.ufl.edu

OFFICE HOURS: M, W & F 10:45 A.M. - Noon

WEB PAGE: through E-Learning at <https://lss.at.ufl.edu/> use CANVAS

OBJECTIVE: To provide the students with an in-depth understanding of the principles and practices of evaluation, analysis, design, performance prediction, planning and maintenance of highway pavements.

PREREQUISITE: TTE 5835 Pavement Design or equivalent, or by permission of the instructor.

CLASS SCHEDULE: T 9:35 – 11:30 AM MAEB 234
Th 9:35 – 10:25 AM MAEB 234

<u>Date</u>	<u>Topic (Lecture Notes #)</u>	<u>Reference</u>
Aug 20	Introduction to Pavement Management (1a & 1b)	Readings #1 & #2
22	Pavement Serviceability (2)	Reading #3
Aug 27	Pavement Performance (2)	Reading #4
29	Pavement Distresses (3a)	Readings #5 & #6
Sep 3	Condition Survey (3b) (4)	Reading #7
5	Skid Resistance and Pavement Safety (5)	Reading #8
Sep 10	AASHO Road Test (6)	Reading #9
12	AASHTO Design for Flexible Pavements (8)	Reading #10
	Topic for Presentation Due	
Sep 17	TEST NO. 1	
19	AASHTO Design for Rigid Pavements (7)	Reading #10
Sep 24	AASHTO Design for Rigid Pavements (9)	Reading #10
26	PCA Design for Concrete Pavements (10)	Reading #11
Oct 1	Performance of Concrete Pavements (11)	Reading #12
3	A Rational Design for Concrete Pavements (12)	Reading #13
Oct 8	Asphalt Institute's Design for Asphalt Pav'ts (13)	Reading #14
10	Structural Evaluation of Rigid Pavements (14)	Reading #15
Oct 15	Structural Evaluation of Rigid Pavements (16)	Reading #15
17	Structural Evaluation of Flexible Pavements (15)	Reading #16

<u>Date</u>	<u>Topic</u>	<u>Reference</u>
Oct 22	TEST NO. 2	
Oct 24	Types of Overlay (18)	Reading #17
Oct 29	Full Depth Repair of Concrete Slab (19)	Reading #18
31	Partial Depth Repair of Concrete Slab (20 & 21)	Reading #19
Nov 5	Crack Sealing (22)	Reading #20
7	Undersealing (23)	Reading #21
Nov 12	Diamond Grinding (24)	Reading #22
Nov 14	Rigid Pavement Recycling (25)	Reading #23
	Outline for Presentation Due	
Nov 19	Subdrainage (26)	Reading #25
21	Asphalt Pavement Recycling (27)	
Nov 26	TEST NO. 3	
Nov 28	Thanksgiving – No Class	
Dec 3	Student Presentations	
Dec 5	Student Presentations	

Additional requirements:

- (1) Each student is to write a term paper (10 to 20 pages) long on a topic that is related to pavement management or pavement engineering.
- (2) Each student is to make a 15 minute presentation of the term paper to the class.

BASIS FOR GRADES:

Three tests	60%
Term paper	20%
Presentation	10%
Class attendance & participation	10%

Grading Scale:

<u>Grade</u>	<u>% Scale</u>
A	90.0 - 100
A-	87.0 – 89.9
B+	84.0 – 86.9
B	80.0 – 83.9
B-	77.0 – 79.9
C+	74.0 – 76.9
C	70.0 – 73.9
C-	67.0 – 69.9
D+	64.0 – 66.9
D	60.0 – 63.9
D-	57.0 – 59.9
E	<57.0

For more information on grades and grading policies, please visit:
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Presentations:

Each student will be required to write a 10 to 20 page term paper on a topic related to pavement management or pavement technology and to make a 20-minute presentation on the term paper.

Attendance

Class attendance is required. Students with a perfect attendance record will earn 10% points for attendance. A penalty point of 2% points will be assessed for each unexcused absence. For example, those with 1 unexcused absence will have 8% points for attendance, and those with 4 unexcused absences will have 2% points for attendance.

Make-up Exam Policy:

No make-up tests will be given except for medical reasons or unless arrangements have been made prior to tests.

Homework assignments are usually due one week following the lab or as specified by the instructor. A penalty of 10% per school day shall be assessed on materials turned in late.

Honesty Policy:

All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

Accommodation for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

UF Counseling Services:

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

* UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.

* Career Resource Center, Reitz Union, 392-1601, career and job search services.

Software Use:

All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Course Evaluation:

“Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.”