



Department of

**Environmental Engineering**

M e r c e r U n i v e r s i t y

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**Syllabus for EVE 420.001**  
**EVE 420 - Solid Waste Management**  
**Spring Semester 2008**  
**Tuesday and Thursday**  
**1:40 to 2:55 pm**  
**Room: EGC 110**

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**Instructor:** Dr. Philip McCreanor, Associate Professor  
Department of Biomedical and Environmental Engineering  
**Office:** Suite 116F, School of Engineering  
**Phone:** 478.301.2044 (w)  
**Email:** mccreanor\_pt@mercer.edu

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**Textbooks and Supplies:**

Required:

P. Aarne Vesilind, William Worrell, and Debra Reinhart, Solid Waste Engineering, Brooks/Cole, 2002

Suggested Reference:

George Tchobanoglous, Hilary Theisen, and Samuel Vigil, Integrated Solid Waste Management - Engineering Principles and Management Issues, McGraw-Hill Book Co., 1992.

**Web Sites:**

- Mercer Blackboard: <<http://www.mercer.edu/webct/>>

Please review the Student Guide located at this URL prior to logging into Blackboard.

To log on to Blackboard, use your Mercer Identification Number as your username, and your birth date (YYMMDD, example: 780521) as your password.

- EVE 420 - Solid Waste Lessons
  - [http://faculty.mercer.edu/mccreanor\\_pt/EVE420/EVE420\\_Table\\_of\\_Contents.htm](http://faculty.mercer.edu/mccreanor_pt/EVE420/EVE420_Table_of_Contents.htm) or
  - [http://faculty.mercer.edu/mccreanor\\_pt](http://faculty.mercer.edu/mccreanor_pt) → Courses → EVE 420

**Catalog Description: (Course Purpose)**

Chemical, mechanical and biological equipment and instrumentation for the collection, processing and disposal of solid wastes are studied and designed. Federal, state, and local regulations regarding generation and disposal of wastes are covered. Handling and recycling of municipal wastes is emphasized.

**Course Objectives: (Learning Objectives)**

Learning objectives preface each of the on-line lessons.

## Prerequisites: (and/or corequisites)

- CHM 111, General Chemistry I
- EVE 290, Introduction to Environmental Engineering

## Grading:

Exam #1:	20%
Exam #2:	20%
On-line Quizzes	15%
Homework & Assignments:	15%
Final exam:	30%
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	total: 100%

Letter grades will be assigned using a 10 point scale (90-100 A, 80-89 B, etc.)

## Course Standards:

1. **Attendance is required.** Students are expected to attend all scheduled class periods and arrive on-time. More than three absences will result in a grade penalty of 1 point per absence.
2. **Tardiness Policy:** If you are more than 10 minutes late to lecture, please do not enter the classroom. If a lecture has started, please take the first available seat.
3. **No eating** during class.
4. Please **turn off cell phones and pagers** before entering the classroom.
5. **On-line Quizzes:** On-line quizzes will be available on the Blackboard Web Site. These quizzes will be due by 11pm on the due date. The quizzes will have a 1-hour time limit and will cover the on-line lesson materials. It is expected that the results of these quizzes represent an individual effort.
6. **Homework Assignments:**
  - On-line homework sets will be due on-line by a specified time on the due date. . Students will be able to submit hard copy reworks of these assignment for re-grading and up to full credit. Hard copies will not be accepted unless the homework has been submitted on-line.
    - Hard copy rework submissions consist of 1) a printout of the original on-line submission, 2) neat reworks of the missed problems, and 3) a brief statement regarding the error made on the initial attempt at the problem.
  - Traditional hand-in homework sets may also be assigned.
  - While students are encouraged to work together on homework problems. Mastery of the material is a personal responsibility.
7. **Late Work:** Submissions may be made after the deadline only by PRIOR arrangement with the instructor. Any missed work or exams, etc. WILL NOT BE MADE UP unless an emergency or unavoidable cause can be identified and approved.
8. You are encouraged to schedule a conference at any point that you need it. If you need to see me, catch me after class to schedule a time or contact the BME/EVE/TCO Secretary (Mrs. Malone, [Malone\\_DL@Mercer.edu](mailto:Malone_DL@Mercer.edu), x2430) to get on my calendar.
9. The **honor code** provisions as outlined in the *Bulletin* and in the student handbook, *The Lair*, will be assumed for everyone. Plagiarism is a violation of the honor code and is prohibited. Your grade is your responsibility. Cheating of any kind will not be tolerated.
10. This syllabus is subject to change. An instructor's posting to the Class Web Site will be considered written notification of any changes to the syllabus or class requirements.

## **Disability Services** (For Macon Undergraduate colleges):

Students requiring accommodations for a disability should inform the instructor at the close of the first class meeting or as soon as possible. If you are not registered with Disability Services, the instructor will refer you to the Disability Support Services office for consultation regarding documentation of your disability and eligibility for accommodations under the ADA/504. In order to receive accommodations, eligible students must provide each instructor with a "Faculty Accommodation Form" from Disability Services. Students must return the completed and signed form to the Disability Services Coordinator on the 3rd floor of the Connell Student Center. Students with a documented disability who do not wish to use academic accommodations are also strongly encouraged to register with Disability Services and complete a Faculty Accommodation Form each semester. For further information, please contact Carole Burrowbridge, Disability Services Coordinator, at 301-2778 or visit the website at [http://www.mercer.edu/stu\\_support/swd.htm](http://www.mercer.edu/stu_support/swd.htm)

## **Electronic Communication:**

Electronic communication is an important adjunct to face-to-face communication, including from professor to students, students to professor, and students to students. You must have regular access to your e-mail and to WebCT. If you do not have an active e-mail address on the first day of class, please secure one. Access to the Web and to the Internet is also integral to the class work. A number of laboratories on campus will provide access, in addition to EGC 102.

## **Important Dates:**

Exam #1:	Feb. 14
Withdrawal Deadline:	March 20
Exam #2:	April 3
Final Exam:	Thursday May 1, 7:00 - 10:00 p.m.
Final Exam Period:	April 28 to May 3

## **Course Content:**

- Solid Waste Regulations
- Waste Generation
- Waste Characterization
- The Physical Properties of Waste
- Waste Separation and Processing
- Recycling
- Composting
- Landfills
- Incineration

**Class Planner:**

Week	Lecture Dates		NOTES Tuesday	NOTES Thursday
	(Tues.)	(Thur.)		
1	Jan. 8	Jan. 10	First Day of Class	
2	Jan. 15	Jan. 17		
3	Jan. 22	Jan. 24		
4	Jan. 29	Jan. 31		
5	Feb. 5	Feb. 7		
6	Feb. 12	Feb. 14		EXAM #1
7	Feb. 19	Feb. 21		
8	Feb. 26	Feb. 28		
9	Mar. 4	Mar. 6	SPRING BREAK	SPRING BREAK
10	Mar. 11	Mar. 13		
11	Mar. 18	Mar. 20		
12	Mar. 25	Mar. 27		
13	Apr. 1	Apr. 3		EXAM #2
14	Apr. 8	Apr. 10		
15	Apr. 15	Apr. 17		
16	Apr. 22	Apr. 24		Last Day of Class

**Notes:**