

ENV 1114H: SPECIAL TOPICS IN THE SUSTAINABILITY TRANSITION – SUSTAINABLE FASHION?

Fall 2023

I. CONTACTS

Instructor: Prof. Miriam Diamond

Office: Earth Sciences, Rm. 3143

Virtual Office Hours: TBD

Email: Please use Quercus email

Tutorial Assistant: TBA

Contact: Quercus email

Time & Location: Thursday's, 9:00-11:00am, ES 1042

II. COURSE OVERVIEW

Course Description:

The statistics describing the extent and impact of the fashion industry, and textile industry writ large, are impressive:

- Textiles have the fourth largest environmental footprint after food, housing and transportation
- Fashion industry employs more than 300 million people along its value chain
- Global clothing production has doubled since 2000 so that we are buying 60% more clothing now than 15 years ago and keep them half as long
- 5% of the world's cultivated land is to produce natural fibres rising to 7% by 2030
- 4% of global freshwater extracted annually is used in the wet processing of textiles
- 2-8% of global GHGs come from production and manufacturing of textiles
- 20% of the world's wastewater and 35% of primary microplastics come from textiles
- The industry "over-produces" 30-40% each season causing large waste burdens
- About 85% of all textiles produced are disposed of annually; 15 million used garments enter Accra Ghana every week from the UK

"Greening" the fashion industry by reducing impacts to human and especially occupational health and ecosystem integrity is challenged by complex global supply chains and brands that push cheap fast fashion (acceleration from two to 52! "micro" fashion seasons per year). Solutions to this fast-growing problem are difficult, from changing corporate and consumer behaviour to determining what in fact are "best practices" for fashion over the entire life cycle.

Our goal: To develop credible and feasible solutions to reduce the human and ecosystem health impacts from the fashion industry.

Over this course we will learn about sustainability issues in the fashion industry so that we can develop

reasonable solutions to reduce the human and ecosystem impacts caused by the fashion industry. We will take a life-cycle approach that starts from considering raw materials (e.g., natural fibres, oil-derived synthetic fibres), then to production and manufacturing, through to end-of-life. Our exploration will be global to match the global nature of the supply chain.

To achieve this goal, we will take on the role of an international agency tasked with researching and proposing solutions articulated through an action plan that will engage partnering agencies, governments, the private sector, workers, civil societies and other interested parties.

Educational Objectives:

- Develop an understanding of the complex, interdisciplinary nature of environment and health issues using the fashion industry as a challenging case study,
- Take a “deep dive” into the details of the fashion industry in order to understand the nature of the problem in order to craft effective solutions,
- Explore solutions to improve the sustainability of the fashion industry that account for the multiple drivers (e.g., socio-economic, climate change, policy frameworks), actors involved (e.g., brands, regulatory agencies, workers), and constraints (e.g., economic, consumer behaviour, technological limitations, limited regulatory powers in many countries),
- Acquire the skills necessary to research and critically assess information, to work in an interdisciplinary group and effectively communicate, and
- Build knowledge and experience in developing evidence-based solutions.

III. HOW THE COURSE IS ORGANIZED

This is a case-based, research intensive course. Each week students will share their research results, culminating in a workshop to develop solutions and vet the action plan. See the weekly schedule below.

Evaluation: Students are required to attend all weekly sessions and to complete research expectations between classes.

- | | |
|--|-----|
| • Lead seminar and discussion on primary topic | 25% |
| • Write review and analysis of primary topic | 25% |
| • Participate in “develop an action plan” workshop | 10% |
| • Contribute to final written report that presents the solutions “action plan” | 30% |
| • Weekly participation based on completing one reading from other topics | 10% |

Details of Expectations:

In the first two weeks, you will choose a primary topic for your “deep dive”. You will work on the primary topic in small teams, depending on class enrollment, culminating in a presentation and written report. You will also contribute to the discussion of other weekly topic presented by other groups, for which you will prepare by reading one “source” or paper provided by leaders of that group.

1. Lead seminar and discussion on primary topic.

Due according to seminar schedule.

You and your team will conduct a literature review from which you will develop a 20-30 minute seminar

on your primary topic. The seminar will introduce the topic and delve into the details needed to develop solutions and the ultimate “action plan”. The presentation needs to tell a story starting from the problem statement through to investigating solutions. The presentation must reference the literature (peer-reviewed, gray literature, information from industry sources, etc.). You also need to select one reading to acquaint others in the class about the topic.

Order of topics will start with the life-cycle of fashion from planning and design, through to obtaining raw materials, to marketing and end-of-life considering human and ecosystems impacts at every stage.

2. Write review and analysis of primary topic.

Due according to seminar schedule.

You will translate a “polished” version of your seminar in written form. The written report (not an essay) needs to i) introduce the topic, ii) establish the motivation and knowledge gap for your research (background material), iii) explain what you found using referenced information, and iv) present a summary and conclusions.

You and your group members can decide whether to write a single report or individual reports that minimize overlap in the subject matter.

You may NOT use AI such as ChatGPT to compile and write this report. You are here to strengthen your analytical and critical skills, which comes from you reading, evaluating and synthesizing the information you have read.

3. Participate in “develop an action plan” seminar.

Last 2 classes

We will all “workshop” ideas before writing the final action plan. You will need to come to the workshop with several well formulated ideas for solutions and be prepared to defend your proposed solutions while critiquing those of others. The goal of the workshop is to discuss and vet many ideas for solutions so that the group can decide on the “best” (most effective, feasible, realistic, innovative, enduring) solutions to enter into our action plan.

4. Contribute to the final written report.

Due end of term.

The report’s main goal will be to present an action plan that was arrived at from the workshop. All class members must contribute to the action plan. The report will start by explaining the problem, challenges, drivers, etc. from a life cycle perspective. This information will come from a succinct, “boiled down” version of your review paper by including only those details that are needed. Together you must write up the agreed-upon solutions and action plan.

5. Weekly participation in seminars.

You will read one article for each seminar to familiarize yourself with that week’s topic being presented by others in the class. This will allow you to better understand the breadth of the fashion topic and to more fully participate in the seminars presented on these topics.

Submissions:

Please submit your review of primary topic electronically as a Microsoft Word (.doc and .docx) file or as a PDF via the course’s website on Quercus on (or before) the week following your seminar, e.g., the following Thursday by midnight.

IV. COURSE SCHEDULE

Date	Weekly Activity
Sept 15	MD: Introduction to course and the human and ecosystem impacts of fashion
Sept 22	MD: How to” develop an evidence-based “action plan” – content, elements, requirements-
Sept 29	Student seminar 1 <i>What are textiles made of & impacts? Natural and semi-synthetic fibres</i>
Oct 5	Student seminar 2 <i>What are textiles made of & impacts? Synthetics</i>
Oct 12	Student seminar 3 <i>Impacts from manufacturing</i>
Oct 19	Student seminar 4 <i>Impacts during use phase</i>
Oct 26	Student seminar 5 <i>What happens at End-of-Life?</i>
Nov 9	Reading week
Nov 16	Student seminar 6 <i>What are proposal solutions I</i>
Nov 23	Student seminar 7 <i>What are proposed solutions II</i>
Nov 30	Workshop I - start with 5 minute recap of each topic & ideas for solutions
Dec 7	Workshop II
Dec 21	Final report due

Oct 31 – final date to drop without penalty

Topics listed for each week are suggestions that follow a life-cycle approach

V. COURSE POLICIES

Please take note of announcements made via Quercus that will come to your utoronto email.

Late Penalties and Deadline Extensions: Late papers will be reduced by 3% of the assignment grade per day (including weekends). Please let me or the TA know BEFORE the due date if extenuating circumstances prevent you from participating in weekly classes or submitting work by the deadline. You can report your absence through the online Absence Declaration Tool on ACORN (in the Profile and Settings menu).

Online conduct and expectations: Please stay home if you are ill!! If you are able to, please participate by a zoom link under such circumstances.

Please note UofT’s policy regarding online conduct and supporting a positive learning environment: “*The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another’s differences. UofT does not condone discrimination or harassment against any persons or communities.*”

VI. INSTITUTIONAL POLICIES AND SUPPORT

Academic Integrity: Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student’s individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto’s Code of Behaviour on Academic Matters

(<https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

1. Using someone else's ideas or words without appropriate acknowledgement (including the use of phrases verbatim without quotation marks, even if you provide the appropriate reference in brackets or as a footnote).
2. Submitting your own work in more than one course without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <https://www.academicintegrity.utoronto.ca/>).

Accessibility Needs: Students with diverse learning styles and needs are welcome in this course. The University of Toronto is committed to accessibility: if you require accommodations for a disability, or have any other accessibility concerns about the course, please register with Accessibility Services as soon as possible (<https://studentlife.utoronto.ca/task/register-with-accessibility-services/>).

Contact information: Accessibility Services Reception: 416-978-8060; Email: accessibility.services@utoronto.ca

Additional Services and Support: The School of Graduate Studies has a range of resources and supports for graduate students (see: <https://www.sgs.utoronto.ca/gradhub/resources-supports/>)

Some of the following may be of particular interest:

- General student services and resources at [Student Life](#)
- Health and wellness services at <https://studentlife.utoronto.ca/department/health-wellness/>
- Full library service through [University of Toronto Libraries](#)
- Resources on conducting online research through [University Libraries Research](#)
- Graduate writing groups at <https://studentlife.utoronto.ca/program/graduate-writing-groups/>