State University of New York
College of Technology at Delhi, NY
Spring 2012

COURSE NAME: AECT 350 – Environmental Systems II

CREDIT HOURS: 3; 3 - 1 hr. lectures per week

INSTRUCTORS:

D. Hultenius (Acoustics + Lighting portion)	**J. Brown (Green Building portion)**
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PREREQUISITE:

AECT 280 – Environmental Systems I, Junior status in either the B.T. Architectural Design & Build program or the B.T. Construction Management program (or Instructor's approval)

COURSE OBJECTIVES:

1. Understand the basics of acoustics as applied to typical building types.
2. Understand the basics of lighting as applied to typical building types.
3. Understand the basics of green building technologies as applied to typical building types.

REQUIRED TEXT: Lecture notes obtained from College Bookstore.

GRADING (Acoustics + Lighting portion):

Four (4) unit tests…..…. 4@10% = 40% (No test grades dropped)
Two Design Projects……2@20% = 40%
Quizzes……..…….....5% (One quiz grade dropped)
Homework……5%
Participation/Attendance……..10%

GRADING (Green Building portion):

To be determined by instructor

POLICIES:

1. ATTENDANCE: Students are expected to attend ALL required lectures and ALL required labs, and attendance will be taken at each. Quizzes, homeworks or other assignments not turned in when due will be given a grade of zero, no exceptions. A test may, at the discretion of the instructor, be made-up under extreme University-approved circumstances only. Unless prior written arrangements are made with the instructor and/or University-approved absences are provided, a grade of "F" for the course will be assigned if 7 or more hours of lectures and/or labs are missed. Full credit for "Participation/Attendance" will be awarded if 3 or

fewer lectures are missed, no credit will be awarded if 4 or more missed lectures. Lateness and/or being unprepared for class will not be tolerated as it is disruptive and inconsiderate. Repeat violators will be dropped from the course. Absolutely NO cell phones allowed at any time in class – a grade of ZERO will be given if a cell phone is used during any quiz or test.

2. CHEATING: You are encouraged to work and study with other students in the class, especially on group assignments. However, you are ultimately responsible for your own work, and it is usually quite evident who is "copying" from whom. Any individually assigned graded work that is discovered to be a copy of another student's work will result in ALL parties involved receiving a zero for that particular test, quiz or homework. Computer assignments (i.e., Internet, CAD, SketchUp, word-processed, spreadsheets and/or other computer software) must be wholly completed by each individual student - i.e., NO sharing of ANY electronic data. Repeat violators will be given an “F” for the course and be referred to the Division Dean for further action.

3. OUTSIDE HELP: Please make every effort to see the instructor for additional help if, at any time, you feel you need some further clarification or review of the subject matter. Do not let yourself get too far behind; I am here to help you.

AECT 350 – Env. Systems II Schedule (Acoustics + Lighting portion):

Lecture:	Topic:
	Acoustics:
1	Introduction, properties of sound
2	Sound characteristics, Project – Acoustical analysis & design
3	Sound characteristics (cont.)
4	Acoustical materials & methods
5	Acoustical materials & methods (cont.), Special acoustic materials
6	Test 1
7	Building sound & noise control
8	Building sound & noise control (cont.)
9	Acoustical design, Sound reinforcement systems
10	Acoustics – Case studies, Innovations in acoustical design
11	Test 2, Acoustics Project due
	Lighting:
1	Properties of light
2	Natural light “Daylighting”, Project – Lighting analysis & design
3	Natural light “Daylighting” (cont.)
4	Artificial Lighting, Artificial Lighting (cont.)
5	Outdoor lighting
6	Test 1
7	Lighting calculations, Emergency, security & egress lighting
8	Lighting design, Lighting design documentation Comm. Bldg. - Lighting Plan
9	Lighting design examples – Retail, office, schools, industrial
10	Test 2, Lighting Project due