## The University of Texas at El Paso Department of Civil Engineering

## **CE5362 Urban Transportation Planning (CRN 28491)**

## **Course Syllabus (Spring 2019)**

Date: January 7, 2019. This version supersedes all the earlier versions.

| Time 0                    | Class times. Tuesday. Thursday, 4:20 mm, to 5:50 mm. CCCD 1 0204  |
|---------------------------|---|
| Time & venue              | Class times: Tuesday, Thursday 4:30 p.m. to 5:50 p.m., CCSB 1.0204  |
| Instructor                | Dr. Ruey (Kelvin) Cheu  |
|                           | Office: Engineering Annex Room A208   |
|                           | Email: rlcheu@utep.edu  |
|                           | Phone: (915)747-5717  |
|                           | Office hours:   |
| Teaching assistant        | None  |
| Course website            | See Blackboard  |
| Course objective          | To introduce to the students the theory and practice of transportation planning. At the end of the course, students should know how to conduct the 4-step urban transportation planning system (UTPS) modeling process, and how it fits into the entire process mandated by Federal Laws. In addition, students should be aware of the shortcoming of the practicing models, and the latest development in transportation planning models. This course also covers the public participation process and stake holder's decision making process. |
| Prerequisite/Co-requisite | Graduate standing.  |
| Textbook                  | No required textbook. Class materials will be provided via Blackboard.  |
| Instructor's expectation  | Since you have registered for the course and paid the fee, I expect you to be serious about getting the most out of this course. I also expect you to be more mature and responsible (in class attendance, punctuality, homework, assignments, making consistent effort). Any special request will not likely be accommodated if you are not serious in your attitude.  |
| Grading                   | Contributions towards final mark (out of 100%) 15% Class attendance (includes field trips) 15% Exam 1 15% Exam 2 15% Exam 3   |
|                           | 20% Homework  |

|                   | 14% Lab assignments   |
|-------------------|---|
|                   | 6% Assignments for field trips  |
|                   | 070 Assignments for field trips   |
|                   | Letter grades will be assigned based on the final course mark:  |
|                   | A 90 and above  |
|                   | B 80 to 89.99   |
|                   | C 70 to 79.99   |
|                   | D 60 to 69.99   |
|                   | F below 60  |
| Exams             | Exams will be given during the class times. The date, format and topics to be tested will be announced in the class one week prior to the exam.   |
| Field trips       | Three field trips will be made.   |
|                   | The first one is to the monthly Transportation Policy Board (TPB) meetings at the El Paso MPO. The meeting will start at 9:00 a.m. and ends when all the agenda items have been discussed. Carpooling to the meeting venue is expected. |
|                   | The second field trip is to the Transportation Project Advisory Board Meeting (TPAC) at the El Paso MPO. The date and time of the meeting is yet to be announced by MPO. It is usually held on Wednesday at 9:00 a.m.                   |
|                   | The third field trip is to a public meeting. This usually takes place on a weekday in the evening, at a local public library or school.   |
| Homework          | The homework problems will be assigned at the completion of a topic and will be due in class on the day stated in the homework sheet. All homework problems will be graded. Homework solutions will be discussed in subsequent classes. |
| Lab assignments   | Lab sessions will be conducted during class hours. The software used is TRANUS (www.tranus.com). Students are expected to work individually. Each student should bring a Window-based notebook computer to the lab class.               |
| Late homework/    | Late homework is normally accepted with the following penalties:  |
| assignment/projec | Late by <=24 hours: 70% credit  |
| t policy          | Late by >24 hours but <=48 hours: 50% credit  |
|                   | Late by >48 hours: 0% credit.   |
| Collaboration/    | Discussions between classmates on homework are strongly encouraged.   |
| cheating          | However, the written work submitted must be your own effort (in your own words and your own style). Directly copying someone else's work  |

|                       | is cheating. Any case of suspected cheating will be reported to the Dean of Students, which may lead to you getting and F grade in this course and/or dismissal from UTEP.   |
|-----------------------|--|
| Audio/video recording | Recording of class instructions by any audio or video device is not permitted. The only exception is at the request of Disable Student Services, or at the request of Department, College or University for teaching evaluation.                                       |
|                       | Taking photos during public meetings (field trips) is usually allowed.   |
| Phone/iPod etc        | Please turn off your cell phone or switch it to silent mode during class time. If you need to answer a phone call, please leave the class quietly and only answer "Hello" outside the class door. You are not allowed to answer any phone call during the examination. |
|                       | Use of iPod, iPhone, MP3, radio, CD/DVD player or any other form of entertainment/ game device is not allowed in the class. Before you enter the classroom, please remove and turn off your entertainment devices.   |
|                       | No cap or hat is allowed in the classroom. The classrooms are heated in the winter and shielded from direct sunlight all the time.   |
| Disability            | If you have any disability and you need special assistance in taking this course, please contact the Center for Accommodation and Support Service at Union East. You identity will be kept confidential.   |

## Tentative Weekly Schedule (including labs and field trips)

Semester: 1/22/19 - 5/9/19

Class times: Tuesday, Thursday 4:30 p.m. to 5:50 p.m., CCSB 1.0204

| Wk | Date         | Topic  |
|----|--------------|--|
| 1  | 1/22, 1/24   | Course introduction  |
| 2  | 1/29, 1/31   | Overview of urban transportation planning models                     |
|    |              | 1/30: 5-6pm Field trip to public meeting at Main Library, City of El |
|    |              | Paso. Topic: Parking at Downtown                                     |
| 3  | 2/5, 2/7     | Urban demographic projection, trip generation                        |
| 4  | 2/12, 2/14   | Trip generation  |
| 5  | 2/19, 2/21   | Trip distribution  |
| 6  | 2/26, 2/28   | Trip distribution  |
| 7  | 3/5, 3/7     | Exam 1   |
|    |              | Mode choice  |
| 8  | 3/12, 3/14   | Mode choice  |
| 9  | 3/18 to 3/21 | No class (Spring break)  |
| 10 | 3/26, 3/28   | Traffic assignment   |
| 11 | 4/2, 4/4     | Traffic assignment   |
| 12 | 4/9, 4/11    | Exam 2   |
|    |              | Combined models and feedback   |
| 13 | 4/16, 4/18   | Guest lecture by MPO   |
|    |              | 4/17 (Wed) 1:30pm Field trip to El Paso MPO TPAC                     |
| 14 | 4/23, 4/25   | Dynamic traffic assignment   |
|    |              | Travel time reliability  |
|    |              | Resilience   |
|    |              | SmartCode  |
|    |              | 4/26 (Fri) 9:00am Field trip to El Paso MPO TPB                      |
| 15 | 4/30, 5/2    | Public participation   |
|    |              | Sustainable transportation   |
|    |              | Transportation and air quality                                       |
|    |              | Transportation and community health                                  |
|    |              | Field trip to a TxDOT or City's public meeting                       |
| 16 | 5/7, 5/9     | Exam 3   |
|    |              | 5/10 Dead Day  |
| 17 | 5/13 to 5/17 |  |