

# MGT 680: Sustainable Business Projects

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SAGINAW VALLEY STATE UNIVERSITY

FALL 2008

## MGT 680\*1: Sustainable Business Projects

Tuesdays

7:00 p.m.- 10:00 p.m.

Class Room: C-102

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### **Course Description**

This course uses active learning techniques to engage students in the evaluation and analysis of the use, development, and implementation of alternate energy strategies in the development of sustainable business projects. Alternate energy technologies including wind, solar, water, and geothermal energy sources will be evaluated for feasibility, cost effectiveness, and readiness of business and society to expand the adoption of such technologies. Less developed and more futuristic technologies will also be explored. State and federal policies that promote and inhibit the development of alternate energy will be assessed and compared with policies in other countries that have succeeded in wide-spread adoption of alternate energy sources. Prerequisite: Permission of Instructor.

### **Textbook(s) and Reading Material:**

Recommended:

- 📖 Tester, J. W., E. M. Drake, M. W. Golay, M. J. Driscoll, and W. A. Peters.  
[\*Sustainable Energy: Choosing Among Options\*](#). Cambridge, MA: MIT Press, 2005.  
ISBN: 9780262201537.
- 📖 A good business economics textbook (which includes methods for evaluating external costs).

## **GOALS AND OBJECTIVES OF THE COURSE –**

Upon completion of MGT 680, the student should be able to:

1. Identify historical energy sources and usage and trends in the U.S. and other countries.
2. Identify the direct and indirect economic, social, and environmental costs of continuing to use fossil fuels as the primary fuel in the U.S.
3. Understand the basic scientific principles of various energy technologies.
4. Understand the economic and productive impact of the recent dramatic increases in energy costs.
5. Identify current alternate energy sources that could be implemented to substitute for fossil fuel usage.
6. Identify promising future alternate energy technologies.
7. Understand how state and federal laws and policies impact the development and implementation of alternate energy technologies.
8. Exercise critical thinking skills to understand and articulate public policies that have succeeded in other countries and how such policies may or may not succeed in the U.S.
9. To demonstrate the relevancy of energy and related costs on an ongoing basis in a dynamic global society and business environment.
10. To present the background, organization and application of state, federal, and international aspects of energy usage, costs, and availability.
11. To have an understanding of the technical language, general principles and procedures of alternate energy sources.
12. To locate reference sources and utilize several methods to identify selected reputable and reliable information regarding energy and economics.

## **REQUIREMENTS FOR PASSING THE COURSE**

1. Completion of Assignments. Students MUST complete ALL assignments in a timely manner to receive a passing grade in the course.
2. Punctuality & Attendance. Attendance and class participation will be counted towards the course grade. (Habitual tardiness or early departure may be treated as absence).
3. Preparation for Class. Reading assignments must be completed PRIOR to each class. Regular quizzes will be administered to assure that reading assignments are completely in a timely manner.
4. Class participation. Students must be ready to discuss the assigned readings and questions. Participation will directly impact the student's grade in the course.
5. Mandatory Assignments include:
  - a. Completing all reading assignments
  - b. Attendance and participation in class
  - c. Submitting and presenting assigned papers
6. Reading of energy related news articles. (Required to search for energy related stories in the mainstream press, trade journals, and scientific publications on a daily basis.)

## **LEARNING GOALS**

Assessments include: Instructor evaluation of student performance, in-class feedback on performance, instructor grading and assessment of written work, instructor feedback on data presented, in class discussion of cases and informal feedback to individual student's performance, exam questions, student discussion of class concepts and/or cases covered.

### **1. Business-Core Competencies**

- a. Written/Oral
- b. Verbal/Non-verbal
- c. Intercultural communications
- d. Ethical/Legal
- e. Listening skills
- f. Communication skills (persuasion, negotiation, etc.)
- g. Report writing

### **2. Technical and Problem Solving Competencies**

- a. Active Learning
- b. Decision making, critical thinking
- c. Logic
- d. Long form case studies (deep analysis)
- e. Quick case studies
- f. Conceptual skills
- g. Ethics/Legal
- h. Enhance students' ability to solve complex and ambiguous problems

### **3. Global Competencies**

- a. Global impact on business
- b. Awareness of global legal links
- c. Awareness of global diversity & ethnocentrism
- d. Impact on culture of product design & use
- e. Communicating in intercultural business
- f. Legal/Social/Political Systems
- g. Cultures
- h. Ethics
- i. Changing Environments: Cultural, Social, Political, Legal Economic, Tech., Physical

### **4. Competencies unique to the management and operation of SME's**

- a. Ethical/Legal
- b. Entrepreneurship
- c. Capital acquisition business form

- d. To know, understand and describe the authority and legal powers to resolve disputes within the U.S. legal system and related forms of dispute resolution systems.
- e. To identify common legal issues in a wide range of business transactions.
- f. To know how an individual or business requests legal services from an attorney or law firm.
- g. To identify and analyze issues and problems related to business activities and transactions at the college level of academic proficiency.
- h. To know and appreciate the basic legal principles as they apply to the day-to-day business operations of a business.

### **Evaluation & Grading**

#### **1. Assignments & Class Preparation:**

- a. Students **MUST** complete reading assignments.
- b. Students will be called on to answer questions and completing the reading assignments will be necessary preparation for class discussion/participation
- c. Student participation will be required and will make up a portion of the final grade as described below.
- d. Students must complete all writing assignments and give presentations as assigned.
- e. Information will be shared by the instructors and students alike *via* V-Space. Students unfamiliar with using V-Space must contact the Student Support Center (989-964-4225) or the Student Technology Center.

#### **2. Grading will be as follows:**

Class Participation	20 Points
3 Papers & Presentations	15 Points Each
<u>1 Concluding Paper and Presentation</u>	<u>35 Points Each</u>
<b>TOTAL</b>	<b>100 Points</b>








#### **3. Grading Scale:**












90	-	100	A- to A
80	-	89	B- to B+
70	-	79	C- to C+
60	-	69	D- to D+
0	-	59	F















- 4. Each unexcused absence beyond the second may lead to a 5 point deduction. Advise instructor of absences **PRIOR to class via email.**
- 5. Instructor Discretion. The Instructor reserves the discretion to increase the final grade of a student by an entire grade if deemed warranted by the Instructor. The Instructor also













reserves the discretion to decrease the final grade of a student by an entire grade if warranted by the student's actions or omissions.










6. **It is the student's responsibility to find out what was covered during any given class.** It is the student's responsibility to contact a classmate to obtain the notes and any handouts. **Please do not contact the instructor to find out what happened during a class that you missed!!!**
7. **Failure to complete and submit any assignment (including, but not limited to quizzes and exams) may result in a failing grade in the course.**
8. Cheating in any form will result in an "F" and appropriate university discipline.
9. The SVSU student honor code must be followed at all times. Failure to abide by the provisions of the SVSU student honor code will result in appropriate disciplinary action.
10. The student is responsible for reviewing Vspace between classes for additional material, requirements, responsibilities, assignments, and other information.
11. This is a tentative syllabus and it is subject to change.
















<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
1	T	08/26/08	<p> <b>Introduction to Course</b></p> <p> <b>Review of Syllabus</b></p> <p> <b>Lecture #1</b></p> <p>⇒ Overview of Historical Energy Sources &amp; Usage in Industrial World</p> <p>⇒ Overview of primary and secondary alternate energy sources</p> <ul style="list-style-type: none"> <li>▪ No silver bullet</li> <li>▪ Likely moving toward using multiple energy sources</li> </ul> <p>⇒ <b><u>Class Discussion:</u></b> Develop initial list of topics to consider when evaluating alternate energy sources (e.g., technical feasibility, costs, benefits, environmental impacts, etc.)</p>	 <b>Ross</b>	<p> Come to class prepared to discuss alternate energy sources and related sustainable business issues</p> <p> Review supplemental reading material</p> <p> Edit List of Topics to Consider when evaluating energy sources</p>
2	T	09/02/08	<p><b>LABOR DAY HOLIDAY</b></p> <p><b>NO CLASS</b></p>		







<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
3	T	09/09/08	 Overview of Scientific Principles for ⇒ Solar Power ⇒ Wind Power ⇒ Geothermal	 <b>Schilling</b>	 Review supplemental reading material   <b>Research additional information regarding solar, wind, and geothermal power and provide documents/links to instructors and classmates</b>   Come to class prepared to discuss solar, wind, and geothermal power related issues
4	T	09/16/08	 Overview of Scientific Principles for ⇒ Fuel Cells ⇒ Hydro Power ⇒ Other	 <b>Schilling</b>	 Review supplemental reading material   <b>Research additional information regarding fuel cells, hydro power, and other promising current or futuristic energy technologies and provide documents/links to instructors and classmates</b>   Come to class prepared to discuss solar, wind, and geothermal power related issues  
















<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
5	T	09/23/08	 STUDENT PRESENTATIONS on alternate energy technologies	 STUDENTS	 Submit memo to instructors and to classmates summarizing research findings regarding feasibility and usage of solar, wind, geothermal, fuel cells, hydro power, and other energy sources   Present findings to class using powerpoint slides, overheads, handouts, etc.   Take home classmates memos and provide grades and constructive comments
6	T	09/30/08	 Follow up discussions to student papers and presentations   Lecture on Sustainable Business Programs/Initiatives	 Ross   Schilling   GUEST SPEAKER	 Return annotated and graded memos to classmates   Review supplemental reading material provided by instructors and classmates and guest speaker   Research additional information on sustainable business programs and provide documents/links to instructors and classmates  

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
7	T	10/07/08	 Impact of rising energy costs and availability of alternate energy sources on business	 Ross	 Review supplemental reading material provided by instructors and classmates and guest speaker   Research additional information regarding impact of energy costs and business responses to such costs and provide documents/links to instructors and classmates
8	T	10/14/08	 Economics of alternate energy <ul style="list-style-type: none"> <li>⇒ External Costs</li> <li>⇒ Opportunity Costs</li> <li>⇒ Environmental Impacts &amp; Costs</li> <li>⇒ Other costs</li> </ul>	 GUEST SPEAKER	 Review supplemental reading material provided by instructors and classmates and guest speaker   <b>Research additional information regarding economics of alternate energy and provide documents/links to instructors and classmates</b>
9	T	10/21/08	 Lecture: Where is the auto industry heading?	 GUEST SPEAKER	 Review supplemental reading material provided by instructors and classmates and guest speaker   <b>Research additional information regarding alternate energy technologies and the auto industry</b>

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
					<p> <b>Research additional information regarding the impact of the energy crisis on business in Michigan and the U.S. and provide documents/links to instructors and classmates</b></p>
10	T	10/28/08	<p> <b>STUDENT PRESENTATIONS</b> on sustainable business, economics, environmental impacts, and the direction of the auto industry</p>	<p> STUDENTS</p> <p> Schilling</p> <p> Ross</p>	<p> Submit memo to instructors and to classmates summarizing research findings regarding sustainable business, economics, environmental impacts, and the direction of the auto industry.</p> <p> Provide critical assessment of auto industry and general business response to the current energy “crisis”</p> <p> Present findings to class using powerpoint slides, overheads, handouts, etc.</p> <p> Take home classmates memos and provide grades and constructive comments</p>

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
11	T	11/04/08	<p> Review of national and international politics of continuing use of fossil fuels and the development of alternate energy</p> <p> Review of national and international laws impacting the continuing use of fossil fuels and the development of alternate energy</p>	 Ross	<p> Return annotated and graded memos to classmates</p> <p> Review supplemental reading material provided by instructors and classmates and guest speaker</p> <p> Research additional information and provide documents/links to instructors and classmates</p>
12	T	11/04/08	<p> Review alternate energy programs in other countries</p>	 Schilling	<p> Review supplemental reading material</p> <p> Research additional information and provide documents/links to instructors and classmates</p>
13	T	11/11/08	<p> Review Michigan and U.S. policies regarding development and implementation of alternate energy</p> <p> Discuss the state, federal, or foreign country policies that are most successful and those that fail to promote alternate energy</p>	 Ross	<p> Review supplemental reading material provided by instructors and classmates and guest speaker</p> <p> Research additional information and provide documents/links to instructors and classmates</p>

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
14	T	11/18/08	 <p>STUDENT PRESENTATIONS on government policies and programs that promote alternate energy development and implementation and what changes to Michigan and federal programs are necessary to succeed at implementing alternate energy programs in the U.S.</p>	 <p>STUDENTS</p>	<ul style="list-style-type: none"> <li> Submit memo to instructors and to classmates summarizing research findings regarding government policies and programs that promote alternate energy development and implementation and what changes to Michigan and federal programs are necessary to succeed at implementing alternate energy programs in the U.S..</li> <li> Provide critical assessment of the state and federal government policies, their response to the current energy “crisis”; and recommendations about what should be done to promote sustainable and alternate energy</li> <li> Present findings to class using powerpoint slides, overheads, handouts, etc.</li> <li> Take home classmates memos and provide grades and constructive comments</li> </ul>

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Class Topics/Discussions</i>	<i>Instructor/ Speaker</i>	<i>Student Assignment</i>
15	T	11/25/08	<p> Follow up discussions on successful and failing policies and programs at the state and federal level</p> <p> Follow up discussions on what improvements/changes are necessary to promote the development of alternate energy in Michigan</p>	<p> Ross</p> <p> Schilling</p>	<p> Review supplemental reading material provided by instructors and classmates</p> <p> Research additional information and provide documents/links to instructors and classmates</p>
16	T	12/02/08	<p> STUDENT PRESENTATIONS</p>	<p> Students</p>	<p> Present findings and conclusions to class using powerpoint slides, overheads, handouts, etc.</p> <p> Take home classmates memos and provide grades and constructive comments</p>
17	T	12/09/08	<p> STUDENT PRESENTATIONS</p> <p> Concluding discussions</p>	<p> Students</p>	<p> Return annotated and graded memos to classmates</p> <p> Review supplemental reading material provided by instructors and classmates and classmates</p>