Course Schedule

Important: **ALL TIMES EASTERN** - Please see the [University Policies](#) section of your Syllabus for details

Module	Week	Activities and Assignments	Start Date	End/Due Date	Weight
Introduction	[Week 1: Introduction to Sustainable Business Operations](#)	[Introduce Yourself](#)	Thursday, September 6, 2018 at 9:00 AM		
		Group formation for the [Group Project](#) (Done by Technical Support)		Check after Wednesday, September 12, 2018 at 4:30 PM	
		[Case Study 1: Indian Oil Corporation Limited: The Mathura Refinery](#)	Thursday, September 13, 2018 at 9:00 AM	Thursday, September 20, 2018 at 9:00 AM	**15%**
	[Week 2: Pollution Prevention](#)	Start thinking about the topic of your group project presentation **proposal** due by the end of Week 6 (Please review the general	Thursday, September 13, 2018 at 9:00 AM		

Module 1: Eco-efficiency		information and guidelines for the [Group Project](#) assignment).			
	[Week 3: Metrics and Reporting](#)	[Discussion 1](#) (Please review the general information and guidelines about the [Discussions and Participation Portfolio](#) assignment).	Thursday, September 20, 2018 at 9:00 AM	Thursday, September 27, 2018 at 9:00 AM	
	[Week 4: Environmental Management Systems](#)	[Discussion 2](#) (Please review the general information and guidelines about the [Discussions and Participation Portfolio](#) assignment).	Thursday, September 27, 2018 at 9:00 AM	Thursday, October 4, 2018 at 9:00 AM	
	[Week 5: Product Innovation and Design](#)	[Case Study 2: Cradle-to-Cradle Design at Herman Miller: Moving Toward Environmental Sustainability](#)	Thursday, October 4, 2018 at 9:00 AM	Monday, October 15, 2018 at 9:00 AM	**15%**

Fall Break - Study Days (Tuesday, October 9, 2018 and Wednesday, October 10, 2018)

Module 2: Sustainability By Design	[Week 6: Voluntary Environmental Programs: LEED Certification](#)	Submit group project presentation **proposal** (Please review the general information and guidelines for [Group Project](#) assignment).		Monday, October 22, 2018 at 9:00 AM	**10%**
	[Week 7: Industrial Ecosystems](#)	[Discussion 3](#) (Please review the general information and guidelines about the [Discussions and Participation Portfolio](#) assignment).	Monday, October 22, 2018 at 9:00 AM	Monday, October 29, 2018 at 9:00 AM	
	[Week 8: Supply Chain Management](#)	[Discussion 4](#) (Please review the general information and guidelines about the [Discussions and Participation](#)	Monday, October 29, 2018 at 9:00 AM	Monday, November 5, 2018 at 9:00 AM	

Module 3: Sustainable Supply Chain Management	[Week 9: Engaging Internal Stakeholders](#)	Portfolio assignment). Submit **discussion participation portfolio** (Please review the general information and guidelines about the [Discussions and Participation Portfolio](#) assignment).	Monday, November 5, 2018 at 9:00 AM	Monday, November 12, 2018 at 9:00 AM	**35%**
	[Week 10: Reverse Logistics](#)	Prepare for [Group Project](#) presentation.	Monday, November 12, 2018 at 9:00 AM		
	[Week 11: Closed-Loop Supply Chain](#)	Submit group project **presentation** (Please review the general information and guidelines for [Group Project](#) assignment). **Comments** (peer feedback) on group		Monday, November 26, 2018 at 9:00 AM	**20%**

Wrap-up	Week 12	presentations (Please review the general information and guidelines for [Group Project](#) assignment); Read all the comments about your group's presentation.	Monday, November 26, 2018 at 9:00 AM	Monday, December 3, 2018 at 9:00 AM	**5%**

Official Grades and Course Access

Official Grades and Academic Standings are available through [Quest](#).

Your access to this course will continue for the duration of the current term. You will not have access to this course once the next term begins.

Contact Information

Announcements

Your instructor uses the **Announcements** widget on the **Course Home** page during the term to communicate new or changing information regarding due dates, instructor absence, etc., as needed. You are expected to read the announcements on a regular basis.

To ensure you are viewing the complete list of announcements, you may need to click **Show All Announcements**.

Discussions

A **General Discussion** topic* has also been made available to allow students to communicate with peers in the course. Your instructor may drop in at this discussion topic.

Contact Us

Who and Why	Contact Details
	Post your course-related questions to the **Ask the Instructor** discussion topic*. This allows other students to benefit from your question as well.
Instructor and TA	**Questions of a personal nature** can be directed to your instructor.
• Course-related questions (e.g., course content, deadlines,	Instructor: Barbara Turley-McIntyre bturleym@uwaterloo.ca TA: Paolo Ciardulli

- assignments, etc.)
- Questions of a personal nature

paolo.ciardulli@uwaterloo.ca

TA: Odeeth Lara-Morales
odeeth.lara@uwaterloo.ca

Your instructor checks email and the **Ask the Instructor** discussion topic* frequently and will make every effort to reply to your questions within 24–48 hours, Monday to Friday.

Technical Support, Centre for Extended Learning

learnhelp@uwaterloo.ca

- Technical problems with Waterloo LEARN

Include your full name, WatIAM user ID, student number, and course name and number.

Learner Support Services, Centre for Extended Learning

Student Resources

extendedlearning@uwaterloo.ca
+1 519-888-4002

- General inquiries
- WatCards (Student ID Cards)
- Examination information

Include your full name, WatIAM user ID, student number, and course name and number.

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*Discussion topics can be accessed by clicking **Connect** and then **Discussions** on the course navigation bar above.

About the Course Instructor, TAs, and Author

Course Instructor — Barbara Turley-McIntyre, CIP, MEB

Vice President, Sustainability and Citizenship
The Co-operators Group Limited

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I started my business career as an independent insurance broker in Montreal and in 1997 joined The Co-operators Group Limited, a $43 billion Canadian-owned, multi-product insurance and financial services company. I have managed underwriting teams in property and casualty and held responsibility for community and shareholder relations.

Presently, I lead the enterprise-wide integration of the Sustainability Vision, Policy

and Strategy with responsibility for leading the production of the annual Integrated Report and carbon management programs. I am a member of The Co-operators Management Investment Committee and have responsibility for The Co-operators community programs, including The Co-operators Foundation.

I completed my Masters in Environment and Business at the University of Waterloo in 2014 and hold a Chartered Insurance Professional designation. I am Sessional Lecturer at the University of Waterloo, Faculty of the Environment. My volunteering activities include organizations that advance sustainable development - a Board member of the United Nations Environment Program – Finance Initiative Global Steering Committee, Kids Help Phone and the Foundation of the Guelph General Hospital.

Course TA — Paolo Ciardulli

Paul is a Ph.D. student in the Department of Geography and Environmental Management at the University of Waterloo. His research examines international and Canadian flood risk and disaster risk management policy, at both the Federal and Provincial levels. His focus is on analyzing the efficacy and preparedness of Canadian institutional arrangements to develop and implement a national flood risk management plan. He is also a graduate of the Masters of Environment and Business program from the University of Waterloo.

Course TA — Odeeth Lara-Morales

Dr. Odeeth Lara-Morales is a Post-Doctoral Fellow working for the project *Implementing Sustainable Community Plans* in the School of Environment, Enterprise and Development (SEED) at the University of Waterloo. She holds a Ph.D. in the discipline of Marketing, Enterprise and Sustainable Tourism from Anglia Ruskin University (UK), and has taught Sustainable Tourism and Management courses at Lord Ashcroft International Business School (LAIBS) in Cambridge, UK.

Dr. Lara-Morales is passionate about sustainability and about achieving the global Sustainable Development Goals (SDGs) on a local level through the implementation of sustainable community plans, and the development of environmental programs, collaborative strategies, and market-based instruments and approaches.

She has participated in international conferences such as the UNESCO Week for Peace and Sustainable Development, the Conference of the Parties to the Convention on Biological Diversity (COP13), and the United Nations Sustainable Development Summit.

She is currently working to publish three articles from her Ph.D. dissertation on Ecotourism as a Mechanism to Achieve Sustainable Development in Indigenous Communities in Mexico. She is also working in collaboration with the Centre for International Sustainable Development Law (CISDL) to publish an article on

sustainable development.

LinkedIn: [Odeeth Lara-Morales](#)

Course Author — Komal Habib

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Educational Background

Degrees

2015: PhD in Energy and Environmentally Efficient Technologies. University of Southern Denmark.

2011: MSc in Engineering (Urban, Energy and Environmental Planning). Aalborg University, Denmark.

Research Experience and Interests

Dr. Komal Habib is Assistant Professor of Industrial Ecology at the School of Environment, Enterprise and Development (SEED), University of Waterloo,

Canada. Before joining SEED, Komal was working as a postdoctoral researcher at [SDU Life Cycle Engineering, Denmark](#), where her work focused on environmental, technical, and economic assessment of biogas upgrading technologies. She joined SDU Life Cycle Engineering Group in 2011 as a PhD researcher. Her PhD work comprised of exploring resource dependencies of clean energy technologies, i.e., wind turbines and electric vehicles, resource criticality assessment, material flow analysis (MFA) of critical resources, and evaluating the treatment efficiencies of waste electrical and electronic equipment (WEEE) treatment facilities. In relation to her PhD research, Komal stayed as a visiting researcher at the Center for Industrial Ecology, Yale University (USA; January – June) in 2012. Her research interests are exploring resource dependency of future clean energy systems, resource criticality assessment (supply risk and vulnerability to supply risk assessment), material and energy flow analysis, industrial ecology, and life cycle assessment (LCA).

Course Description and Objectives

The ability to evaluate the social and environmental impact of an organization's operational practices is a critical skill for students in the Master of Environment and Business program. Learning this evaluative skill is also important to policy makers, nonprofits, and potential clients who value environmental information. With the evaluated information as decision support, it is also important for you to identify solutions to the operational issues facing your organization or client. In an effort to prepare you to evaluate an organization's environmental management practices, and identify appropriate solutions, this course has three goals:

1. To understand the basic planning, management, design, and evaluation tools required to implement sustainable operations in your organization.

2. To prepare you to evaluate an organization's operational impacts to the natural environment.

3. To recognize how organizations' independent actions (in the absence of policy) may improve the environment.

The basic planning, management, design, and evaluation tools include environmental management system tools; cleaner production and pollution prevention tools (environmental risk management, environmental impact assessment, emissions qualification and verification, eco-efficiency, etc.); product stewardship and eco-design tools (design for environment, life-cycle assessment/costing, greening supply chain, etc.); sustainability measurement and reporting tools; and human resources tools (managing teams, motivating people for sustainability, diversity policies, etc.). The sustainability tools are explained in relation to health/safety programs, human resource management, and operations and quality management. This course draws on practices and illustrative examples of performance of organizations in different sectors, around different environmental issues (energy, waste, water, air emissions, etc.). This is one of the four core courses required by the newly launched Master of Environment and Business (MEB) program.

This online course was developed by Dr. Komal Habib, with instructional design and multimedia development support provided by the Centre for Extended

Learning. Further media production was provided by Instructional Technologies and Multimedia Services.

Materials and Resources

Textbook

There is no textbook assigned for this course.

Course Reserves

Course Reserves can be accessed using the **Library Resources** widget on the **Course Home** page.

Resources

- [Library services for co-op students on work term and distance education students](#)

Grade Breakdown

The following table represents the grade breakdown of this course.

Activities and Assignments	Weight (%)
Introduce Yourself	Ungraded
Case Studies (2x15%)	30%
Discussion Participation Portfolio	35%
Group Project: • Proposal (10%) • Presentation (20%) • Comments (5%)	35%

University Policies

Submission Times

Please be aware that the University of Waterloo is located in the **Eastern Time Zone** (GMT or UTC-5 during standard time and UTC-4 during daylight saving time) and, as such, the time that your activities and/or assignments are due is based on this zone. If you are outside the Eastern Time Zone and require assistance with converting your time, please try the [Ontario, Canada Time Converter](#).

Accommodation Due to Illness

If your instructor has provided specific procedures for you to follow if you miss assignment due dates, term tests, or a final examination, adhere to those instructions. Otherwise:

Missed Assignments/Tests/Quizzes

Contact the instructor as soon as you realize there will be a problem, and preferably within 48 hours, but no more than 72 hours, have a medical practitioner complete a [Verification of Illness Form](#).

Email a scanned copy of the Verification of Illness Form to your instructor. In your email to the instructor, provide your name, student ID number, and exactly what course activity you missed.

Further information regarding Management of Requests for Accommodation Due to Illness can be found on the [Accommodation due to illness](#) page.

Missed Final Examinations

If this course has a final exam and if you are unable to write a final examination

due to illness, seek medical treatment and have a medical practitioner complete a [Verification of Illness Form](). Email a scanned copy to the Centre for Extended Learning (CEL) at [extendedlearning@uwaterloo.ca]() within 48 hours of your missed exam. Make sure you include your name, student ID number, and the exam(s) missed. You will be REQUIRED to hand in the original completed form before you write the make-up examination.

After your completed Verification of Illness Form has been received and processed, you will be emailed your alternate exam date and time. This can take up to 2 business days. If you are within **150 km** of Waterloo you should be prepared to write in Waterloo on the additional CEL [exam dates](). If you live outside the 150 km radius, CEL will work with you to make suitable arrangements.

Further information about [Examination Accommodation Due to Illness]() regulations is available in the Undergraduate Calendar.

Academic Integrity

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. **If you have not already completed the online tutorial regarding academic integrity you should do so as soon as possible.** Undergraduate students should see the [Academic Integrity Tutorial]() and graduate students should see the [Graduate Students and Academic Integrity]() website.

Proper citations are part of academic integrity. Citations in CEL course materials usually follow CEL style, which is based on APA style. Your course may follow a different style. If you are uncertain which style to use for an assignment, please confirm with your instructor or TA.

For further information on academic integrity, please visit the [Office of Academic Integrity]().

Turnitin

Turnitin.com: Text matching software (Turnitin®) may be used to screen

assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

Discipline

A student is expected to know what constitutes [academic integrity](#) to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration, should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties, check [Guidelines for the Assessment of Penalties](#).

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](#).

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. When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Final Grades

In accordance with [Policy 46 - Information Management](#), Appendix A - Access to and Release of Student Information, the Centre for Extended Learning does not release final examination grades or final course grades to students. Students must go to [Quest](#) to see all final grades. Any grades posted in Waterloo LEARN are unofficial.

AccessAbility Services

[AccessAbility Services](#), located in Needles Hall, 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 accommodation to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term and for each course.

Accessibility Statement

The Centre for Extended Learning strives to meet the needs of all our online learners. Our ongoing efforts to become aligned with the [Accessibility for Ontarians with Disabilities Act (AODA)](#) are guided by University of Waterloo accessibility [Legislation](#) and policy and the [World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines (WCAG) 2.0](#). The majority of our online courses are currently delivered via the Desire2Learn Learning Environment. Learn more about [Desire2Learn's Accessibility Standards Compliance](#).

Use of Computing and Network Resources

Please see the [Guidelines on Use of Waterloo Computing and Network](#)

Resources.

Copyright Information

UWaterloo's Web Pages

All rights, including copyright, images, slides, audio, and video components, of the content of this course are owned by the course author, unless otherwise stated. These web pages are owned or controlled by the University of Waterloo, Centre for Extended Learning. By accessing the web pages, you agree that you may only download the content for your own personal, non-commercial use. You are not permitted to copy, broadcast, download, store (in any medium), transmit, show or play in public, adapt, or change in any way the content of these web pages for any other purpose whatsoever without the prior written permission of the course author and the University of Waterloo, Centre for Extended Learning.

Other Sources

Respect the copyright of others and abide by all copyright notices and regulations when using the computing facilities provided for your course of study by the University of Waterloo. No material on the Internet or World Wide Web may be reproduced or distributed in any material form or in any medium, without permission from copyright holders or their assignees. To support your course of study, the University of Waterloo has provided hypertext links to relevant websites, resources, and services on the web. These resources must be used in accordance with any registration requirements or conditions which may be specified. You must be aware that in providing such hypertext links, the University of Waterloo has not authorized any acts (including reproduction or distribution) which, if undertaken without permission of copyright owners or their assignees, may be infringement of copyright. Permission for such acts can only be granted by copyright owners or their assignees.

If there are any questions about this notice, please contact the University of Waterloo, Centre for Extended Learning, Waterloo, Ontario, Canada, N2L 3G1 or extendedlearning@uwaterloo.ca.

Course and Department Policies

Course Policies

This course *requires* regular access to the Waterloo LEARN course site. Your instructor will use this site for communicating important information concerning course matters, returning graded assignments, etc. A reliable internet connection and regular checking of the course site (at least twice a week) is therefore *mandatory*.

Late Policy

All assignments are due on the date and time indicated. Late assignments (without penalty) are permitted only when specifically allowed by the instructor. Late assignments will be penalized by 5% per day it is late (to a maximum of 20% for the first week), and by 50% if submitted prior to the end of the course. Permission may be obtained in advance for late assignments (with no penalty), but this must occur by email at least 3 days PRIOR to the assignment deadline.