Texas A&M University

Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of Landscape Architecture and Urban Planning

2. Course prefix, number and complete title: PLAN 676 Transportation Investment Decisions

3. Course description (not more than 50 words): The course provides the graduate-level student with an overview of the elements of transportation investment decisions including transportation supply, demand, finance, and economic impact.

4. Prerequisite(s): n/a

5. Is this a variable credit course? □ Yes ☐ No If yes, from ______ to _______.

6. Is this a repeatable course? □ Yes ☐ No If yes, this course may be taken _____ times. Will the course be repeated within the same semester/term? □ Yes ☐ No

7. Has this course been taught as a 489/689? □ Yes ☐ No If yes, how many times? 1 Indicate the number of students enrolled for each academic period it was taught. 7 spring 2008

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)
     PLAN | 676 | TRANSPORT INVESTMENT DEC

     Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code
     03 | 0 | 03 | 01 03 01 00 06 16 44 08-09 | 003632 | Level 6

Approval recommended by:

Head of Department Date

Chair, College Review Committee Date

Head of Department (if cross-listed course) Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date

Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
Department of Landscape Architecture and Urban Planning

Prerequisite: Graduate standing
Class Time: MW 10:35 – 11:50 a.m., Room: TBA
Office hours: MW 1:00 – 2:00 p.m. or by appt.
3 Credit Hours

Instructor: David Ellis, Ph.D.
E-mail: d-ellis@tamu.edu
Office: 404D CE/TTI Bldg.
Office Phone: 845-6165

PLAN 476600

TRANSPORTATION INVESTMENT DECISIONS

Course Description: The course provides the graduate-level student with an overview of the elements of transportation investment decisions including transportation supply, demand, finance, and economic impact. This is not a modeling course; rather it is designed to provide an overview of fundamental techniques that guide transportation infrastructure investment decisions. In addition, the historical context and current trends in transportation investment will be examined.

Required Texts: Giglio, Joseph. Driving Questions: Developing a National Transportation Vision.
Roth, Gabriel. Street Smart: Competition, Entrepreneurship and the Future of Roads.
A major daily newspaper each day

Required Readings: You will have other required readings throughout the course. They will be made available to you as handouts or electronically.

Lecture Schedule

NOTE: We will likely have several guest speakers during the semester. Consequently, the schedule outlined here may change slightly based on their availability. I will advise you well in advance of any changes.

Monday, January 14: Course Overview
Historical Context of Transportation Finance

Wednesday, January 16: Historical Context of Transportation Finance

Monday, January 21: Assessing/Forecasting Need (Transportation Supply vs. Demand): Roadway and Transit Supply
Wednesday, January 23: Assessing/Forecasting Need (Transportation Supply vs. Demand): Roadway and Transit Demand

Monday, January 28: Assessing/Forecasting Need (Transportation Supply vs. Demand): Mobility Goals and Targets


Problem Assignment #1 Distributed


Monday, February 11: Methods of Finance: General Taxes and Fees
Problem Assignment #1 Due
Problem Assignment #2 Distributed

Wednesday, February 13: Methods of Finance: Toll Finance

Monday, February 18: Methods of Finance: Debt, Special Funds and Other Methods

Wednesday, February 20: Estimating Revenue: Elements of Revenue Projection
Problem Assignment #2 Due


Wednesday, February 27: Estimating Revenue: Projection Techniques (continued)

Monday, March 3: Review.

Wednesday, March 5: Exam I

Monday, March 10: Spring Break

Wednesday, March 12: Spring Break

Monday, March 17: Estimating Economic Impact of Transportation Improvements

Wednesday, March 19: Estimating Economic Impact of Transportation Improvements (continued)
Monday, March 24: Estimating Economic Impact of Transportation Improvements (continued)

Wednesday, March 26: Estimating Economic Impact of Transportation Improvements (continued)

Monday, March 31: Understanding the Highway Economic Requirement System Model (HERS)

Wednesday, April 2: Understanding the Highway Economic Requirement System Model (HERS)

Monday, April 7: Applications of the Highway Economic Requirement System Model (HERS)

Wednesday, April 9: Trends in Transportation Investment Decisions: Public-Private Partnerships, Comprehensive Development Agreements

Monday, April 14: Trends in Transportation Investment Decisions: Public-Private Partnerships, Comprehensive Development Agreements (continued)

Wednesday, April 16: Issues Affecting Transportation Investment Decisions: Fuel Efficiency, Telecommuting, Housing Patterns, New Technologies, Congestion Pricing, and Others


Wednesday, April 23: Issues Affecting Transportation Investment Decisions: Fuel Efficiency, Telecommuting, Housing Patterns, New Technologies, Congestion Pricing, and Others (continued)

Monday, April 28: Review.

Wednesday, April 30: Reading Day. No Class.

Tuesday, May 6: Exam II.
Assignments and Grading

Grading Policy: Your final course grade will be determined by the points accumulated at the end of the semester according to the following schedule:

A = >90 percent  
B = 80 percent to 89 percent  
C = 70 percent to 79 percent  
D = 60 percent to 69 percent  
F = <60 percent

The relative weight accorded to each class activity will be distributed as follows:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Class attendance, participation and readings:</td>
<td>10%</td>
</tr>
<tr>
<td>Assigned Problems:</td>
<td>40%</td>
</tr>
<tr>
<td>Exam I:</td>
<td>25%</td>
</tr>
<tr>
<td>Exam II:</td>
<td>25%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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Miscellaneous Comments and Helpful Hints

- Attend class. Not only is class attendance and participation 10 percent of your grade, much of the information conveyed in this class will be through lecture only. It's important for you to be there. Finally, the classroom environment is greatly enhanced by a diverse set of experiences and opinions.

- Read a major daily newspaper each day. Mobility, transportation improvements, finance and the economic impact of improvements are major issues today. We’ll be discussing real life case studies as they develop. Stay current.

- The two exams will be a combination of short answer, short essay and calculations. Bring a calculator to the exams. (Don’t panic, you won’t need it for anything more than addition, subtraction, multiplication and division.)

- Each Problem Assignment will be the direct application of what we’ve talked about in class. There will be four of them during the semester as indicated on the Course Schedule above. The assignments will be due at the beginning of class on the day indicated. There is a one letter grade per day penalty for each day the assignment is late.

- My office hours, office phone number, e-mail address and office location are on the first page of this syllabus. If we need to talk because you’re having problems with the class, an assignment or whatever, get in touch with me. I’m easy to find and happy to visit with you. Also, I’m available at times during the week other than those listed on the first page. Just call ahead to make sure I’m there.
Academic Integrity

American with Disabilities Act (ADA) Policy
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.