SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE:	Sustainable Environmental Planning		
CODE NO. :	NET254	**SEMESTER:**	4
PROGRAM:	Natural Environment Technician/Technologist		
AUTHOR:	Stephen Turco (updated by E. Muto)		
DATE:	Dec 2015	**PREVIOUS OUTLINE DATED:**	Jan 2015
APPROVED:	Colin Kirkwood		Dec 2015
	DEAN/CHAIR		**DATE**
TOTAL CREDITS:	3		
PREREQUISITE(S):	None		
HOURS/WEEK:	3		

For additional information, please contact Colin Kirkwood, Dean
School of Environment, Technology & Business
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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

   Potential Elements of the Performance:
   - 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 with 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. 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 urbanism/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:

Daigle, J.M. and Havinga, D.J. 1996. **Restoring Nature's Place: A Guide to Naturalizing Ontario Parks and Greenspace**, Ecological Outlook Consulting and Ontario Parks Association.

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests and Assignments	85%
Attendance and Participation	15%
	100%

The following semester grades will be assigned to students:

Grade	Definition	*Grade Point Equivalent*
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	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 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 without academic penalty.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

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.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.