CE 370
Syllabus

Course Title :	Transportation Engineering Fundamentals
Class Hours:	Tu/Th: 10:40 – 11:55 PM
Classroom :	MEC 114
Instructor Information:	Mandar Khanal, Ph.D., P.E. MEC 403-F, Boise State University 1910 University Drive Boise, ID 83725 Phone: (208)426-1430, Fax: (208)426-4800 E-mail: mkhanal@boisestate.edu

Course Description:

Planning, design, and operations of multi-modal transportation systems.
PREREQ or COREQ: MATH 272 or MATH 275

Objectives/Goals:

1. To give an overview of the engineering of multi-modal transportation systems.
2. To introduce the fundamental concepts of transportation engineering through an in-depth study of road-based transportation systems.

Course Topics:

- Transportation Economics
- The Land-Use Transportation Relationship
- Vehicle and Human Characteristics
- Traffic Flow Theory
- Geometric Design of Roads
- Highway Capacity Analysis
- Intersection Traffic Control Analysis
- Intersection Capacity and Level-of-Service Analysis
- Public Transportation
- Local Area Traffic Management

Text:

Khisty, Jotin C. and B. Kent Lall, *Transportation Engineering An Introduction,* Second Edition, Prentice Hall, New York, 1998.

COURSE SCHEDULE

Month	Week	Dates	Topic	Chapter
January	1	15/17	Introduction/Transportation Economics	1/2
	2	22/24	Transportation Economics	2
	3	29/31	The Land-Use – Transportation System	3
February	4	5/7	Vehicle and Human Characteristics	4
	5	12/14	Traffic Flow Characteristics	5
	6	19/21	Traffic Flow Characteristics	5
	7	26/28	Geometric Design of Highways	6
March	8	5/7	Geometric Design of Highways	6
	9	12/14	Highway Capacity	7
	10	19/21	Test 1 (Chapters 1 – 6)/Highway Capacity	7
		25-29	SPRING BREAK	
April	11	2/4	Intersection Control and Design	8
	12	9/11	At-Grade Intersection Capacity and Level of Service	9
	13	16/18	At-Grade Intersection Capacity and Level of Service	9

Month	Week	Dates	Topic	Chapter
	14	23/25	Public Passenger Transportation	10
April/May	15	30/2	Review/Test 2 (Chapters 7 – 10)	7 – 10
	16	**7**/9	Local Area Traffic Management	**12**
	17	**14**	**FINAL EXAM (10:30 AM – 12:30 PM)**	**1 – 12**

Note:

- The course schedule is tentative. Revisions may be made during the semester

Grading Policy:

The following is the distribution of points for this course:

Final Exam:	20%
Test 1:	20%
Test 2:	20%
Homework:	20%
Quiz/Classwork:	20%

Letter grades :

Scores >= 90:	A
Scores >= 80 & < 90:	B
Scores >= 70 & < 80:	C
Scores >= 55 & < 70:	D
Scores < 55:	F

Office Hours:

- Tuesdays and Thursdays between 2:00 – 3:00 PM
- You are also welcome to stop by anytime you wish, with or without an appointment.
- You can also contact me by e-mail or telephone.