CE 497-002/CE 572
Syllabus

Course Title : Special Topics – Transportation Planning

Class Hours: Tu/Th: 5:40 – 6:55 PM

Classroom : ET 238

Instructor Information:

Mandar Khanal, Ph.D., P.E.
MEC 403-F, Boise State University
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Course Description:

The course will cover the theory and practice of transportation planning at the metropolitan as well as regional levels. The traditional four-step planning process as well as recent advances in the field will be covered. Use of a transportation planning software will be required. Students will be required to complete a project using data from the Boise metropolitan region.

Objectives/Goals:

1. To give an overview of the theory of transportation planning.
2. To provide a hands-on experience with the practice of transportation planning through the completion of a real-world project using the transportation planning software TP+/Viper.

Course Topics:

- Transportation Planning Definition
- Transportation Planning and Decision-Making
- A Systems Perspective of Urban Travel
- Data Management
- The Urban Transportation Modeling System
- Urban Activity Analysis
- Land-Use Models
- Network Models
- Impact Models
- Cost Models
- Project Evaluation
- Programming Process

- Financial Analysis and Funding Availability

Text:

Meyer, Michael D. and Eric J. Miller, *Urban Transportation Planning*, Second Edition, McGraw Hill, New York, 2001.

COURSE SCHEDULE

Month	Week	Dates	Topic	Chapter
January	1	15/17	Urban Transportation Planning: Definition and Context	1
	2	22/24	A Decision Oriented Transportation Planning Approach	2
	3	29/31	Transportation from a Systems Perspective / Transportation System Impacts	3
February	4	5/7	Characteristics of Urban Travel / The Transportation Planning Database	3/4
	5	12/14	Transportation System and User Data, Goals Set and Community Vision, and The Feedback Loop	4
	6	19/21	Introduction of Demand Analysis / Simplified Demand Estimation Techniques	5
	7	26/28	The Urban Transportation Systems Model	5
March	8	5/7	Discrete Choice Models, Activity-Based Models, and Non-Motorized And Goods Movement Demand	5
	9	12/14	Urban Activity Analysis	6
	10	19/21	Land-Use Models	6
		25-29	SPRING BREAK	
April	11	2/4	Performance Analysis Methods / Network Models	7
	12	9/11	Impact Models / Cost Models	7

Month	Week	Dates	Topic	Chapter
	13	16/18	Benefit-Cost Analysis / Comparative Assessment Methods	8
	14	23/25	Programming Process, Project Priorities, Financial Analysis, and Project Implementation	9
April/May	15	30/2	Project Discussions	
	16	**7**/9	Project Presentations	
	17	**14**	**FINAL EXAM (7:50 – 9:50 PM)**	**All**

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:	30%
Project:	30%
Homework:	20%
Quiz:	20%

Letter grades :

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

The course can also be taken under audit status, in which case the final grade awarded will be AUD (satisfactory audit) or UAU (unsatisfactory audit).

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.