



## Course Outline

### EDUC 6101— Fundamentals of Sustainability for Educators

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Course Schedule: On-line delivery

#### Statement of Territory

#### Department Mission and Core Focus

The Department of Education at Cape Breton University is committed to preparing teachers for their responsibilities as educators in both local and global contexts. To achieve this, we provide programs in both pre-service and continuing teacher education that emphasize disciplined professional inquiry while reflecting the best classroom practice and the results of current research on teaching and learning. The Department of Education is dedicated to preparing teachers, who will be knowledgeable, skilful, flexible, caring pedagogues and responsible members of the profession.

A core focus for the Education programs at Cape Breton University is Education for Sustainability (EFS). This vision of EFS is inclusive of the three realms of sustainability – environment, society and economy and addresses content, context, pedagogy, global issues and local priorities. Teachers and teacher candidates will engage in learning designed to cultivate, critical thinking, creativity, knowledge, and skills to actively address challenges with sustainable solutions. EFS supports the values of interdependence, empathy, equity, personal responsibility, social justice and holistic perspectives required to participate in society and to live sustainably and well.

#### Course Outcomes

The course is designed to develop skills, knowledge, and values aligned with:

- becoming a sustainably competent educator responsible for developing teaching knowledge and skills as it pertains to EFS

- demonstrating an understanding of new pedagogies to foster creativity, deep learning and innovative approaches to teaching and learning
- demonstrating the ability to empathize with the problems of others including issues affecting global communities
- demonstrating the ability for systemic thinking
- working and thinking from a futures oriented perspective
- demonstrating a personal commitment to sustainable living
- a commitment to decisiveness, action and an entrepreneurial mindset to advance sustainable solutions
- becoming an effective communicator able to use digital media technology creatively to deepen and accelerate sustainability education across all education processes

### **Course Objectives**

Students will:

- know the evolving definitions of sustainability and sustainable development
- understand the complexity of defining sustainability
- understand the principles and practices of sustainability
- develop an awareness of the emerging sustainability field and the scholarship of sustainability
- understand the basic principles of the science of sustainability
- recognize and provide examples of one-way traffic, and propose ideas for closing cycles
- provide examples of positive and negative feedback
- determine his or her own ecological footprint
- make the connection between the present wave of extinctions and earlier ones that have occurred throughout the planet's history
- identify a number of consequences for the environment and for human beings as a result of the degradation of the natural environment
- think critically about the role of consumerism and consumption on sustainability
- understand opportunities for individuals and for NGOs to contribute to sustainable development
- Understand sustainability principles as it relates particularly to environmental perspectives.
- understand technological opportunities for sustainable development and how creative, innovative thinking can foster sustainability
- understand opportunities for economies to contribute to sustainable development
- understand how entrepreneurial thinking can facilitate opportunities for sustainable development

- understand the positive developments and the important role of hope in the continuing efforts to influence individual attitudes and beliefs in the pursuit of the goal of sustainable societies.

### Textbook(s) and Other Resources

Required Text: Mulligan, M. (2015) *An Introduction to Sustainability: Environmental, social and personal perspectives*. New York: Routledge.

Additional required readings and supplemental readings, resources and texts are available on the course Moodle site.

### Learning Modules

#### MODULE 1: Sustainability: History, Evolution, Definitions and Concepts

In Module 1 we look closely at the definitions of sustainability and how they have evolved over time. A brief history of what we understand today as *sustainability* principles and practices will help contextualize and situate the concept of sustainability allowing us to appreciate its global emergence. Over the past century there have been seminal documents, individuals and gatherings that have shaped the concept of sustainability, as we know it today.

#### MODULE 2: The Science of Sustainability- Flows, Cycles, Loops and Systems

In Module 2 we explore the science of sustainability and the basic principles of ecology. The physicist Fritjof Capra reminds us that the term "sustainable" has been overused and often misused, so that articulating clearly what we mean by the term is of utmost importance. Capra reminds us that to develop sustainable human communities we do not have to start from square one - we have models. There have been human communities that have sustained themselves over generations. But Capra reminds us that the most powerful models we have are nature's ecosystems.

#### MODULE 3: Consumption and Materialism

In this module we explore the texts that attempt to explain and describe the complexities of the modern consumerist life style. The consumption of natural resources is essential to human life all around the world. The air, water, energy, timber, food and other resources that come from nature are the basis of, and sustain, all human activities. We live by producing, processing and then consuming these products of nature. However, the rate of resource consumption around the world is rising rapidly. So too are the many adverse social, economic and ecological impacts of over-consumption. Consumption has led to improved material living standards – private automobiles, television sets/computer/mobile technology, overseas holidays, new designer fashions, restaurant meals, etc. – at least for those who can afford to consume. However, it does not necessarily lead to a sustainable or fulfilling way of life.

## MODULE 4: Social and Personal Dimensions of Sustainability

Taking up the challenge to work for sustainable solutions requires patience, humility and courage - to appreciate and honour differing perspectives and diverse ways of thinking and being in the world. In this module we explore the personal and social dimensions of sustainability. It requires understanding environmental, economic and social systems as deeply interconnected and it requires the ability to think on different scales in the face of what can seem to be very big, complex issues. To affect change in our communities and in our own lives requires the ability to communicate clearly, to listen attentively, and to collaborate with others seeking creative, innovative approaches to complex problems.

## Module 5: Solutions - The Hope for Sustainability

Finding sustainable solutions to the many vexing, or wicked problems requires a hopeful optimism. The last 40 years of work in the environmental movement have raised the awareness of the general public and fostered cultural transformation. Moving toward sustainable communities requires creating partnerships and using the skills of diplomacy, negotiation, and compromise. Every day individuals and groups are undertaking this work and achieving success helping people, working together to create a shared vision of what a healthy biosphere with healthy social and economic communities look like. These achievements are happening incrementally - one step at a time.

### Assignments and other Course Requirements

**Discussion Forums and Contributions:** Throughout the course you will be given many opportunities to engage, discuss, share, debate in the spirit of the graduate seminar. Discussions are undertaken to further our exploration and thinking and to challenge taken for granted assumptions. Learning is collaborative and discussion is taken to be a supportive, respectful opportunity to learn from each other. The Discussion Forum Guidelines are posted on the Moodle site. Contribute to the learning community; share interesting resources in the Sustainability Resources Sharing Space. **15%**

#### Module 1: Sustainability: History, Evolution, Definitions and Concepts

Learning Task 1: Creating a Multi-media Digital Text - in this first assignment you will utilize the power of online multimedia curation and blogging software to deepen and demonstrate your learning by creating, organizing and presenting a topic that is relevant to the Module 1 readings. **15%**

#### Module 2: The Science of Sustainability

Learning Task 2: A Collaborative Project - Develop an Educator/Facilitator Resource and Teaching Guide for the science of sustainability concept of your choice. **25%**

#### Module 3: Consumption and Materialism

Learning Task 3: Creating a Reflective Digital Journal. Students can contribute to their blog/curation site. The learning activity for this Module is to reflect on the readings and to pay close attention to consumption habits and patterns for a week. By doing so we may make explicit that which is often unnoticed or implicit in our daily routines, behaviours and thought patterns when it comes to discerning and meeting our wants and needs. **15%**

#### **Module 4: Social and Personal Dimensions: Discussion Forum – Graduate Seminar**

Learning Task 4: Participate in a Graduate Seminar designed for more in depth involvement with the Module readings. **15%**

#### **Module 5: Solutions: The Hope for Sustainability**

Learning Task 5: The final course assignment is to identify a `source of vigour` close to you and your community. It may be a group, an NGO, an individual, an initiative, a business, a technology, government program, education initiative, policy or plan etc that is addressing a sustainability issue close to where you live. The source of vigour may be designed to address a cultural, economic, social, environmental problem in an urban or rural context. **15%**

#### **A Note on Grades**

Grades in the range of 90-100 indicate work that is of exceptional quality that represents achievement that is quite rare; all course outcomes are met and exceeded. Grades in the range of 80-89 reflect a level of achievement that is excellent and indicate a high degree of sustained effort and a demonstration of mastering most course content and skills. A grade in the 70 -79 range communicates a good effort with many course concepts and skills being mastered and an acceptable quality of course work being produced. Grades below 70 communicate that many of the core course outcomes have not been met by the student. Grades below 70 indicate the student has been unsuccessful in completing the course.

***Your evaluation will be based on clear standards and communicated through the use of assessment tools that reflect the criteria. Comprehensive descriptions and expectations will be given previous to the assigned learning tasks. You are encouraged to ask for assistance or clarification if you are unsure how to proceed on assigned work. There will be opportunities to discuss assignments and your progress with the course instructor through scheduled virtual “office hours” using email, phone, Skype or Black Board Collaborate.***

Code of Student Behaviour

All students should read carefully the section in the University calendar pertaining to “Ethical Behaviour in Academic Matters”. This information can be found at:

[http://www.cbu.ca/cbu/Calendar/Calendar\\_2007\\_2009/pdfs/calendar\\_07-09.pdf](http://www.cbu.ca/cbu/Calendar/Calendar_2007_2009/pdfs/calendar_07-09.pdf)

**Late/Missed Assignments**

It is important to have open and transparent communication with your instructor in the event of late or missed course work. Consistent with University policy on evaluated tasks, acceptable documentation if assignments/evaluated tasks are missed due to absence is required. Students are responsible for any missed materials and when acceptable documentation is received a mutually acceptable alternate arrangement for evaluation will be made. Penalties may be incurred unless alternate arrangements are made prior.

It is the student's responsibility to ensure that any course work that is submitted electronically is actually received by the instructor. Students should follow up with instructors to ensure emails and file attachments were received.

**Accommodation/ Special Needs**

Students requiring accommodation should self-identify to the instructors and refer to Jennifer Keeping Accessibility Centre at [www.cbu.ca/jkac](http://www.cbu.ca/jkac) for available resources.