

THE GEORGE WASHINGTON UNIVERSITY
Environmental and Energy Management Program
Beyond Compliance: Next Generation Environmental Governance
EMSE 6296: Syllabus

Course and Contact Information

Course: Next Generation Environmental Governance; EMSE 6296
Meeting time: TBD
Location: TBD

Instructor

Name: Joe Cascio, Esq.
Campus Address: Tompkins Hall, Suite 103
Phone: 202-994-3005
E-mail: cascio@gwu.edu
Office hours: As requested and arranged

Bulletin Course Description

This course teaches *next generation* environmental and energy management with specific instruction on the implementation of voluntary systems based on the ISO 14000 and 50000 series standards. The instruction benefits professionals in the environmental and energy fields who are expected to have knowledge and capability to implement systems that can be third-party certified.

Relevant Information

Course web page: <https://eemi.seas.gwu.edu/course-offering-emse-6992-11>
Instructor web page: <https://eemi.seas.gwu.edu/joe-cascio-esq>
EEMI: <https://eemi.seas.gwu.edu/>
EEM Program: <https://eem.seas.gwu.edu/>
Guest Lecturer: TBD
No formal course prerequisites.

Required Text(s)

Author	Title	Edition
Fiorino, Daniel J.	<u>The New Environmental Regulation</u>	The MIT Press, 2006, ISBN 0-262-06256-9__ISBN 978-0-262-06256-5 (alk. paper)__ISBN 0-262-56218-9__ISBN 978-0-262-56218-8 (pbk. : alk. paper) *Students to arrange own

		access to text
	ISO 14001 and ISO 50001	*Will be available electronically

The instructor will provide other handouts to be made available electronically (PDF format.)

Learning Outcomes:

1. Ability to establish the organizational need for an Environmental or Energy management system
2. Ability to form the system implementation team
3. Ability to evaluate organizational needs for awareness and competence training for an Environmental or Energy management system
4. Ability to execute organizational plans to create and implement an Environmental or Energy management system based on the ISO 14001 / 50001 standards
5. Ability to create action plans for the Environmental or Energy management system
6. Ability to prepare for third-party certification of systems for Environmental or Energy management based on the ISO 14001 / 50001 standards
7. Ability to structure elements of a maintenance plan for Environmental or Energy management systems
8. Understand the similarities and differences between ISO 14001 and 50001, and how to leverage integrated implementation

Independent Learning:

In a **15**-week semester, including exam week, students are expected to spend a minimum of 100 minutes of out-of-class work for every **50** minutes of direct instruction, for a minimum total of **2.5** hours a week.

This **3**-credit course includes **2.5** hours of direct instruction and a minimum of **5** hours of independent learning or **7.5** hours per week. More information about GW's credit hour policy can be found at:

<https://provost.gwu.edu/policies-procedures-and-guidelines>

and, click on Assignments of Credit Hour Policy (PDF), Or see the PDF pages (webpage);

https://provost.gwu.edu/files/downloads/Resources/Assignment-of-Credit-Hours_Final_Oct-2016.pdf

Class Schedule [week-by-week]

Date	Topic(s) and readings	Assignment(s) Due
Prior to Session 1		Read: Session 1 handouts.
Session 1	<p><u>Introduction to E&E Management Systems; Identifying Environmental Aspects of Activities.</u> Introductions; discussion of course requirements; history of management system standards (MSS); focus of management systems; defining environmental aspects; approaches for identifying relevant activities, products and services; intro to case study. Case exercise #1. Intro to Text.</p> <ol style="list-style-type: none"> 1. Review the course requirements, 2. Provide brief history of advent of MSS 3. Establish what MSS add to traditional approaches 4. Define the unit to manage in the EMS (EA) (tool) 5. How to identify activities (A,P, S) that have EAs 6. Exercise 1: Identifying activities and their aspects 	
Prior to Session 2		Read: Session 2 handouts; Text Ch's 1 and 2;
Session 2	<p><u>Selecting Significant Aspects.</u> Determining potential environmental impacts; significance and its criteria; setting priorities. Case exercise #2; Discuss text ch's 1 and 2.</p> <ol style="list-style-type: none"> 1. Establishing the potential impacts of the aspects 2. Setting environmental and other significance criteria 3. Establishing which aspects are significant (SEA) (tool) 4. Differentiating significance from priority 5. Exercise 2: Identifying significant aspects 	Turn in Case Exercise 1.
Prior to Session 3		Read: Session 3 handouts;
Session 3	<p><u>Establishing the Scope of the System.</u> Organizational boundaries; upstream and downstream view; life cycle considerations. Case exercise #3.</p> <ol style="list-style-type: none"> 1. Why setting the EMS scope is important 2. Considering: control or influence; off-site work; those working on behalf of the org.; life cycle of products; supply chain; outsourced processes 3. Exercise 3: Set the EMS scope for TRX Lab 	Turn in Case Exercise 2.

Date	Topic(s) and readings	Assignment(s) Due
Prior to Session 4		Read: Session 4 handouts; Text Ch'r 3;
Session 4	<p><u>Compliance, Performance, Performance Indicators.</u> Role of compliance; continual improvement and performance; performance indicators. Discuss text ch'r 3.</p> <ol style="list-style-type: none"> 1. How does traditional compliance fit into an EMS? 2. What are the expectations for env'l performance? 3. What is the meaning of continual improvement? 4. What are environmental performance indicators (PI)? 5. Where do we document performance indicators? 6. Exercise 4: Drafting the ESH Policy 	Turn in Case Exercise 3.
Prior to Session 5		Read: Session 5 handouts;
Session 5	<p><u>Structuring Operational Management Programs (OMPs).</u> Purpose of OMPs (environmental or energy); OMP elements; documenting OMPs; responsibilities and accountabilities; review for mid-term examination. Case exercise #5.</p> <ol style="list-style-type: none"> 1. Why do we need OMPs in the EMS? 2. Which EMS elements go into an OMP? 3. How do we document OMPs? 4. How do we manage and use OMPs? 5. Exercise 5: Create an OMP for one SEA 	Turn in Case Exercise 4.
Prior to Session 6		Read: Session 6 handouts; Text Ch'r 4;
Session 6	<p><u>Setting O&Ts and OCs.</u> Discuss text ch'r 4. Case exercise #6</p> <ol style="list-style-type: none"> 1. Setting O&Ts 2. When and how do we reset O&Ts 3. What is the function of OCs? 4. OCs types and origins 5. How do we create and document OCs? 6. Who's responsible to apply OCs? 7. Exercise 6: Setting O&Ts and OCs for a SEA 	Turn in Case Exercise 5.

Date	Topic(s) and readings	Assignment(s) Due
Prior to Session 7		Read: Session 7 handouts; Text Ch'r 5
Session 7	<u>Management Principles and Organizational Policies.</u> Principles; drafting the Policy; implementation tasks; system champion. Discuss text ch'r 5. <ol style="list-style-type: none"> 1. Management principles and organizational policies 2. Incorporating principles in the system 3. Implementation tasks 4. System champion 	Turn in Case Exercise 6.
Session 8	<u>Mid-Term Examination</u>	
Prior to Session 9		Read: Session 9 handouts
Session 9	<u>Awareness and Competency Training; Documentation.</u> Purpose of awareness and competence training. Documenting the EMS. <ol style="list-style-type: none"> 1. Why do we need awareness training in an EMS? 2. What is the function of competency training? 3. EMS documentation: function and parameters 	
Prior to Session 10		Read: Session 10 handouts; Text Ch'r 6
Session 10	<u>System Auditing.</u> Nature of systems auditing; preparing for, conducting and recording system audits; auditor qualifications; system certification. Discuss text ch'r 6. Case exercise #7. <ol style="list-style-type: none"> 1. Why do audits? 2. How to prepare for the EMS audit 3. How to conduct the EMS audit 4. Use of compliance audits findings in an EMS audit 5. Managing audit findings 6. Recording and using audit findings 7. Exercise 7: Structure an EMS audit plan 	

Date	Topic(s) and readings	Assignment(s) Due
Prior to Session 11		Read: Session 11 handouts; Text Ch'r 7.
Session 11	<p><u>Management Review.</u> Purpose of Management reviews; preparing for, conducting and recording Management reviews. Discuss Text Ch' 7</p> <ol style="list-style-type: none"> 1. Why have reviews by Management? 2. Who and How do we prepare for a MR? 3. What questions must Management answer? 4. Why record the proceedings of a MR? 5. How is the record of an MR used in system auditing? 	
Prior to Session 12		Read: Session 12 handouts;
Session 12	<p>Energy Management System I (EnMS)</p> <ol style="list-style-type: none"> 1. Why was 50001 developed? 2. Who are the intended audience and user? 3. What are the fundamental concepts that make 50001 differ from 14001? 4. What is the advantage of using 50001 and how can it be leveraged with 14001? 	
Prior to Session 13		Read: Session 13 handouts;
Session 13	<p>Energy Management System II (EnMS)</p> <ol style="list-style-type: none"> 1. How do the elements of 50001 compare to 14001? 2. How can the elements be best integrated? 3. Special programs and resources available specifically for 50001 	
Prior to Session 14		Read: Session 14 handouts
Session 14	<p><u>Implementation Tools, Pitfalls and Review.</u> Discussion of case study and system implementation tools and pitfalls; review for final examination. Implementation tools and pitfalls Review main points in lessons and in case study</p>	

Date	Topic(s) and readings	Assignment(s) Due
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Session 15

Final Examination. The main points in all course sessions will appear on the final examination.

NOTE: In accordance with university policy, the final exam will be given during the final exam period and not the last week of the semester

Grading

- midterm exam (30%)
- case study exercises (20%),
- final exam (30%)
- class participation/makeups (20%)

Assignments

Specific assignments related to the case study will be made in course sessions.

Assignment	Description	Total Points
Case Exercises	Discussed in multiple sessions	20% of grade
	Total Possible Points	20 out of 100

University Policies

Academic integrity:

Academic integrity is central to the learning and teaching process. Students are expected to conduct themselves in a manner that will contribute to the maintenance of academic integrity by making all reasonable efforts to prevent the occurrence of academic dishonesty. Academic dishonesty includes, but is not limited to, obtaining or giving aid on an examination, having unauthorized prior knowledge of an examination, doing work for another student, and plagiarism of all types. Ignorance is no excuse.

The number one problem that students run into with regards to academic integrity is plagiarism. It is not okay to copy, use, or otherwise exploit other people's ideas, words, or creations without giving them credit in the proper form. Sometimes this means you must use quotation marks; while other times a simple source citation will do the trick. Changing a few words in a paraphrase is not enough to turn source material into "your own words" – in fact, that's a really bad idea to even try. Changing the phrasing order of sentences is not okay and using the thesaurus to find ways to change "happy" to "glad" is also a very bad idea. It is expected that students know how to correctly quote and cite material, and also how to write well. For those students who need assistance, the GWU Writing Center is available. Please see:

<http://www.gwu.edu/~gwriter/>
<https://writingcenter.gwu.edu/>

Academic Integrity Code:

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For the remainder of the code, see: studentconduct.gwu.edu/code-academic-integrity

What to do if the instructor does not arrive:

If the Instructor does not arrive for the class at the designated starting time and has not notified the class of a late starting time or the cancellation of the class, the students should wait in the classroom for at least **30 minutes** before departing. One member of the class should be selected to notify the EMSE Department of the Instructor's absence by calling the EMSE Department **202-994-4892** on next business day.

University Policy on Religious Holidays:

In accordance with University Policy,

1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance.
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations.
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities. For more details and policy and accommodations for religious holidays see: <https://students.gwu.edu/accommodations-religious-holidays>

Support for Students Outside the Classroom:**Disability Support Services (DSS)**

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to disabilitysupport.gwu.edu/

Mental Health Services 202-994-5300

The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. counselingcenter.gwu.edu/

Security and Safety Policy:

GW Campus Advisories; Students should check the GW Campus Advisories Web Site at: <http://www.campusadvisories.gwu.edu/> for current information related to campus conditions, closures, safety information and any other information concerning events that may disrupt normal operations.

GW Alert Notifications:

GW Campus Advisories. Students should check the GW Campus Advisories Web Site at: <http://www.campusadvisories.gwu.edu/index.cfm> for current information related to campus conditions, closures, safety information and any other information concerning events that may disrupt normal operations.

All students, faculty and staff registered in the GW banner system GW **will receive emergency alerts**, notifications and updates sent directly to their GW email address.

If individuals elect to receive these alerts on a mobile device they may log on to GWeb Information Web Site at:

<https://banweb.gwu.edu/> https://banweb.gwu.edu/PRODCartridge/twbkwbis.P_WWW and update their contact information to include mobile devices.