SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON.

COURSE OUTLINE

COURSE TITLE: Site Planning and Landscape Design

COURSE CODE: ARC 307

PROGRAM: Architectural Technology

SEMESTER: VI (Winter)

AUTHOR: B. Sparrow

DATE: 11 May 1993 Aug/93

PREVIOUSLY DATED:

APPROVED: _____ DATE: 93 08 19
(DEAN)

TOTAL CREDIT HOURS: 4
PREREQUISITES: ARC 212 ARC 304

I. PHILOSOPHY AND GOALS

This course is intended to introduce the student to basic site development, planning and landscape design issues. Environmental factors affecting planning and site design will be examined, including windflow and snowdrifting. Plant and surface materials in northern climates will also be examined.

II. STUDENT PERFORMANCE OBJECTIVES

Upon successful completion of the course, the student will be able to:

1. Develop a site plan based on response to environmental factors.
2. Design a grading plan for a given site, building and existing elevations.
3. Design a traffic circulation pattern and parking layout given a set of parameters and constraints.
4. Select plant materials appropriate for a particular application in a Northern climate.
5. Understand and apply principles of windflow and snowdrifting to site design and building configuration.
6. Analyze a site to establish location and extent of microclimate zones.

III. TOPICS TO BE COVERED

1. Development and planning issues.
2. Building and site integration.
3. Environmental factors and microclimate.
4. Windflow and snowdrifting.
5. Surface drainage and grading.

6. Plant materials.

7. Traffic movement and parking.

8. Site design and accessibility.

IV. LEARNING ACTIVITIES

REQUIRED RESOURCES

1.0 Development and Planning

Upon successful completion of this unit, the student will be able to:

1.1 Understand the impact of the history of North American planning on current planning.

Handouts

1.2 Apply various mapping methods to interpret data.

1.3 Prepare a site planning checklist.

2.0 Building and Site

2.1 Discuss building and site integration issues.

2.2 Describe site planning and building energy issues.

2.3 Prepare a site plan given a set of parameters.

3.0 Environmental Factors

3.1 Describe climate and site issues.

Plants, People and Environmental Quality.

3.2 Define microclimate	
3.3 Perform a microclimate analysis of a given site.	
4.0 Windflow and Snowdrifting	
4.1 Understand principles of windflow.	Handouts
4.2 Understand the application of barriers.	
4.3 Predict snow accumulation patterns based on models.	
5.0 Drainage and Grading	
5.1 Understand the principles of surface and building drainage.	
5.2 Prepare a grading plan for a site given a set of parameters.	
6.0 Plant Materials	
6.1 Identify plant material appropriate to northern climates.	Plants, People and Environmental Quality
6.2 Understand the use of plant material for solar/wind control.	
6.3 Prepare a planting plan given a set of parameters.	
7.0 Vehicular Movement and Parking	
7.1 Understand the requirements for vehicular movement.	Architectural Graphic Standards

7.2 Prepare a parking layout for a particular set of conditions.	
8.0 Site Design and Accessibility	
8.1 Identify site design issues related to accessibility.	Ontario Building Code Handouts
8.2 Examine a site to determine degree of accessibility.	
8.2 Prepare a design to retrofit a site to allow accessibility.	

V. METHOD OF EVALUATION

Students will be assigned a final grade based on successful completion of tests, assignments, projects and attendance, weighted as follows:

Assignments	70%
Tests (3)	30%
TOTAL	100%

Late assignments will be penalized 10% for each day late. Successfully completed assignments more than 4 days late will receive a 'C' (55) grade. Attendance and punctuality will be considered in the student assessment.

A final letter grade will be assigned as follows:

A+	90-100%
A	80-89%
B	70-79%
C	55-69%
R	Repeat

VI. REQUIRED STUDENT RESOURCES

Architectural Drafting Equipment

In addition to those materials provided in the kit, the student will be expected to supply various other media and materials necessary to complete the assignments and projects.

VII. ADDITIONAL RESOURCES AND MATERIALS

Architectural Graphic Standards
Ramsey/Sleeper
Latest Edition
John Wiley & Sons

Plants/People and Environmental Quality
G.O. Robinette
U.S. Department of Interior
National Parks Service

There are available in the library a number of texts and periodicals on the subject.

VIII. SPECIAL NOTES

1. Students with special needs are encouraged to discuss required accommodations in confidence with the instructor.

2. The instructor reserves the right to modify the course and course outline as deemed necessary to meet the needs of the students.