BUSI 5906A
Innovating for the Green Economy
Fall-2 2016

Class Schedule: Thursdays Classroom – Canal 3400
6:05 pm - 8:55pm

Professor:
Sujit Sur, PhD, MBA

Teaching Assistant:
TBD
Office: DT 1707
Phone: 613-520-2600, ext. 4003
Email: sujitsur@carleton.ca
Emails are responded to rapidly; no voice messages

Office Hours:
Thursdays 4:30 – 5:30pm
or by appointment – email request in advance

Course Description:
This course integrates innovation management principles for sustainable products, services and technology development. The focus is on design thinking principles for economic, social and environmental innovations. Students will apply concepts of sustainable business innovations to formulate and implement strategies for organizations in the green economy.

Course Learning Objectives:
1. To develop an understanding of the issues of innovating for sustainability as faced by organizations, especially those in the nascent green economy.
2. To integrate the various organizational functions to manage stakeholder expectations to achieve creative and innovative sustainable business models.
3. To develop an appreciation of the complexity, trade-offs and imperatives for innovations in the green economy.

Course Prerequisites: Permission of school.
Required Reading Material:
The textbook for the course is “The designing for growth field book” and is available in the Carleton Bookstore. Additional readings will also be assigned as indicated on cuLearn. Students are also expected to read professional publications related to sustainability and innovation.

Newsletters and Publications:
Students are asked to subscribe to the following free business newsletters and to join NBS to which references will be made as applicable throughout the course:

- booz & co. – http://www.strategy-business.com/registration/register
- Green Biz – http://www.greenbiz.com
- Network for Business Sustainability - http://nbs.net/members/signup

Exam date: There is no final written exam.

Drop Course Policy:
The deadline for academic withdrawal is the last day of classes (each term).

Grading Scheme:

Individually earned grades:
Individual case report (final submission) 30%
Contribution to peer learning – professor assessment 10%
Team assessment of contribution to the team 10%

Team earned grades:
Team weekly reports/presentations (5 for 10% each) 50%

Total 100%

Criteria for Evaluation and Grading:
The grading rubric for the team/individual case reports and presentations are placed at appendix A and B respectively. Team case reports and presentations are due by the end of class and need to be uploaded to cuLearn before class commences. The presenting teams also need to upload their powerpoint slides or other presentation material to cuLearn too before class commences. Each component of the grade will be assigned a letter grade score. The final course grade will be a weighted average of each of these components as per the above scheme. Individual case report (final submission) also needs to be submitted online.
via cuLearn. Details for the individual report is placed on cuLearn. In case of technical difficulties, students can email the deliverable directly at sujitsur@carleton.ca using their official Carleton email ID to ensure synchronized date and time stamp of receipt at my end.

**Late Penalties:** For any assignment that is late there is a one letter grade level penalty for each calendar day (or part thereof) late. For example, an “A” becomes a “B” if within 24 hours late; and if more than 24 hours, but within 2 days late a “C”.

**Class Discussions and Contributions to Peer Learning:**
Students are encouraged to actively participate in all classes by being adequately prepared. Regular attendance, participation and contribution from all class members is essential for effective discussion. It is student contribution to peer learning that constitutes a contribution, including encouraging colleagues, building on earlier comments without repeating, listening attentively to speakers and being respectful of differences of opinion.

While attendance is a pre-requisite to participation, it is the quality, not the quantity, of remarks that earns the grades. *Meaningful* contribution requires that you teach your peers something useful that might otherwise have gone unnoticed. A discrete use of electronic devices for note-taking is permitted, however no distractions are allowed. Accordingly, should you engage in any non-course related use of the device in the classroom or breakout rooms you will forfeit this permission for the remainder of the course.

**Teams:**
You will be required to form teams of a maximum of 4 students (minimum of 3 students and dependent upon class size, *exceptionally* a team of 5 may be permitted or a student without a team may be assigned to a team). These teams will collectively carryout team assignments and presentations.

Students are responsible for selecting their team partners and the team is expected to *selfgovern* to ensure the quality of all deliverables, independently resolving any conflicts within the team. It is strongly recommended that students seek diversified and complementary skill sets in their prospective team partners, ideally students from different academic concentrations with varied work experiences and backgrounds. Further information on effective team formation and processes will be discussed at the first class. The team assignments provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other team skills. The resources at [http://sprott.carleton.ca/students/undergraduate/bcom/group-work-resources/](http://sprott.carleton.ca/students/undergraduate/bcom/group-work-resources/) and [http://sprott.carleton.ca/wp-content/files/Group-Work-Resources.pdf](http://sprott.carleton.ca/wp-content/files/Group-Work-Resources.pdf) are recommended. You are particularly encouraged to maintain evidence of your contribution to the team performance, including estimated research time, working papers, etc. The keeping of a team log of meetings, commitments, decisions, etc. is also a valuable organizational tool. It is in each team member’s best interest to ensure an equitable sharing of the research and work. You will be asked to evaluate the individual contributions of the
other team members to all of the team presentations, recognizing that to consider one team member as contributing significantly more, requires that another team member be identified as contributing less (details to be provided in class).

Policy for Team Presentations:
All team members must participate in the presentations. Any student unable to do so because of illness or other circumstances beyond their control must contact the professor via email prior to the start of the class for which the presentation is scheduled. The professor may allow an alternative individual assignment when the absence is supported by a medical certificate and or appropriate document(s) to support the reason for the inability to present. Any student missing the presentation would not obtain any grades for the team work. The other team members must make the entire presentation as scheduled.

Tentative Course Schedule¹:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Agenda*</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nov. 5th</td>
<td>Introduction, team formation</td>
<td>Class based team challenge</td>
</tr>
<tr>
<td>2 Nov. 12th</td>
<td>Introduction to design thinking</td>
<td><strong>In class DT simulation</strong></td>
</tr>
<tr>
<td>3 Nov. 19th</td>
<td>Inspiration (scoping and research) (pg. 1 - 17 &amp; pg. 41 – 61)</td>
<td>3 teams present (1, 2 &amp; 3)</td>
</tr>
<tr>
<td>4 Nov. 26th</td>
<td>Ideation (insight to brainstorming) (pg. 18 - 29 &amp; pg. 62 - 77)</td>
<td>3 teams present (4, 5 &amp; 6)</td>
</tr>
<tr>
<td>5 Dec. 3rd</td>
<td>Implementation (rapid prototyping) (pg. 30 - 38 &amp; pg. 78 - 132)</td>
<td>3 teams present (1, 2 &amp; 3)</td>
</tr>
<tr>
<td>6 Dec. 10th</td>
<td>Agile Development methodology &amp; Emergent Business Planning</td>
<td>3 teams present (4, 5 &amp; 6)</td>
</tr>
<tr>
<td>7 Dec 17th</td>
<td>Final report (individual)</td>
<td><strong>All individual case reports</strong></td>
</tr>
</tbody>
</table>

¹ While every attempt will be made to keep to the schedule listed above, modifications may become necessary.

Policy on Mobile Devices:
The use of mobile devices is not permitted in class. If you carry such a device to class, please make sure it is turned off. If an emergency situation requires you to keep it turned on, please discuss this with me.

IMPORTANT ADDITIONAL INFORMATION

Course Sharing Websites
Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the
Team Work
The Sprott School of Business encourages team assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other team skills. Team assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more team tasks/assignments/projects in this course. If you have a team assignment you may find the resources at http://sprott.carleton.co/wp-content/files/Group-Work-Resources.pdf useful. Some of the advice offered to B. Comm students may also be helpful (see http://sprott.carleton.co/students/undergraduate/bcom/forms/ ).

Before embarking on a specific problem as a team, it is your responsibility to ensure that the problem is meant to be a team assignment and not an individual one.

Person with Disabilities
Students with disabilities requiring academic accommodations in this course are encouraged to contact a coordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with the PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the first in-class test or ITV midterm exam. This is necessary in order to ensure sufficient time to make the necessary arrangements. Please refer to http://www.carleton.ca/pmc/ for all PMC information.

Religious Obsvance
Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton’s Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.

Pregnancy
Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student
must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

**Academic Integrity and Plagiarism**

Violations of academic integrity are a serious academic offence. Violations of academic integrity include presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student; all of which weaken the quality of the degree and will not be tolerated. Penalties may include expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, amongst others.

The University Senate defines plagiarism in the regulations on instructional offenses as: “to use and pass off as one’s own idea or product work of another without expressly giving credit to another.”

Using, summarizing or copying directly from another person’s work, without identifying the name of the original thinker, is considered a form of cheating called “plagiarism”. Plagiarism has serious consequences and can result in course / assignment failure and/or academic suspension.

When using, and/or summarizing the ideas and words of another, be it from a web site, a written text, lecture or discussion team, you must identify the source. Should you choose to use the exact words of another, you must acknowledge these words as such by enclosing them within quotation marks. However, be aware that it is not acceptable to copy large chunks from a source, even if you reference it correctly.

Ensure that you cite every graph, table, report, quote, original idea or piece of information taken from somewhere else, to avoid plagiarism see [http://www1.carleton.ca/studentaffairs/academic-integrity/](http://www1.carleton.ca/studentaffairs/academic-integrity/)

The photocopying of substantial portions of a textbook (e.g. more than 1 chapter or 15% of the total page count) without the publisher’s permission is another misuse of intellectual property, and is also a violation of Canadian copyright law. Access Canada’s web site provides guidelines on legitimate copying. You may also find helpful information at: [http://www.library.carleton.ca/campus-copying](http://www.library.carleton.ca/campus-copying)

**Important Dates and Deadlines** can be found at: [http://sprott.carleton.ca/students/mba/dates-deadlines/](http://sprott.carleton.ca/students/mba/dates-deadlines/)

**Deferred Final Examination:** (There is no exam for this course)
## Appendix A: Final Project Grading Rubric

<table>
<thead>
<tr>
<th>CONTENT (marks)</th>
<th>LEVEL 4</th>
<th>LEVEL 3</th>
<th>LEVEL 2</th>
<th>LEVEL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of the Main Issues (10)</td>
<td>Identifies &amp; understands all of the main issues in the case study</td>
<td>Identifies and understands most of the main issues</td>
<td>Identifies and understands some of the issues</td>
<td>Identifies and understands few of the issues in case study</td>
</tr>
<tr>
<td>Analysis of the Issues (30)</td>
<td>Insightful and thorough analysis of all the issues</td>
<td>Thorough analysis of most of the issues</td>
<td>Superficial analysis of some of the issues</td>
<td>Incomplete analysis of the issues</td>
</tr>
<tr>
<td>Assessment of Alternatives and Recommendation (35)</td>
<td>Well documented, reasoned and appropriate comments on alternatives to all issues, elaboration of pros and cons, and specific recommendation</td>
<td>Appropriate, well thought out comments about alternatives, pros and cons, and recommendation</td>
<td>Superficial and/or inappropriate comments about alternatives and recommendation</td>
<td>Little or no action suggested, and/or inappropriate alternatives and recommendation</td>
</tr>
<tr>
<td>Development of an effective implementation plan (15)</td>
<td>Detailed and creative implementation plan with timelines and financial projections, reflecting thorough understanding of class concept (obstacles, levers and leadership, et al.)</td>
<td>Appropriate, well thought out comments and financials on implementation plan. Reflects understanding of most of implementation issues.</td>
<td>Superficial and/or inappropriate development of implementation plan and financials. Reflects understanding of some implementation issues.</td>
<td>Little or no details about implementation plan</td>
</tr>
<tr>
<td>Links to Course Readings and concepts (10)</td>
<td>Excellent research into the issues with clearly documented links to class (and/or outside) readings</td>
<td>Good research and documented links to the material read</td>
<td>Limited research and documented links to any readings</td>
<td>Incomplete research and links to any readings</td>
</tr>
<tr>
<td>FORM (marks)</td>
<td>LEVEL 4</td>
<td>LEVEL 3</td>
<td>LEVEL 2</td>
<td>LEVEL 1</td>
</tr>
<tr>
<td>Professional quality of case write up (penalties assigned to a maximum of 15)</td>
<td>Excellent grammar, clarity, transitions, organization and logical flow, succinctness</td>
<td>Good grammar, adequate clarity, good transitions, good organization and logical flow, succinct</td>
<td>Some grammatical errors, lacks clarity sometimes, some abrupt transitions, some lack of organization and logical flow, some verboseness/repetitiveness</td>
<td>Many grammatical errors, not clear, many abrupt transitions, lack of organization and logical flow, verbose/repetitive</td>
</tr>
</tbody>
</table>

Total Marks ( /100)
# Appendix B: Case Presentation Grading Rubric

<table>
<thead>
<tr>
<th>CONTENT (marks)</th>
<th>LEVEL 4</th>
<th>LEVEL 3</th>
<th>LEVEL 2</th>
<th>LEVEL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of the Main Issues (10)</td>
<td>Identifies &amp; understands all of the main issues</td>
<td>Identifies and understands most of the main issues</td>
<td>Identifies and understands some of the issues</td>
<td>Identifies and understands few of the issues in case study</td>
</tr>
<tr>
<td>Analysis of the Issues (30)</td>
<td>Insightful and thorough analysis of all the issues</td>
<td>Thorough analysis of most of the issues</td>
<td>Superficial analysis of some of the issues</td>
<td>Incomplete analysis of the issues</td>
</tr>
<tr>
<td>Comments on effective solutions /strategies (30)</td>
<td>Well documented, reasoned and appropriate comments on solutions, or proposals for solutions, to all issues</td>
<td>Appropriate, well thought out comments about solutions, or proposed solutions to most of the issues</td>
<td>Superficial and/or inappropriate solutions to some of the issues</td>
<td>Little or no action suggested, and/or inappropriate solutions to all of the issues</td>
</tr>
<tr>
<td>Development of an effective implementation plan (15)</td>
<td>Detailed and creative implementation plan with timelines and financial projections, reflecting thorough understanding of class concept (obstacles, levers, leadership, et al.)</td>
<td>Appropriate, well thought out comments and financials on implementation plan. Reflects understanding of most of implementation issues.</td>
<td>Superficial and/or inappropriate development of implementation plan and financials. Reflects understanding of some implementation issues.</td>
<td>Little or no details about implementation plan</td>
</tr>
<tr>
<td>Links to Course Readings and Additional external Research (15)</td>
<td>Excellent research into the issues with clearly documented links to class (and/or outside) readings</td>
<td>Good research and documented links to the material read</td>
<td>Limited research and documented links to any readings</td>
<td>Incomplete research and links to any readings</td>
</tr>
</tbody>
</table>

## PRESENTATION

<table>
<thead>
<tr>
<th>LEVEL 4</th>
<th>LEVEL 3</th>
<th>LEVEL 2</th>
<th>LEVEL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery, clarity and Enthusiasm (- 5)</td>
<td>Very clear and concise flow of ideas. Demonstrates passion for the topic and engagement with the class.</td>
<td>Clear flow of ideas Demonstrates interest in topic and some engagement with the class.</td>
<td>Most ideas flow but focus is lost at times Limited evidence of interest in topic and limited engagement with the class</td>
</tr>
<tr>
<td>Visuals (- 5)</td>
<td>Visuals augmented and extended comprehension of the issues in unique ways</td>
<td>Use of visuals related to the material</td>
<td>Limited use of visuals loosely related to the material</td>
</tr>
<tr>
<td>Response to Class Queries (- 5)</td>
<td>Excellent response to student comments and discussion with appropriate content supported by theory/research</td>
<td>Good response to class questions and discussion with some connection made to theory/research</td>
<td>Satisfactory response to class questions and discussion with limited reference to theory and research</td>
</tr>
<tr>
<td>Professionalism and body language (- 5)</td>
<td>Excellent body language and posture, formal attire, flawless vocabulary and transitions</td>
<td>Good body language, well dressed, professional vocabulary, good transitions</td>
<td>Disinterested when not speaking, semi-casual dress, some slang, some abrupt transitions</td>
</tr>
</tbody>
</table>

Total Marks ( /100)