School of Community and Regional Planning (SCARP)
University of British Columbia
COURSE OUTLINE

<table>
<thead>
<tr>
<th>Course Number</th>
<th>PLAN 521</th>
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<tbody>
<tr>
<td>Course Credit(s)</td>
<td>3.0</td>
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<tr>
<td>Course Title</td>
<td>Quantitative Skills for Planners</td>
</tr>
<tr>
<td>Term</td>
<td>2017-2018 – Winter Term 1</td>
</tr>
<tr>
<td>Days/Times</td>
<td>Monday 9:30am to 12:30pm</td>
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Instructor: Mark Stevens
Office: WMAX 223
Telephone: (604)822-0657
Email: mark.stevens@ubc.ca
Office Hours: by appointment

**Short Course Description**
The course enables students to develop basic capabilities in working with quantitative data for analysis in professional planning practice, including the appropriate use of statistical measures. This includes developing core vocabulary, conceptual understandings, critical awareness, analytical capabilities, and computer skills.

**Course Format**
The class meets once a week for 3 hours. The format of the course is based on the principles of Team-Based Learning (TBL), which shifts the focus of classroom time from the instructor conveying course concepts to the application of course concepts by student learning teams.

**Course Overview, Content and Objectives**
This course fulfills overall academic objectives of the MCRP program by ensuring that students (1) are familiar with information sources commonly used by planners, (2) have essential knowledge of quantitative analytical skills as they relate to defining planning problems, and (3) can demonstrate basic competency in using these skills to inform planning-related policies and programs.

This course is designed to promote learning-by-doing. Students will learn concepts through readings and individual spreadsheet-based exercises, and apply them in practical assignments through team discussion and decision-making. The course will use Microsoft Excel software for spreadsheet analysis.

This course aims to help students acquire literacy and develop basic capabilities in working with quantitative data for analysis in professional planning practice. This includes developing core vocabulary, conceptual understanding, critical awareness, analytical capabilities, and computer skills. The course also aims to provide students with realistic examples of how quantitative data analysis skills are used in the real world by practicing planners.
Learning Outcomes
At the completion of this course, students will be able to:
• Identify and access quantitative data sources commonly used by planners
• Manage quantitative data in a spreadsheet program
• Design tables and charts to effectively present quantitative data
• Conduct basic quantitative analysis relevant to planning practice
• Use the results of quantitative data analysis to support decision-making

Additional Course Requirements
There are no prerequisites for this course. Enrollment is restricted to first-year MCRP students. PLAN 521 is not a statistics course per se, and competence in conducting statistical analysis is not a goal of the course. Many of the quantitative methods covered in the course are not statistical (e.g., population forecasting). Students typically come into the course with a range of prior experience with statistical analysis.

Attendance
Students are expected to attend all classes. A portion of the final course grade will depend upon attendance.

Evaluation Criteria and Grading
To be determined on the first day of class, subject to the following constraints:

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<tr>
<th>Evaluation Category</th>
<th>Minimum Percentage</th>
<th>Maximum Percentage</th>
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<tbody>
<tr>
<td>1) Individual Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Class attendance and attentiveness</td>
<td>5%</td>
<td>50%</td>
</tr>
<tr>
<td>b) Readiness assurance tests</td>
<td>10%</td>
<td>50%</td>
</tr>
<tr>
<td>c) Excel calculations</td>
<td>5%</td>
<td>5%</td>
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<tr>
<td>2) Team Performance</td>
<td></td>
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<tr>
<td>a) Readiness assurance tests</td>
<td>10%</td>
<td>50%</td>
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<tr>
<td>b) In-class application exercises</td>
<td>20%</td>
<td>50%</td>
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<td>3) Peer Evaluation</td>
<td>10%</td>
<td>20%</td>
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Required Readings and Videos
There are no required textbooks for this course. Required readings will be drawn from books, and professional reports, and journal articles.

Recommended Readings

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**Course Schedule**

(Week 1) Introduction: quantitative skills for planning practice  
(Week 2) Managing and presenting quantitative data  
(Week 3) Collecting quantitative data through surveys  
(Week 4) Collecting and managing quantitative data in Excel  
(Week 5) *(UBC holiday)*  
(Week 6) Creating tables and charts  
(Week 7) Describing and analyzing quantitative data  
(Week 8) Making population projections  
(Week 9) Analyzing land supply and demand  
(Week 10) *(UBC holiday)*  
(Week 11) Estimating demand for transit services  
(Week 12) Calculating development costs charges

**Special Needs**

**Academic Integrity**

1 Assistance with the creation of a course syllabus is available through the Centre for Teaching, Learning and Technology, [www.ctlt.ubc.ca](http://www.ctlt.ubc.ca) 
Resources related to the development of assessable learning outcomes can be accessed through [http://ctlt.ubc.ca/resources/webliography/course-designdevelopment/](http://ctlt.ubc.ca/resources/webliography/course-designdevelopment/) 
The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President’s Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences. 
A more detailed description of academic integrity, including the University’s policies and procedures, may be found in the Academic Calendar at [http://calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0](http://calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0).