Course Syllabus

E44 EECE 411: International Experience in Energy, Environmental and Chemical Engineering 2020

Instructors: Ray Ehrhard rehrhard@wustl.edu (314) 935-8589 Brauer 3021
Rajan Chakrabarty chakrabarty@wustl.edu (314) 935-6054 Brauer 3025

Text: None

Lecture Room: TBA

Office Hours: By appointment

Course Credits: 3

General Course Description (from the course catalog):
This course will provide undergraduate students with an international experience related to energy, environmental and/or chemical engineering. The country visited will vary from year to year with one or more EECE faculty members developing the program in collaboration with McDonnell Global Energy and Environment Partnership (MAGEEP) universities. The 2019/20 trip will be to Indian Institute of Technology (IIT) in Delhi, India. Example activities include conducting field or laboratory research, attending lectures and short courses taught by MAGEEP university faculty members, and visiting attractions relevant to the course focus (e.g., industrial facilities). Students will also gain an understanding of the local culture and history of the country visited. Course content will include planning in the fall semester prior to the international experience, a two week visit to the location of study, and a follow-up student project and presentations during the spring semester, which draws upon the experience. Students will enroll in EE44 EECE 411 for the spring semester following the trip.

Homework: None

Examinations: None

Course Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>% of Grade</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip report and participation</td>
<td>30%</td>
<td>January 31</td>
</tr>
<tr>
<td>Class video</td>
<td>15%</td>
<td>March TBD</td>
</tr>
<tr>
<td>PowerPoint Presentation</td>
<td>20%</td>
<td>March TBD</td>
</tr>
<tr>
<td>Research Paper</td>
<td>35%</td>
<td>April 24</td>
</tr>
</tbody>
</table>

Trip report and group participation
Each student will prepare trip report to summarize the daily activities to keep a record of lectures, research tours, industry tours, and cultural events. These will be due in the Spring semester when the students return to class and will be the basis for information to be used in preparing subsequent reports. During the trip students are to attend lectures and tours and expected to present information on the knowledge they learned in
their final report and video presentation. The trip report and your overall participation are combined worth 35% of your final grade. Participation in the lectures and activities will weigh heavily on this grade.

Class video and PowerPoint presentation
The class will jointly produce a PowerPoint presentation and video summarizing the International Experience Program. Each student is responsible to produce a clearly definable section of the video. The class will receive a common grade for the video unless an individual’s contributions are deemed to be particularly strong or weak. A presentation of this trip will be given to faculty and students at an assigned MAGEEP seminar during the fall semester.

Research paper
Each student will prepare a research paper summarizing their experience. The paper should also include an expanded overview of at least one topic related to an aspect of his or her experience. For example, a topic could be “renewable energy research in India” The student will research the topic and prepare a research paper. The paper will be 10-15 pages long (double spaced), including references.

Late Work Policy:
If the journal, trip report or research paper are turned in late, they will be assessed a penalty of 5% per day. They will not be accepted if overdue more than seven days.

Special Needs:
If you have any special needs during the trip, e.g., vegetarian food, religious observance, allergies, phobias, etc. please notify Ray Ehrhard at least one month before departure.

Schedule and Important Dates:
Fall Semester:
Orientation and pre-trip seminars (time, date and place TBA)

Please go through all handouts describing travel requirements and other logistics prior to the trip. If there are any problems, notify Ray Ehrhard well ahead of any deadlines.

Winter Trip:
Tentatively December 26 2019 through January 9, 2020: Trip to India!!! Classes will be held at IIT Delhi with separate industrial and cultural trips. There will be field trips to industrial facilities and labs. Prepare to work hard and have fun. Be diligent in keeping information relating to lectures and research tours. Take pictures to be presented in your group video.

Spring Semester:
January 31: Submit individual trip reports to Ray Ehrhard via e-mail. (it is highly recommended that this be done as soon as you return when it is still fresh and before the hectic semester begins)

March TBD: Class video and PowerPoint presentation due.
April 24: Turn in individual Research Papers.

Academic Integrity Policy:
Students in the School of Engineering and Applied Science are expected to conform to high standards of conduct. This "Statement on Student Academic Integrity" has been formally approved by the School's faculty and is intended to provide guidelines on academic behaviors that are not acceptable.

Statement on Student Academic Integrity:
You are not allowed to collaborate when writing reports unless the instructor specifically states otherwise.

It is dishonest and a violation of academic integrity if:

1. You turn in work that is represented as yours when in fact you have significant outside help. When you turn in work with your name on it, you are in effect stating that the work is yours, and only yours.
2. You use the results of another person's work (exam, homework, computer code, lab report) and represent it as your own, regardless of the circumstances.
3. You request special consideration from an instructor when the request is based upon false information or deception.
4. You submit the same academic work to two or more courses without the permission of each of the course instructors.
5. You willfully damage the efforts of other students.
6. You use prepared materials in writing an in-class exam except as approved by the instructor.
7. You write on or make erasures on any test material or class assignment being submitted for re-grading.
8. You collaborate with other students planning or engaged in any form of academic dishonesty.
9. You turn in work which is represented as a cooperative effort when in fact you did not contribute your fair share of the effort.
10. You do not use proper methods of documentation. For example, you should: Enclose borrowed information in quotation marks; acknowledge material that you have abstracted, paraphrased or summarized; cite the source of such material by listing the author, title of work, publication, and page reference.

If in doubt, ask the instructor.

University communication to students regarding the tough issues of sexual assault, bias, and mental health

Accommodations based upon sexual assault:

The University is committed to offering reasonable academic accommodations to students who are victims of sexual assault. Depending on the specific nature of the allegation, such measures may include but are not limited to: implementation of a no-contact order, course/classroom assignment changes, and other academic support services and accommodations. If you need to request such accommodations, please direct your request to Kim Webb (kim_webb@wustl.edu), Director of the Relationship and Sexual Violence Prevention Center. Ms. Webb is a confidential resource; however, requests for accommodations will be shared with the appropriate University
administration and faculty. The University will maintain as confidential any accommodations or protective measures provided to an individual student so long as it does not impair the ability to provide such measures.

Bias Reporting:

The University has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of bias, prejudice or discrimination against a student can report their experiences to the University’s Bias Report and Support System (BRSS) team. See: diversityinclusion.wustl.edu/brss/

Mental Health:

Mental Health Services’ professional staff members work with students to resolve personal and interpersonal difficulties, many of which can affect the academic experience. These include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. See: shs.wustl.edu/MentalHealth