

**TRENT UNIVERSITY**  
**ENVIRONMENTAL AND RESOURCE STUDIES PROGRAMME**  
**ERST 3080Y WASTE MANAGEMENT**  
**2010-2011**

**Course Description:**

This course examines current and leading edge methods and systems for waste management and for diversion of used resources from disposal. Related social, economic, health, political and ecological matters are considered within a policy and planning framework. The main focus is on municipal waste management, with a lesser focus on radioactive wastes and industrial hazardous wastes.

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**Secretary:** Deb Mills                      ESC B202                      748-1011 ex 7199

**Class:**              Weekly lecture, Mondays 3:00-4:50      Gzowski College Rm 103

Students are encouraged to contact the instructor by e-mail or during the class break.

**Textbook:**

Required: 1) Hans Tammemagi, *The Waste Crisis: Landfills*  
2) Course Pack, Volume 1 [Fall] and Volume 2 [Winter]; selected material from various sources.

**ASSIGNMENTS AND MARKING SCHEME**

Grades will be based on accuracy, organization, clarity, adherence to size requirements, depth of understanding, relevance and conciseness. Students in this course are expected to become participants in the changing world of waste management. Research is expected to involve work beyond library research, including direct contact with persons active in the waste management field.

Late written assignments will be penalized by 5% per day late. If a revised deadline for written material seems absolutely necessary, it may be negotiated with the instructor until 7 days before the deadline. Written approval of the instructor must be received.

**Academic Integrity:**

Academic dishonesty, which includes plagiarism and cheating, is an extremely serious academic offence and carries penalties varying from a 0 grade on an assignment to expulsion from the University. Definitions, penalties, and procedures for dealing with plagiarism and cheating are set out in Trent University's *Academic Integrity Policy*. You have a responsibility to educate yourself – unfamiliarity with the policy is not an excuse. You are strongly encouraged to visit Trent's Academic Integrity website to learn more – [www.trentu.ca/academicintegrity](http://www.trentu.ca/academicintegrity).

**Access to Instruction:**

It is Trent University's intent to create an inclusive learning environment. If a student has a disability and/or health consideration and feels that he/she may need accommodations to succeed in this course, the student should contact the Disability Services Office (BL Suite 109, 748-1281, [disabilityservices@trentu.ca](mailto:disabilityservices@trentu.ca)) as soon as possible. Complete text can be found under Access to Instruction in the Academic Calendar.

**Assignments:**

Examinations:

November Midterm	20%
March Midterm	20%
Final Exam	20%
Personal Waste Audit Project and Report	10%
Research Project	30%

**Personal Waste Audit:**

Purpose: to become more aware of the garbage we throw away and to change our habits to minimize garbage creation.

Step 1: Week of September 27, fill in Waste Watcher's Diary.

Step 2: By October 18, submit report (2-3 single-spaced pages) stating:

- 1) major types of waste you produce and where disposed of it;
- 2) what you can do to reduce or eliminate these wastes.

Step 3: Change your waste generation.

Step 4: Week of January 24, fill out Waste Watcher's Diary again.

Step 5: By February 7, submit final report of waste audit (3-4 single-spaced pages) stating:

- 1) changes in wastes you generated comparing week of September 27 and January 24 [be sure to keep Waste Diary and report from first term];
- 2) waste streams you were least successful at eliminating and why;
- 3) changes needed to address the waste streams not eliminated.

**Research Project:**

**Purpose:** to gain better in-depth understanding of a resource/waste management topic; to gain real world experience on a waste issue; to contribute to improved waste management.

**Types of Projects:** The project should be more than library research. Look for original documents from government agencies, etc. Depending on topic, contact citizens' groups, environmental groups, waste generators and waste handling companies. See if the project can be of practical benefit to someone, e.g., do some research for an environmental or citizens' group or help them organize; critique a proposal for a waste policy currently under review or out for public comment; help develop a waste management program in your residence; propose ways to address a waste management issue that seems intractable.

Projects may be carried out individually or co-operatively with other class members. If you do a co-operative project, the report size requirements may need to be adjusted. This should be worked out with the instructor as your project proposal is being developed.

**Step 1:** By November 29, submit a written proposal for approval. The proposal should include a description of the topic, what will be gained by doing the project, and a description of how you will do the project.

**Step 2:** Submit research paper by March 21. The paper should be approximately 20-25 double-spaced pages.

**IMPORTANT DATES**

Sept. 27	Week one of personal waste audit
Oct. 18	Report on waste audit
Nov. 22	Midterm exam
Nov. 29	Submission of research project proposal for approval
Jan. 24	Second week of personal waste audit
Feb. 7	Report on waste audit

March 7	Midterm exam
March 21	Research project due
April 4	Take-home exam distributed
April 21	Take-home final exam due

## **FALL SCHEDULE**

- WEEK 1: September 13: Introduction to Course – JJ & CM
- WEEK 2: September 20: The Direction of Resource/ Waste Management - JJ
- WEEK 3: September 27: Reduce-Reuse-Zero Waste - JJ
- WEEK 4: October 4: Generation of Solid Waste & IC&! Waste - CM
- WEEK 5: October 11: No Class -- Thanksgiving
- WEEK 6: October 18: Recycling Part 1 - CM
- WEEK 7: October 25: No Class – Reading Week
- WEEK 8: November 1: Recycling Part 2 - CM
- WEEK 9: November 8: Composting - CM
- WEEK 10: November 15: Incineration and Energy From Waste - CM
- WEEK 11: November 22: Test
- WEEK 12: November 29: Landfill - JJ
- WEEK 13: December 6: Life Cycle Analysis and Waste Issues - CM

## **WINTER SCHEDULE**

WEEK 1: January 10:	Radioactive Waste - JJ
WEEK 2: January 17:	Hazardous Waste – Part 1 - JJ
WEEK 3: January 24:	Hazardous Waste – Part 2 - JJ
WEEK 4: January 31:	The Waste Management Industry - JJ
WEEK 5: February 7:	Federal, Provincial & Municipal Roles - CM
WEEK 6: February 14:	Siting Waste Management Facilities - JJ
WEEK 7: February 21:	No Class – Reading Week
WEEK 8: February 28:	Risk, Equity and Compensation - JJ
WEEK 9: March 7:	Test
WEEK 10: March 14:	Finance and Economics - CM
WEEK 11: March 21:	Producer Responsibility – Part 1 - CM
WEEK 12: March 28:	Producer Responsibility – Part 2 - CM
WEEK 13: April 4:	Wrap Up – CM