

**Semester at Sea Course Syllabus**  
**Colorado State University, Academic Partner**

**Voyage:** Fall 2017  
**Discipline:** International Education  
**Course Number and Title:** IE 272 World Interdependence - Current Global Issues  
(Focus: Climate and Energy) (Section 3)  
**Division:** Lower  
**Faculty Name:** Armin Rosencranz  
**Semester Credit Hours:** 3

**Meeting:** A Day 1700-1820, Lido Terrace  
**Prerequisites:** None

### **COURSE DESCRIPTION**

This course is about energy and climate change, with a variety of perspectives: The US, the EU, India, China, Japan plus Brazil, South Africa and small island states. It will include student presentations on all energy technologies. Students will also represent self-chosen countries at a simulated international climate negotiation.

### **LEARNING OBJECTIVES**

1. To introduce students to basic concepts, principles and norms of international law;
2. To engage in learning about global environmental problems;
3. To learn about climate science and impacts; climate economics; climate obligations of developed, advanced developing and least developed countries.
4. To learn about all forms of energy, including fossil fuels, alternative and renewable energy technologies and transport technologies.

### **REQUIRED TEXTBOOKS**

**AUTHOR:** Stephen Schneider et al.  
**TITLE:** Climate Change Science and Policy (CCSP)  
**PUBLISHER:** Island Press  
**ISBN #:** 13: 978-1-59726-567-6 (paperback)  
**DATE/EDITION:** 2010

## TOPICAL OUTLINE OF COURSE

Depart Bremerhaven, Germany – September 9

**A1–September 11: Introductory lecture and eliciting what students know about energy and climate change. CCSP pages 1-6 – John Holdren intro.**

**A2–September 13: CCSP chapter 1 – Climate Change Science Overview**

Barcelona, Spain – September 15-18

**A3–September 19: CCSP chapter 2 -conclusions and 3: wild species and extinction.**

**A4–September 21: CCSP chapter 4 – ecosystems.**

No Class – September 23

**A5–September 24: CCSP chapter 5 – marine ecosystems and chapter 6 – water.**

**A6–September 26: CCSP chapter 7 – hurricanes and chapter 8 – wildfires.**

Tema, Ghana – September 27-30

No Classes – October 2

**A7–October 3: CCSP chapter 9 – tropical forests and chapter 10 – food security.**

**A8–October 5: CCSP chapter 11 – human health and chapter 12 – unique and valued places.**

Cape Town, South Africa – October 7-12

**A9–October 13: CCSP chapter 13 – economic impacts and chapter 17 – economic cost of climate change**

**A10–October 15: CCSP chapter 15 - risk, uncertainty and assessing dangerous climate change, and chapter 16 - risk perceptions and behavior.**

No Classes – October 16

**A11–October 18: CCSP chapters 19 – carbon taxes, trading and offsets, and chapter 20 – the cost of reducing CO<sub>2</sub> emissions.**

Port Louis, Mauritius – October 19

**A12–October 21: midterm**

No Class — October 22

**A13—October 24 CCSP chapter 21 – International Treaties and chapter 31 - India**

Cochin, India — October 25-30

No Classes — October 31

**A14—November 2: CCSP chapter 26 – Developing Country Perspectives and chapter 27 – CDM and mitigation in developing countries**

Yangon, Myanmar — November 4-8

**A15—November 9: CCSP chapters 22, 23, 24 and 25: Conclusion sections only.**

No class — November 11

**A16—November 12: CCSP chapters 29 and 30, both on China.**

Ho Chi Minh City, Vietnam — November 14-18

**A17—November 19: CCSP chapters 33, 34 and 35 – US policies**

No Class — November 21

**A18—November 22: student presentations on energy technologies I (resources: chapters 42-47 plus the internet)**

Shanghai, China — November 24-29

**A19—November 30: Student presentations on energy technologies II (skim chapters 42-47, plus the internet.**

Kobe, Japan — December 2-6

**A20—December 7: student presentations on energy technologies III (skim chapters 42-47, plus the internet)**

**A21—December 9: CCSP chapter 49 – Engineering the Planet**

**A22—December 11: international climate negotiation I (student will represent self-chosen countries)**

**A23—December 13: international climate negotiation 11 (students will represent self-chosen countries)**

**A24—December 15: general review and discussion of the course's themes.**

Honolulu, Hawaii – December 16

**A25—December 18; A Day Finals**

San Diego, California – December 23

### **FIELD WORK**

Semester at Sea field experiences allow for an unparalleled opportunity to compare, contrast, and synthesize the different cultures and countries encountered over the course of the voyage. In addition to the one field class, students will complete independent field assignments that span multiple countries.

**Field Class attendance is mandatory for all students enrolled in this course. Do not book individual travel plans or a Semester at Sea sponsored trip on the day of your field class.** Field Classes constitute at least 20% of the contact hours for each course, and are developed and led by the instructor.

### **Field Class and Assignment**

The Field Class for this course will take place **on Saturday, 7 October in Cape Town, South Africa.**

Class Title: Climate Mitigation in South Africa

We'll spend the morning at Pegasys, an NGO comprised of diverse advisors focused on development impact in emerging economies. Here, students will have the opportunity to hear from and engage with two climate and clean energy experts. After lunch we'll climb Table Mountain to observe the natural surroundings and discuss the impacts of climate change on the region.

Learning Objectives:

1. To learn about climate mitigation and clean energy in Africa, and more specifically in South Africa and Cape Town.
2. To be engaged in learning about global environmental problems.
3. To learn about climate science and impacts; climate economics; climate obligations of developed, advanced developing and least developed countries.

### **Independent Field Assignments**

Students will prepare a journal with insights on energy and climate drawn from all ports.

## METHODS OF EVALUATION

Attendance and participation 15%

Midterm 15%

Energy technologies slide presentation 15%

International climate negotiation 15%

Field class and journal 20%

Final exam 20%

## GRADING SCALE

The following Grading Scale is utilized for student evaluation. Pass/Fail is not an option for Semester at Sea coursework. Note that C-, D+ and D- grades are also not assigned on Semester at Sea in accordance with the grading system at Colorado State University (the SAS partner institution).

Pluses and minuses are awarded as follows on a 100% scale:

<u>Excellent</u>	<u>Good</u>	<u>Satisfactory/Poor</u>	<u>Failing</u>
97-100%: A+	87-89%: B+	77-79%: C+	Less than 60%:
93-96%: A	83-86%: B	70-76%: C	
90-92%: A-	80-82%: B-	60-69%: D	

Note that faculty use of the +/- grading is optional. Course instructors should indicate on the syllabus the grading system used in the course.

## ATTENDANCE/ENGAGEMENT IN THE ACADEMIC PROGRAM

Attendance in all Semester at Sea classes, including the Field Class, is mandatory. Students must inform their instructors prior to any unanticipated absence and take the initiative to make up missed work in a timely fashion. Instructors must make reasonable efforts to enable students to make up work which must be accomplished under the instructor's supervision (e.g., examinations, laboratories). In the event of a conflict in regard to this policy, individuals may appeal using established CSU procedures.

## LEARNING ACCOMMODATIONS

Semester at Sea provides academic accommodations for students with diagnosed learning disabilities, in accordance with ADA guidelines. Students who will need accommodations in a class, should contact ISE to discuss their individual needs. Any accommodation must be discussed in a timely manner prior to implementation.

A memo from the student's home institution verifying the accommodations received on their home campus is required before any accommodation is provided on the ship. Students must submit this verification of accommodations to [academic@isevoyages.org](mailto:academic@isevoyages.org) as soon as possible, but no later than two months prior to the voyage.

## **STUDENT CONDUCT CODE**

The foundation of a university is truth and knowledge, each of which relies in a fundamental manner upon academic integrity and is diminished significantly by academic misconduct. Academic integrity is conceptualized as doing and taking credit for one's own work. A pervasive attitude promoting academic integrity enhances the sense of community and adds value to the educational process. All within the University are affected by the cooperative commitment to academic integrity. All Semester at Sea courses adhere to this Academic Integrity Policy and Student Conduct Code.

Depending on the nature of the assignment or exam, the faculty member may require a written declaration of the following honor pledge: "I have not given, received, or used any unauthorized assistance on this exam/assignment."

## **RESERVE BOOKS AND FILMS FOR THE LIBRARY**

None

## **ELECTRONIC COURSE MATERIALS**

None

## **ADDITIONAL RESOURCES**

Some internet research on energy technologies.