# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



### **COURSE OUTLINE**

COURSE TITLE: Sustainable Environmental Planning

CODE NO.: NET 254 SEMESTER: 4

**PROGRAM:** Natural Environment and Outdoor Studies

**UTHOR:** Stephen Turco

**DATE:** Jan 2013 **PREVIOUS OUTLINE** Jan 2012

DATED:

APPROVED:

"C. Kirkwood" January 7, 2013

DEAN DATE

TOTAL CREDITS: 3

PREREQUISITE(S): None

**HOURS/WEEK:** 3 hrs/week

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### I. COURSE DESCRIPTION:

Cities, at their origins, were located and planned based on their geographical location, e.g. fortresses, trading posts, railway towns. However, since the second World War, the vast expansion of cities, largely influenced by an affluent society and the prevalence of the automobile, has created tremendous demand on community land and has brought new dimensions of environmental strain to cities and their regions. This course will look at ongoing environmental impacts related to urban growth, and methods to mitigate these environmental concerns in an effort to create vibrant and sustainable communities.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

- 1. Present an understanding of the sustainability issues facing cities <u>Potential Elements of the Performance:</u>
  - What is urban sprawl
  - Characteristics of urban sprawl
  - The environmental impacts of sprawl type development
  - The social, economic impacts of sprawl
- 2. Understand the forces at play that encourage sprawl and the global realities that are currently challenging the way Cities are planned Potential Elements of the Performance:
  - What is peak oil
  - Why are we at/near peak oil
  - What challenges do peak oil have on the way cities are planned
- 3. Comprehend and assess the environmental and social impacts associated urban and regional growth

# Potential Elements of the Performance:

- Urban storm water run-off and its impact on natural water sources
- Degradation of natural habitat as a result of sprawl
- Air pollution and its relationship to the built environment
- Understand social deficiencies in sprawl type development
- 4. List and describe key planning theories relating to how communities can be planned to improve quality of life, energy consumption and other environmental concerns

### Potential Elements of the Performance:

 Understanding the concept of density and how the use of density can mitigate the impacts of sprawl

- The role of public and alternative transportation in addressing urban sprawl
- Understanding key approaches to developing dense, livable cities, specifically new urbanism/smart growth
- 5. Assess current local (i.e. Sault Ste. Marie) development patterns and communicate solutions to foster future sustainable development measures, based on global best practices.

### Potential Elements of the Performance:

- Understanding sprawl development patterns in Sault Ste. Marie
- Assessing the state of Public and alternative transportation in the community
- 6. Present conceptual plans illustrating the sustainable best practices Potential Elements of the Performance:
  - Applying design solutions to "re-plan" existing areas and/or new development sites
  - Re-thinking traditional local development utilizing new urbanist/smart growth concepts
  - Assessing best practices from around the world and how they can be incorporated as part of future urban development

#### III. TOPICS:

- 1. Concept of Urban Sprawl and Peak Oil
- 2. Sustainable planning best practices
- 3. Concepts of Urban Sprawl, Mixed Use Development, Fused Grid, New Urbanism, Transit Oriented Design, Age-Friendly Communities

#### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- 1. Seven Rules for Sustainable Communities: Design Strategies for the Post Carbon World. Patrick M. Condon
- 2. Other online resources will be suggested throughout the course

# V. EVALUATION PROCESS/GRADING SYSTEM:

Attendance = 15% Test = 20% Assignment 1 = 25% Assignment 2 = 40%

The following semester grades will be assigned to students:

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Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical	
11	placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded	
	subject area.	
X	A temporary grade limited to situations	
	with extenuating circumstances giving a	
	student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course	
v v	without academic penalty.	
	willout academic penalty.	

#### VI. SPECIAL NOTES:

## Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be granted admission to the room.

<Include any other special notes appropriate to your course>

Cell Phone use (i.e. calls, texts, apps, etc.) during class time will not be tolerated. Students will be asked to leave and attendance marks will be adjusted accordingly.

#### VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.