

**San Jose State University**  
**College of Social Sciences / Environmental Studies Dept**  
**EnvS 148 Section 1: Recycling and Resource Management**  
**Spring 2014**

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<b>Office Hours:</b>	Tues and Thurs 1:30-3:30 and by appt
<b>Class Days/Time:</b>	Tues and Thurs 10:30 a.m.-12:00
<b>Classroom:</b>	Clark 243
<b>Prerequisite</b>	Environmental Studies 001; may be waived with instructor consent.
<b>GE/SJSU Studies Category:</b>	This is a “specialty” course within the ES dept. It is not a GE course.

**COURSE DESCRIPTION**

Historically federal, state, and regional political policies and practices have maintained laws and associated regulations requiring consumer and business discards, municipal solid wastes (MSW) and recyclables, to be collected and managed. This course seeks to understand to these policies and improved sustainable alternatives.

Business and consumer products begin “life” as natural resources extracted from the environment which are then processed causing significant environmental disruption and impacts, perhaps more than any human activity when studied from a life cycle analysis perspective. Government has historically supported consumption and with a variety of policies including resource extraction subsidies and other financial incentives. At a products end of life, political systems again play a role, largely supporting disposal and incineration alternatives over recycling and reuse. It can be argued that disposal alternatives subsidize the inefficient manufacture and consumption of goods. Inevitably, society has created and continues to maintain a largely linear cradle-to-grave system of natural resource “management” that converts and wastes natural resources discarding and ultimately managing them as pollutants. Compounding the issue is that landfill and incineration alternatives wastes the energy and the associated environmental impact used to process energy resources to manufacture and produce products from natural resources.

National and global political and economic system converts much of our natural resources into pollutants. In the process of doing so, we waste much of the energy used to transform raw materials into products, creating pollutants that cause additional economic, human and ecological disharmony (impaired or loss of ecological services, air pollutants, etc.). These disposal alternatives destroys economic opportunities to make new products and reduce overall environmental impact through efficient resource use.

Apparently unconcerned with environmental and economic sustainability, society maintains an unsustainable throw-away material economy whereby natural resources and the energy to transform those resources into marketable goods literally go to the “dumps.” For all of time, communities must expend funds to protect themselves from the threats of the self-created toxic landfills, incineration ash, and municipal waste leachate. This is contrary to the natural cyclical system that maintains healthy natural systems and supports human endeavors.

The problem of this system has been recognized, and some communities have engaged in waste reduction and recycling practices. However, the economic and political transition requires not only greater awareness but greater engagement of solutions to effectively engage in the benefits of a recycling economy. A recycling economy would encourage the efficient use of resources in manufacturing products and packaging resulting in reduced waste production, collection of recyclables, and the manufacture of recycled-content products. Economic opportunities can be spurred with political innovation and environmental damage and related costs reduced. However, adoption of new practices is uneven across the nation.

This course is highly interdisciplinary and will investigate these issues while focusing on practical understanding of the municipal solid waste management, or what is more properly known as Sustainable Resource Management (SRM). The course will consider politics, business, economics, marketing and science, environmental knowledge, governmental systems, urban planning, engineering and more. We will study federal, state and local laws and regulations and trending issues; learn the role of government and the interplay between government and business in creating and maintaining markets and spurring innovation; learn the role of technology and science; learn how to implement sustainability rather than talk about it as a nebulous goal.

Transitioning from a discard-based, government-centric system requires knowledge of data and facts and how to apply them. We will rely primarily on data from government sources, their contractors, industry, and study of a variety of “real world reports.” This information will be provided on a course web site. The course will have guest speakers from industry and government and include field trips to recycling facilities (probably one day to two or more facilities) and we may attend a professional recycling conference where we’ll meet professionals and ask them questions.

We will study the significant environmental and economic benefits of managing municipal solid waste (MSW) streams as natural resource streams. While this course emphasizes discard management policies, procedures and practices, we will also study related past, present and possible future environmental policy and practices of federal, state, and local government as well as the actions of private industry.

### **Course Goals and Learning Objectives**

Coursework will include an historical overview, regulatory approaches to waste reduction, California and national legislation, material recovery facilities, recycling markets and marketing recyclables, recycling processes, and more.

Learning Objective 1: Students should be able to demonstrate an understanding of; a) key legislation, b) policy development, c) program management mechanisms, d) the responsibility of local, state, and the federal government, e) market realities, and; f) emerging private and/or public initiatives.

Learning Objective 2. Students should be able to demonstrate an understanding of the connections between issues (systems theory), discuss environmental theory and seek methods for efficient resource management through waste reduction, recycling, market realities, and the concept of Zero Waste.

Learning Objective 3. Students should be able to demonstrate an understanding of integrated waste management, current management techniques, future trends, and address issues in regard to their environmental, political, technological, and economic impacts.

## **REQUIRED READINGS/BOOKS**

Readings are available on the course website.

Key course websites:

- The course may be found on the SJSU's Canvas Learning Management System.
- Other Key web sites: (for course research)
- United States Environmental Protection Agency, Office of Solid Waste
    - <http://www.epa.gov/osw/>.
  - California Department of Resources, Recovery and Recycling
    - <http://www.calrecycle.ca.gov/>
    - <http://www.calrecycle.ca.gov/BevContainer/>
  - Californian's Against Waste
    - [www.cawrecycles.org](http://www.cawrecycles.org)
  - Northern California Recycling Association (Spring conference)
    - [www.ncrarecycles.org](http://www.ncrarecycles.org)
  - Center for the Development of Recycling (Santa Clara County Recycling Hotline and Website—ES 193 student credit available)
    - [www.recyclestuff.org](http://www.recyclestuff.org) (Information Resource Guide: found in the publications section, very useful to find sources for research)
  - California Resource Recovery Association (Summer conference)
    - [www.crra.com](http://www.crra.com)
  - Grass Roots Recycling Network: [www.grrn.org](http://www.grrn.org)

Book Club Project (select one to read)

- Rathje, William and Murphy, Cullen. 1993. Rubbish, The Archaeology of Garbage. HarperPerennial. New York.
- Royte, Elizabeth. 2005. Garbageland: On the Secret Trail of Trash. Little, Brown and Company. New York.
- Humes, Edward. 2012. Garbology: Our Dirty Love Affair with Trash. Penguin Books. New York.
- Strasser, Susan. 1999. Waste and Want: A Social History of Trash. Metropolitan Books. New York
- Connet, Paul. 2013. The Zero Waste Solution. Chelsea Green Publishing. White River Junction, Vermont.

## **Readings/Schedule**

Classroom discussions, exams, and reading assignments and due dates are listed on an accompanying *Schedule*.

## **CLASSROOM PROTOCOL**

### **Class Format**

This course will be taught using a seminar format and the Socratic method (the professor will ask “what do you think of the issue and for you to explain why”—students aren’t required to have the “answers” but must have a thoughtful response). Students are expected to be in class for all meetings. We’ll have guest speakers, attend a professional conference and/or field trips (more than likely scholarships will be obtained for each class member) have course lectures and complete activities on the assignment list (see the schedule). The professor will provide lectures and an occasional video to clarify topics throughout the course. The *course is designed to engage in active learning with student interaction*. It also provides an opportunity for students to learn and practice “real life” skills such as writing, group dynamics, project development, and have interaction with working professionals. We will extrapolate information from literature reviews, interviews and site visits to judiciously apply critical thinking skills in the analysis of policy. *Quality participation is expected. The application of an inquisitive nature is the key element to a good classroom experience—feel free to ask questions!*

Canvas Learning Management System (LMS): Computing Skills, Our Course, Attendance, and Postings

This course operates on Canvas, SJSU’s LMS. Students are expected to have basic computer skills including proficiency with the operating system of their computer, software used in the course (word processing, possibly some Excel), access and use of a web browser, the Canvas LMS (see above), and properly attaching documents to emails. This course does not teach computer and software skills. All questions regarding Canvas or related SJSU web or computer issues must be directed to the SJSU help desk. To access the course:

**Login URL:** <https://sjsu.instructure.com>

Please note that it should NOT have the “www” at the start of the URL like many other websites.

**Username:** SJSU 9-digit ID number.

**Password:** Self-generated password for your SJSUOne account

**Courses:** Once logged into Canvas, you will see your course or courses listed in the Courses Heading on the top of the page. From the dropdown menu, click on the course name, and you will be entered into the course. Note: That link will not be active until the start date of the course.

**It is recommended that you visit the eCampus Canvas website at**

<http://www.sjsu.edu/at/ec/canvas/>. This website offers a number of Quick Start Learning Guides to help you navigate Canvas tools. Also, detailed guides can be found at <http://guides.instructure.com/>.

For questions regarding the course or course materials on Canvas, please contact me, the instructor. **For issues related to the operation of Canvas, please contact the eCampus Help Desk.** The Help Desk can give technical support for issues encountered in Canvas Courses.

- Phone: (408) 924-2337
- Submit a help ticket using the following  
URL: <https://isupport.sjsu.edu/ecampus/ContentPages/Incident.aspx>.
- While logged into Canvas, click on the word **Help** on the upper right corner of the screen.

## STUDENT RESPONSIBILITIES

Class members **are required** to be engaged with the material. ***Be a responsible class member by being prepared for class.*** The course is carefully constructed to *build knowledge from each meeting and activity. Missing a class causes disruption to this cycle of learning and will affect grades (participation is required).* Come to each class **prepared to engage, discuss, and learn (active learning)**. Here's some other advice:

- Please bring a name card to put on your desk until I get to know you.
- ***Be prepared to be conversant about the reading material each day (graded).***
- Actively participate in learning: Ask questions, provide opinions, and respond to questions asked in class. (Opinions are always ok; you aren't graded on them. You are graded on not knowing or engaging with the discussion info).
- Attend each class to pick up class handouts, if any.
- Take good notes. You'll need them for the assignments.
- Take the time to edit your work and write quality assignments.
- Pay attention to details in the schedule including due dates. They may change.
- Read assignment instructions carefully
- Seek clarity. Ask questions!
- Start work immediately on assignments once they are received. If you have questions it's ok to ask at the beginning of class or during office hours.
- Be prepared for guests by reading the assigned material and treat them respectfully.
- Late assignments are not accepted.

### Speakers:

Speakers will be invited to discuss the reality behind the “book learning.” We'll meet the experts in class, at recycling facilities, or at conferences (maybe you can bring friends or family—ask later). Students should be prepared for the topic and will be required to have questions prepared for our guest speaker. Always be on time!

- *Speakers are professionals that take time from their schedule to meet with us—respect their time. Be on time, respectful, courteous, and be prepared with written questions.*
- *Being unprepared or rude will affect your grade.*

### Office Visits

*Do not rely on the advice of other students as they are often mistaken (if I had a dollar for every bad piece of advice I've heard!). I'd like to work with your situation and see you successfully through the course and maybe even to graduation. Please drop in for a visit if you'd like some help with an assignment, would like to discuss something from the course, as soon as you think you need advice, have a problem, or are looking for an internship. Please do no delay as you may be in a situation that requires meeting a university imposed deadline. See, call, email, or passenger pigeon me ASAP or drop in during office hours using the information on the first page.*

## UNIVERSITY POLICIES

### DROPPING AND ADDING

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's [Catalog Policies](#) section at

<http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/) at [http://www.sjsu.edu/provost/services/academic\\_calendars/](http://www.sjsu.edu/provost/services/academic_calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>.

### **Achieving Success**

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.”

### **Consent for Recording of Class and Public Sharing of Instructor Material Policy (S12-7)**

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

Requests for permission of any type of course recording must be made to the instructor by email. Requests are approved only when responded to in writing by the instructor. *Requests must specify the time period including the student name, student ID number, semester, date of request, course name and number, start and end date of the recording or recording period.* One semester is the maximum. In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.

### **Intellectual Property (S12-7)**

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

### **Academic Integrity Policy**

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University’s Academic Integrity policy S07-2](http://www.sjsu.edu/senate/S07-2.htm), located at <http://www.sjsu.edu/senate/S07-2.htm>, requires you to be honest in all your academic course work. Please familiarize yourself with the information on this website describing the SJSU Academic Integrity Policy. According to SJSU’s Academic Integrity Policy, “Plagiarism is the use of someone else’s language, images, data, or ideas without proper attribution. It is a very serious offense in both academic and professional environments. In essence, plagiarism is both theft and lying: you have stolen someone else’s ideas, and then lied by implying that they are your own.” Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student](#)

[Conduct and Ethical Development website](http://www.sjsu.edu/studentconduct/) is available at <http://www.sjsu.edu/studentconduct/>.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Integrity Policy S07-2 requires approval of instructors.

I suggest going through the simple plagiarism tutorial, developed by the library staff, found at this link: <http://tutorials.sjlibrary.org/tutorial/plagiarism/selector.htm>.

### **Disabilities Policy**

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. [Presidential Directive 97-03](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) at [http://www.sjsu.edu/president/docs/directives/PD\\_1997-03.pdf](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) requires that students with disabilities requesting accommodations must register with the [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability

### **Course Schedule**

Classroom discussions, exams, lectures, reading assignments and due dates are on a separate sheet which can be found on the course web site. The schedule is subject to change with fair notice, typically announced in class.

## **ASSIGNMENTS AND GRADING POLICY**

### **Rubrics for Written Assignments**

All formal writing assignments will be graded according to these standards. They will be assessed for the quality of the content and the clarity of your writing.

<b>Score</b>	<b>~Grade</b>	<b>Content criteria</b>
10	A	Outstanding response with superior supporting examples or evidence; logical analysis, reasoning, and explanation; clear mastery of content; includes relevant principles and details; excellent citation form and use.
9	A- to B+	Good, solid response that uses excellent supporting examples or evidence; excellent reasoning and explanations; good citation form and use.
8-8.5	B	Solid response that meets minimum required by assignment. Reasoning and explanations are very good. .
7.5	C	Response is accurate but cursory, and does not meet the minimum required for completeness; some inaccuracies or reasoning flaws; response is too general, lacks specific evidence; all sources cited but form is incorrect.
3-5	D	Response doesn't effectively address the question; response fails to support assertions with data or examples; major flaws in reasoning; explanations are unclear; displays inadequate understanding of content; lack of citation.
0	F	Response is missing or not submitted, or does not address the question.

<b>Score</b>	<b>~Grade</b>	<b>Writing criteria</b>
10	A	Meets criteria for 4 (below), plus demonstrates superior grammatical correctness and sense of personal style. Effortlessly readable prose.

9	A- to B+	Very effective organization of paragraphs and paper; interesting, varied sentences; good grammar (usage, punctuation, etc.); few spelling mistakes; does not read like a first draft.
8-8.5	B	Reasonably effective organization of paragraphs and paper; serviceable prose; numerous errors of grammar or spelling; reads like a first draft.
7.5	C	Structurally disorganized; paragraphs lack topic sentences or are not developed effectively; awkward sentence structure; poor grammar, spelling.
3-5	D	Similar to 2, but even harder to read.

### Assignments, Exams and Extra Credit

*All written assignments must be submitted to the course website by the posted due date/time.*

Multiple assignments reduce the stress of having to perform well on infrequent, high point value single-style exams or writing assignments. It's also an attempt to grade students with different skill sets fairly. The course has written papers, exams, discussions, presentations and attending events as tools for evaluating student performance. If you are weak in one area, (exams or speaking) hopefully being strong in another will help in determining a fair and reasonable final grade. Specific instructions for the assignments listed in the following table will be available as they are assigned. Expectations for writing include citing primary sources, avoiding plagiarism, meeting basic formatting standards, and following instructions. All papers will be reviewed by TurnItIn.com which will note plagiarism and report it to the instructor. Severe penalties exist for violating University policies.

[http://www.drc.sjsu.edu/student\\_services/document\\_disability.htm](http://www.drc.sjsu.edu/student_services/document_disability.htm) .

### Due Dates, Late Papers and Make-Up Exam Policies

All assignments are due at the deadline to the course website. There is no leniency or acceptance of late papers. Students report procrastination and being overwhelmed as major reasons for poor performance. I encourage you to *schedule time for homework and studying* for this course, now. To avoid missing deadlines: a) back up your computer weekly and save the back-up device in a safe place (your computer will crash, get stolen, or will otherwise disappoint you!), b) Bad stuff happens--even to you--be prepared by getting an early start on assignments --time waits for no one, including you, deadlines, and professors. Get started on all assignments EARLY to soften the blow if the inevitable happens (but I hope it doesn't).

### Course Grading

The course grade is determined from 100 possible points and some extra credit. Points accumulated during the semester within the grade scale, below, determine the semester grade. Grades are performance-based with one exception, a grade may be moved up by one-third of a grade (e.g. C+ to a B-) if a student has turned all assignments, showed improvement throughout the course, attended regularly and has participated.

98 - 100	A+	81 - 86	B	68 - 69	C-	54 and less	F
91 - 97	A	79 - 80	B-	66 - 67	D+		
89 - 90	A-	77 - 78	C +	58 - 65	D		
87 - 88	B+	70 - 76	C	55 - 57	D-		

### ASSIGNMENTS LIST

↓ Record your scores here

Points	Points	<b><u>NOTE: SEE SEPARATE HANDOUTS FOR SPECIFIC INSTRUCTIONS.</u></b>
	5	<u>Participation: Course Seminars</u> Students are expected to contribute to seminar discussions. Preparation requires reading material prior to class, understanding the readings and engaging in class discussions.
	20	<u>1a. Readings: Topical Summaries (TS-5 points each, 4 total = 20 points total)</u> There are 8 group topics. Students must submit a TS for the first topic (Group 1 presents it) plus three additional TS's of your choice. <u>Do not</u> submit a TS when presenting. TS's will be assigned at the beginning of class. Persons writing TS's are responsible for keeping presenters accountable. The TS assignment can be found on the course website.
	5	<u>1b. Readings: Presentation, Small Groups (about 8 groups)</u> Select students will present a synopsis of the <i>assigned readings</i> in PowerPoint or similar software, and manage discussion from the class and/or engage classmates with <i>creative measures</i> : question/answer seminars, games, and/or small group discussions. Provide a graphical representation of key concepts for classmates. Note: Students who prepare TS's (above) are to support the presenting group with subject knowledge (not actually participate in the group). All students must read the assigned readings.
	5	<u>2a. "Garbage and Recycling Book Club" Pre-Report</u> Read and assess an assigned book on recycling or garbage and key points. About four book clubs will be assigned. Follow instructions provided on a separate sheet on course website. Book suggestions will be provided.
	10	<u>2b. "Garbage and Recycling Book Club" Final Report</u> Complete the Pre-Report. Instructions on website.
	5	<u>2c. "Garbage and Recycling Book Club:" Presentation/discussion.</u> Meet and exchange research with your Book Club, and then have your Club share info with others reading different books.
	10	<u>Field trip(s): 10 points Mandatory Attendance:</u> (possible two days or one day, two places) Students are required to attend field trips listed on the schedule. Field trips are essential components of the course (seeing is believing!). Therefore, a 5-page research paper, on a subject approved by the instructor, is required of students who miss all or part of a field trip. Research papers are due within one week of a field trip. Some field trips require more time than class allows. We will discuss this in class to find scheduling that works best for us.
	20	<u>Midterm Exam:</u> The midterm is an in-class examination consisting of multiple choice and short answer questions.
	20	<u>Final Exam:</u> The final exam is of similar format as the mid-term and cover topics discussed after the mid-term. It may include previous course material as it is a final exam.
	5	<u>EXTRA CREDIT:</u> Possible extra credit will be available with each exam.
	5	<u>Field Paper: Extra Credit</u> Write an assessment of one issue at the NCRA conference and interview someone at the conference about the topic

# ENVIRONMENTAL STUDIES 148: RECYCLING AND RESOURCES

## Spring2014 SCHEDULE AND TOPIC LIST

Please note: Attend class daily! The class schedule is likely to change because of the need to accommodate speakers and field trips.  
Reading List (refer to course web site and group number or corresponding number on Envs.148 Reading List)

Class	Day	Date	Topic	Speaker/Due	Reading Material
1.	TH	1/23	<ul style="list-style-type: none"> <li>Syllabus Review: Name Cards—for a while please.</li> <li>Topic Overview: Environment, Resources, MSW and IWM, Sustainable Resource Management</li> <li>Discuss and Review Course Website(s)</li> <li>Topical Summary preferences?</li> <li>Group topic preferences?</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Syllabus, Schedule and Course Website</li> </ul>
2.	T	1/28	<ul style="list-style-type: none"> <li>Syllabus, Assignment, and Schedule Questions?</li> <li>Students assigned to TS's and group topics</li> <li>Discussion of Tour Days—Class Days or Fridays, Weekend?</li> <li>Assign books; “Garbage and Recycling Book Club”</li> <li>Lecture: Overview of Env Issues—connection to Sustainable Resource Management</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> <li>Thesis: Challenge or Crisis</li> </ul>
3.	TH	1/30	<ul style="list-style-type: none"> <li>Lecture 1: Resources and Waste: The Metamorphosis of Solid Waste Management to Integrated Waste Management: Can we have a Zero Waste Society?</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> <li>Thesis: Challenge or Crisis</li> </ul>
4.	T	2/4	<ul style="list-style-type: none"> <li>Lecture 1, continued</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	
5.	TH	2/6	<ul style="list-style-type: none"> <li>Lecture 2: Sustainability and Resource Mgmt.</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> </ul>
6.	T	2/11	<ul style="list-style-type: none"> <li>Lecture 2, continued</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	
7.	TH	2/13	<ul style="list-style-type: none"> <li>Lecture 3: Total Environmental Perspective: Systems Theory, Environmental Thought, and IWM</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> <li>Thesis</li> </ul>
8.	T	2/18	<ul style="list-style-type: none"> <li>Lecture 4: Legislation and Regulation                             <ul style="list-style-type: none"> <li>o AB 939, AB 2020, AB341 and Associated Clean Up Legislation, Historical Overview</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Thesis</li> <li>Website: Canvas</li> </ul>
9.	TH	2/20	<ul style="list-style-type: none"> <li>Lecture 5: Terms and Statistics</li> <li>Municipal Solid Waste in the United States: Facts and Figures</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> </ul>
10.	T	2/25	<ul style="list-style-type: none"> <li>Lecture 6: Beyond RCRA: Environment, Resource Management and Future Considerations</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> </ul>
11.	TH	2/27	<ul style="list-style-type: none"> <li>Product Sample Review and Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> <li><b>MEET IN WSQ 115!!!</b></li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> <li>Beyond RCRA</li> </ul>
12.	T	3 /4	<ul style="list-style-type: none"> <li>Guest lecture: Tom Hoyge, Electronics Recycling</li> </ul>	<ul style="list-style-type: none"> <li>Guest Lecture</li> <li>Bring Questions!</li> </ul>	<ul style="list-style-type: none"> <li>Guest Lecture</li> </ul>
13.	TH	3/6	<ul style="list-style-type: none"> <li>Lecture 6, continued</li> <li>Discuss Topical Summary</li> <li>Group Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Olszewski</li> <li>All Students</li> </ul>	<ul style="list-style-type: none"> <li>Bring notes from assigned group readings to discuss action plan</li> </ul>
14.	T	3/11	<ul style="list-style-type: none"> <li><u>Exam Review</u></li> <li><u>DISCUSS CONFERENCE/TRANSPORTATION</u></li> </ul>	<ul style="list-style-type: none"> <li><b>Students: bring list of key points</b></li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> </ul>
15.	TH	3/13	<ul style="list-style-type: none"> <li><u>Midterm: Exam 1 and exam review</u></li> </ul>	<ul style="list-style-type: none"> <li><u>MIDTERM</u></li> </ul>	
16.	T	3/18	<ul style="list-style-type: none"> <li>RECYCLING UPDATE CONFERENCE</li> <li>Carpools or other transportation</li> <li>Take notes for class discussion!</li> </ul>		<ul style="list-style-type: none"> <li><b>Freight &amp; Salvage</b> Auditorium in Berkeley, California</li> </ul>
17.	TH	3/20	<ul style="list-style-type: none"> <li><u>Public facility Recycling Tour: Sunnyvale Materials Recovery Facility (possible)</u></li> <li><u>Private facility Recycling Tour: GreenWaste or Sims</u></li> </ul>	<ul style="list-style-type: none"> <li>Tour: Place and Date may change!</li> <li>Carpools</li> </ul>	<ul style="list-style-type: none"> <li>Website: Canvas</li> </ul>

18.	T TH	3/25 3/27	<ul style="list-style-type: none"> <li>• SPRING BREAK</li> <li>• SPRING BREAK</li> </ul>	<ul style="list-style-type: none"> <li>• <u>SPRING BREAK</u></li> </ul>	<ul style="list-style-type: none"> <li>• SPRING BREAK</li> </ul>
19.	T	4/1	<ul style="list-style-type: none"> <li>• Recycling and Municipal Recycling Practices</li> <li>• Discussion of Tour Findings <ul style="list-style-type: none"> <li>◦ Bring notes for discussion</li> </ul> </li> <li>• Discussion of Conference Events</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Group 1</u></li> </ul>	<ul style="list-style-type: none"> <li>• DMG Chp.2,4, 6</li> <li>• Website: Canvas</li> </ul>
20.	TH	4/3	<ul style="list-style-type: none"> <li>• Benefits of Recycling</li> <li>• Public Education, Planning and Source Reduction <ul style="list-style-type: none"> <li>◦ Source Reduction: General Concept; Reuse, Obstacles, Legislation, ADF's, and Variable Rates. Packaging, Industrial Ecology, Full Cost/Lifecycle Analysis, Environmental Accounting, Extended Producer Responsibility (EPR)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <u>Group 2</u></li> <li>• <u>Group 3</u></li> <li>• <u>TS</u></li> </ul>	<ul style="list-style-type: none"> <li>• DMG, Chp. 1, 3,5</li> <li>• Website: Canvas</li> </ul>
21.	T	4/8	<ul style="list-style-type: none"> <li>• Guest Speaker: Rob Darcy, HHW and EPR</li> </ul>	<ul style="list-style-type: none"> <li>• Guest Speaker</li> <li>• Class Questions</li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
22.	TH	4/10	<ul style="list-style-type: none"> <li>• Key CA Legislation</li> <li>• State Fee Programs</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Group 4</u></li> <li>• <u>Group 5</u></li> <li>• <u>Entire class</u></li> <li>• <u>Olszewski</u></li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
23.	T	4/15	<ul style="list-style-type: none"> <li>• Book Club Check-up: Discussion of Paper: BRING IN DRAFT FINAL PAPER FOR DISCUSSION</li> <li>• Discussion of the Organization of Presentations</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Entire class</u></li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
24.	TH	4/17	<ul style="list-style-type: none"> <li>• NO CLASS: (IN EXCHANGE OF CONFERENCE AND FIELD TRIP)</li> </ul>	<ul style="list-style-type: none"> <li>• <u>No class today</u></li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
25.	T	4/22	<ul style="list-style-type: none"> <li>• Managing Organics, Composting and yard trimmings</li> <li>Guest Speaker: Composting Programs and Backyard Composting Programs</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Group 6</u></li> <li>• <u>TS</u></li> </ul>	<ul style="list-style-type: none"> <li>• DMG Chp. 7</li> <li>• Website: Canvas</li> </ul>
26.	TH	4/24	<ul style="list-style-type: none"> <li>• <u>Michelle Young: Managing Organics, Composting and Aneorbic Digestion</u></li> </ul>	<ul style="list-style-type: none"> <li>• <u>Guest Speaker</u></li> <li>• <u>Class Questions</u></li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
27.	T	4/29	<ul style="list-style-type: none"> <li>• Disposal: Landfills, Transformation, Waste-to-Energy, Universal and Household Hazardous Wastes</li> <li>• The Future of IWM and Zero Waste</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Group 7 (TS)</u></li> <li>• <u>Group 8 (TS)- Olszewski</u></li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
28.	TH	5/1	<ul style="list-style-type: none"> <li>• Book Club Presentations <ul style="list-style-type: none"> <li>◦ <b>Book Club papers due</b></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Olszewski</li> <li>• Class Questions</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
29.	T	5/6	<ul style="list-style-type: none"> <li>• Guest Speaker, Richard Gertman: The Future of Materials Management</li> </ul>	<ul style="list-style-type: none"> <li>• Entire Class</li> <li>• Papers Due</li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
30.	TH	5/8	<ul style="list-style-type: none"> <li>• Final exam review/class wrap-up</li> <li>• Bring list of topics/issues</li> </ul>	<ul style="list-style-type: none"> <li>• Guest Speaker</li> <li>• Class Questions</li> </ul>	<ul style="list-style-type: none"> <li>• Website: Canvas</li> </ul>
31.	T	5/13	<ul style="list-style-type: none"> <li>• Last day of class</li> </ul>	<ul style="list-style-type: none"> <li>• Olszewski</li> </ul>	
32.	TH	5/16	<ul style="list-style-type: none"> <li>• Final exam 9:45a.m.-noon</li> </ul>	<ul style="list-style-type: none"> <li>• FINAL EXAM</li> </ul>	