Faculty of Engineering
Department of Civil Engineering
COURSE OUTLINE

CIVE 360 – Sustainable Transportation Systems and Urban Communities

Term – Fall 2017 (201709)

Instructor
Mrs. Donna Howes
Phone:
E-mail: dhowes@uvic.ca

Office Hours
Days: Wednesdays

List all prerequisites and co-requisites: CIVE 210 and ENGR 001; CIVE 200; STAT 254 or STAT 260

LECTURE DATE(S)
Section: A01
Days: Wednesday
Time: 10:30 – 13:20
Location: COR A225

LAB SECTIONS
Section: B
Days: (or leave blank and state how/when labs will be scheduled)

Lab #1: B01 / CRN10601
Wed 14:00 – 16:50
ELW B220

Lab #2: B02 / CRN10602
Wed 14:00 – 16:50
ELW B220

Lab times and locations are also available from the timetable through Sign in to UVic, My Page.

TA Name
Peiman Azarsa

E-mail
azarsap@uvic.ca

Office
B208

Required Text
Title: Sustainable Transportation Planning
Author: Jeffrey Tumlin
Publisher/Year: John Wiley and Sons, Inc./2012

Optional Text
Reference Materials:

COURSE OBJECTIVES:
To improve our knowledge of how transportation is integrated within the domain of sustainability and how to better allocate scarce transportation infrastructure resources to the competing needs of urban communities.

LEARNING OUTCOMES:
After successfully completing this course you will be able to:
1. Explain the role of transportation within sustainable context.
2. Within the context of a group project, demonstrate how to conceptually formulate a transportation problem to create a foundation for engineering analysis.
3. Use general transportation planning analysis techniques to solve sustainability issues in transportation design.
4. Apply basic geometric road design techniques to conceptual urban layouts.
5. Assess transportation modes and their role in the community structure.
SYLLABUS: (The schedule may be subject to change)

September
6   Introduction - Ch 1 and Ch 2; City/Health: Basic Principles
13  City/Streets/Measurement: Urban Design, Street layouts, Reference material – Ch 3, 4, 5, 14
20  Methods: Analysis method and techniques
27  Transportation Modelling

October
4   Quiz #1
11  Geometric design basics and application
18  Geometric design basics and application (contd.)
25  Context Sensitive Design + Transportation demand management (TDM) – Ch 9, 10, 11, 13

November
1   Transportation Modes – Transit - Ch 8, 12
8   Transportation Modes – Cycling and pedestrians Ch 6, 7
15  Reading Break – no class
22  Project presentations; Wrap up and Projects due – Hard copies due by 10:30 at the start of class
29  Quiz #2

December
11-16 Examination – date TBD

<table>
<thead>
<tr>
<th>Weight &amp; Date(s) of Assessments:</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments 5% each</td>
<td>20%</td>
</tr>
<tr>
<td>Quiz #1</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz #2</td>
<td>15%</td>
</tr>
<tr>
<td>Project</td>
<td>25%</td>
</tr>
<tr>
<td>Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

ASSIGNMENTS:
Four assignments will be distributed over the course of the term. The assignments will be discussed at the end of the lecture period and the class will need to use the lab time to complete the assignment over the following two week period. The assignment problems will be predominantly hand calculations - some assignment problems will require lab software to complete. Assignment hardcopy submissions are to be made at the beginning of class.

<table>
<thead>
<tr>
<th>Assignment #</th>
<th>Modules</th>
<th>Start</th>
<th>Due (10:30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Big Picture, Software</td>
<td>15 Sept</td>
<td>20 Sept</td>
</tr>
<tr>
<td>2</td>
<td>Urban Design</td>
<td>29 Sept</td>
<td>4 Oct</td>
</tr>
<tr>
<td>3</td>
<td>Modelling and Design</td>
<td>13 Oct</td>
<td>25 Oct</td>
</tr>
<tr>
<td>4</td>
<td>Context Sensitive Design and Synchro</td>
<td>3 Nov</td>
<td>8 Nov</td>
</tr>
</tbody>
</table>

PROJECT: (Description & Method of Delivery)
Project submissions will be in the form of reports with drawings and will be submitted in hard copy format. Topics will be discussed in class. Project teams will be in groups of 6 students and project topics need to be confirmed by Oct 4, 2017.

NOTE: Failure to complete all laboratory requirements will result in a grade of N being awarded for the course. Failure to pass the final exam will result in a failing grade for the course.

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Undergraduate Calendar.
COURSE LECTURE NOTES
Unless otherwise noted, all course materials supplied to students in this course have been prepared by the instructor and are intended for use in this course only. These materials are NOT to be re-circulated digitally, whether by email or by uploading or copying to websites, or to others not enrolled in this course. Violation of this policy may in some cases constitute a breach of academic integrity as defined in the UVic Calendar.

There will be no supplemental examination for this course.

GENERAL INFORMATION

Note to Students:
Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the Chair of the Department by email or the Chair’s Secretary to set up an appointment.

“Attendance
Students are expected to attend all classes in which they are enrolled. An academic unit may require a student to withdraw from a course if the student is registered in another course that occurs at the same time.

An instructor may refuse a student admission to a lecture, laboratory, online course discussion or learning activity, tutorial or other learning activity set out in the course outline because of lateness, misconduct, inattention or failure to meet the responsibilities of the course set out in the course outline. Students who neglect their academic work may be assigned a final grade of N or debarred from final examinations.

Students who do not attend classes must not assume that they have been dropped from a course by an academic unit or an instructor. Courses that are not formally dropped will be given a failing grade, students may be required to withdraw and will be required to pay the tuition fee for the course.” UVic Calendar, (2017) [link]

ACCOMMODATION OF RELIGIOUS OBSERVANCE
The University recognizes its obligation to make reasonable accommodation for students whose observance of holy days might conflict with the academic requirements of a course or program.

Students are permitted to absent themselves from classes, seminars or workshops for the purposes of religious or spiritual observance.

In the case of compulsory classes or course events, students will normally be required to provide reasonable notice to their instructors of their intended absence from the class or event for reasons of religious or spiritual observance. In consultation with the student, the instructor will determine an appropriate means of accommodation. The instructor may choose to reschedule classes or provide individual assistance.

Where a student’s participation in a class event is subject to grading, every reasonable effort will be made to allow the student to make up for the missed class through alternative assignments or in subsequent classes. Students who require a rescheduled examination must give reasonable notice to their instructors. If a final exam cannot be rescheduled within the regular exam period, students may request an academic concession.

To avoid scheduling conflicts, instructors are encouraged to consider the timing of holy days when scheduling class events. For further information, including a list of days of religious observances, please contact the Equity and Human Rights Office or visit their website: [link]

Discrimination and Harassment Policy (GV0205) [link] Faculty of Engineering, University of Victoria

Standards for Professional Behaviour
“It is the responsibility of all members of the Faculty of Engineering, students, staff and faculty, to adhere to and promote standards of professional behaviour that support an effective learning environment that prepares graduates for careers as professionals.”

You are advised to read the Faculty of Engineering document [link] which contains important information regarding conduct in courses, labs, and in the general use of facilities.

Policy on Academic Integrity [link]

Equality
This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum and to meet the syllabus requirements.

Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging for appropriate accommodation. Alternatively, you may want to contact the Resource Centre for Students with a Disability located in the Campus Services Building.

The University of Victoria is committed to promoting, providing, and protecting a positive, and supportive and safe learning and working environment for all its members.”