School of Planning Faculty of Environment University of Waterloo

## PLAN 483/602 ECDEV 612

## Land Development Planning

Winter 2020

Instructor: Jeff Solly
Office: EV3 - 3307
Hours: Wednesday 1:00 to 2:15
Email: jsolly@uwaterloo.ca

### **Teaching Assistants:**

Suzan Rakha Lukas Mollame

## **COURSE OUTLINE**

### **Calendar Description**

An examination of planning issues related to the design, economics and financing of private land and building construction projects including residential high-rise condominium, low-rise residential subdivision, infill, intensification and brownfield redevelopment and industrial/commercial land development. The course focuses on developer decision-making, analysis of risk, sources of financing, planning, environmental and engineering aspects of land development.

Prereq: For undergrad students, at least 3A. For grad students, a basic understanding of land use planning principles

### **Course Objectives:**

The intent of the course is, firstly, to provide students a basic understand the principles of land development from a private sector perspective and, secondly, to allow students to obtain a basic understanding of the financial benchmarks commonly used in the industry and, finally, encourage students to connect the dots as to how government policy – as reflected in the approval processes – affects financial and product outcomes and shapes the built environment.

Most importantly, the course will offer an opportunity for the student to test their own land development proposal for a built form outcome against a pro forma financial model.

This is a one term course with credit weight of 0.5.

## **Learning Modes:**

The lectures provide instruction on the use of the pro forma financial model and the development of project inputs to the financial model through the due diligence process.

An opportunity is also provided in the lectures, and through guest speakers, to understand how land development planning is undertaken by private sector companies. To get the most out of each session, students should be prepared to actively participate in the lectures presented by the instructor and guest speakers

Land development practice is not extensively reported upon in academic literature and there are few publicly available case studies available for independent study. As a result attendance at the weekly lectures is of paramount importance. Students best learn the methods from these class discussions and the completion of the term assignment.

### **CAUTION**

- "For the assignments to be true learning experiences where students build analysis skills, the assignments have been developed to parallel "real" problems and are challenging in thought and time. It is simply not possible to do the assignments at the last minute."
- "Computer work is part of the assignments. Students are expected to have already appropriate skill in working with Excel Spreadsheets. Instruction and consulting regarding the use of these computer skills are not provided in this course."

#### **SCHEDULES**

### **Class Meetings**

The class lectures are scheduled Wednesdays in LEC 001 RCH 301 - from 2:30 pm to 5:20 pm commencing January 8, 2020.

### **Scheduled Office Hours or Consulting (professor)**

Wednesdays 1:00 to 2:15 pm EV3 3307

# **SEQUENCE OF COURSE TOPICS**

There may be minor adjustments from time to time in sequence and date. Students are responsible for all of the topics listed below.

Course Week	Week Begins	Notes	Topics	
1	Jan 8th		Introduction and Course Overview.	
			Course overview + administration	
			Introduction to the principles of land development.	
			Overview of the acquisition, approval, marketing, development and construction process.	
2	Jan 15 <sup>th</sup>		The Land Development Process #1.	
			An exploration of the steps in the development process	
3	Jan. 22 <sup>nd</sup>		The Land Development Process #2	
			A further exploration of the steps in the development process	
4	Jan. 29 <sup>th</sup>		Introduction to Land Development Analysis.	
			A review of the factors that go into the decision making process including a review of feasibility studies and basic financial concepts	
			Assignment #1 Due	
5	Feb. 5 <sup>th</sup>		Proforma Lab Session #1	
			A hands-on walk thru of a land development proforma.	
			Due to the nature of this exercise, the class will be divided into two and the session will be repeated over two time periods.	
6	Feb. 12 <sup>th</sup>		Proforma Lab Session #2	
			A hands-on walk through of a land development proforma for the $2^{nd}$ half of the class.	
			Grad Student Topic Proposal Due.	
7	Feb. 19 <sup>th</sup>		Reading Week	
8	Feb. 26 <sup>th</sup>		Sales, Marketing and Revenue	
			A review of product development and how developers respond to changes in the market.	
			Assignment #2 Due	

9	March 4 <sup>th</sup>	Guest Speaker	Construction Management An overview of site servicing and construction methods and issues
10	March 11 <sup>th</sup>	Guest Speaker	The Public Developer  How does the public sector act as developer? A review of the public sector as developer through an exploration of their mandate and decision-making process.
11	March 18 <sup>th</sup>	Guest Speaker	The Politics of Planning.  A detailed review of how development projects are shaped as they go through the approval process.
12	March 25 <sup>th</sup>	Guest Speaker	Project Management  An overview of the principles of project management as they apply to land development projects.
12	April 1 <sup>st</sup>		Future Development Trends  Laneway housing. Net zero development. LEED. The densification of the suburbs. How are developers leading new ways of creating spaces.  Last class – all term assignments not received by April 10 will not count in the final grade calculation.

# **ASSIGNMENTS**

# **Undergrad Student Schedule**

No.	Assigned Week Of	Time Allowed	Due	Topic
1	Jan 8 <sup>th</sup>	3 weeks	January 29 <sup>th</sup>	Site Selection Report
2	Jan 29 <sup>th</sup>	4 weeks	February 26 <sup>th</sup>	Due Diligence Report
3	Jan 29 <sup>th</sup>	10 weeks	April 9 <sup>th</sup>	Development Recommendation Report

### **Graduate Student Schedule**

**In addition** to the assignments listed above the Graduate Student must complete an additional term paper. Ideally, the term paper will be an examination of your graduate thesis or area of interest from a land development perspective.

No.	Assigned Week Of	Time Allowed	Due	Topic
1	Jan 8 <sup>th</sup>	5 weeks	Feb. 12 <sup>th</sup>	Topic Proposal
2	Feb 12 <sup>th</sup>	8 weeks	April 9 <sup>th</sup>	Term Paper

### **STUDENT EVALUATION**

The professor determines the content and establishes the grading rules for all assignments, mid term and final examinations, and any essays or projects.

The teaching assistants grade lab tests and participation and they assist the instructor with grading course work.

The apportionment which makes up the final **UNDERGRAD** grade is:

Course Component	Percentage
Participation	10%
Site Selection Report	10%
Due Diligence Report	30%
Final Development Recommendation Report	50%

The apportionment which makes up the final **GRADUATE** grade is:

Course Component	Percentage
Participation	10%
Site Selection Report	10%
Due Diligence Report	20%
Final Development Recommendation Report	40%
Term Paper	20%

Masters Graduate Students are required to complete an additional term paper. The topic is to be approved by the course instructor.

To obtain a passing grade in the course, students are expected to achieve a pass in each graded course component. When determining a student's final grade in the course, the professor will examine the record of each individual student's achievement; the final grade may be adjusted to take into account the component passing requirement, extenuating and compassionate circumstances and the student's general pattern of achievement in the course.

## Requirements, Grade Penalties and Special Considerations:

- Readability and Clarity: Students are expected to present well organized and properly written work. Penalties of up to 25% may be applied in cases where readability and/or clarity are inadequate.
- <u>Computer Use:</u> Assignments must be completed by using a computer and submitted electronically. Assignments may not be accepted or penalties assessed if this requirement is not met.
- <u>Lateness penalty</u>: all assignments are due on the date set by the professor. Teaching assistants
  are NOT allowed to change the due dates. The first day an assignment is late brings about a 5%
  penalty. An additional 5% penalty is assessed for each additional late day. A student's assignment
  more than 4 days business days late will not be accepted and a grade of zero will be recorded for
  that assignment.
- Requests for exemptions or compassionate considerations: are to be discussed with the professor in advance or as soon as possible.

### SPECIAL REQUIREMENTS IN THIS COURSE

### Computer Use

Students are **required** to complete their assignments using a computer. Students may use any computer to which they have access. To facilitate this, students may copy course provided spreadsheets and data sets onto their own computer disks from LEARN networks. If students use other software spread sheet systems for their work they are themselves responsible for correct operations -- in other words, they cannot expect the teaching assistants to be able to assist with system and software issues on all of the wide variety of computers available to individuals. In all cases, the computing approach specified in lectures and lab/tutorials must be followed.

It is assumed that students have full functional ability to use a standard spread sheet system for the assignments. Spread sheet use is not taught in this course, nor are the teaching assistants expected to teach spread sheet use. Students who feel they have a deficiency in spread sheet use are advised to drop this course and obtain such skill before continuing with this course -- perhaps by taking CS 100. Useful reference texts spread sheet systems are available in the Book Store.

### \*Academic Integrity:

To provide appropriate guidance to students, all course outlines in the Faculty of Environment **must** address academic integrity and reference the web documents for Policy #71. The statement below is recommended for inclusion in the Course Outline. In addition, instructors are encouraged to discuss academic integrity during course meetings.

### **Consequences of Academic Offences:**

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. The University's guiding principles on academic integrity can be found here:

http://uwaterloo.ca/academicintegrity/

ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: http://uwaterloo.ca/academicintegrity/Students/index.html

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Student who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also visit this webpage: https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline,

https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71

Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance:

https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70

- \*Research Ethics: Please also note that the 'University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office's Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see https://uwaterloo.ca/research/office-research-ethics
- Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.
- ◆Mental Health: The University of Waterloo, the Faculty of Environment and our Departments consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges physical and / or emotional. Please note that help is available. Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <a href="http://www.uwaterloo.ca/counselling-services">http://www.uwaterloo.ca/counselling-services</a> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

- **Religious Observances:** Student needs to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.
- •Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.
- ◆Appeals: A decision made or penalty imposed under Policy 70 Student Petitions and Grievances (other than a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm
- ◆Turnitin: Text matching software (Turnitin®) will be used to screen assignments in this course. This is being done to verify that use of all materials and sources in assignments is documented. Students will be given an option if they do not want to have their assignment screened by Turnitin®. In the first week of the term, details will be provided about arrangements and alternatives for the use of Turnitin® in this course.

  Note: students must be given a reasonable option if they do not want to have their assignment screened by Turnitin®. See: https://uwaterloo.ca/academic-integrity/guidelines-instructors for more information.
- ◆For further information on UW's Turnitin guidelines, see: http://uwaterloo.ca/academic-integrity/home/guidelines-instructors
- ◆LEARN: Users can login to LEARN via: <a href="http://learn.uwaterloo.ca/">http://learn.uwaterloo.ca/</a> use your WatIAM/Quest username and password
- **Onclaimed assignments:** Unclaimed assignments will be retained up to one month after term grades become official in Quest. After that time, they will be destroyed in compliance with UW's confidential shredding procedures.
- •Communications with Instructor and Teaching Assistants: All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

### **◆Recording lecture**

Use of recording devices during lectures is only allowed with explicit permission of the instructor of the course. If allowed, video recordings may only include images of the instructor and not fellow classmates. Posting of videos or links to the video to any website, including but not limited to social media sites such as: facebook, twitter, etc., is strictly prohibited.