

University of Notre Dame
Center for Sustainable Energy at Notre Dame (ND Energy)
Course: *Puerto Rico: Road Map to a Renewable Future*
Credit: 1 (S/U)
Schedule and Room: TBD
Instructor of Record: Dr. Peter Burns
Fee: None

Course Overview

After Hurricane Maria hit Puerto Rico in 2017, the island's energy infrastructure was destroyed. The lack of electricity in rural areas for months following the storm contributed to thousands of post-hurricane deaths. As the island rebuilds, there are calls for replacing the fossil-fuel based centralized grid with renewable microgrids, making use of abundant solar, wind, and water resources. This course will explore the complications of such a seemingly simple solution. Any community attempting to reduce its carbon footprint must deal not only with technological challenges, but also consider the economic, political, historical, and ethical issues unique to each location.

Laudato Si is well known in Catholic circles as Pope Francis' call to "care for our common home." In fact, the Church has been advocating for "energy ethics" at least as early as a statement from the US Catholic bishops in 1981. Concepts such as moral globalization and intergenerational justice have moved front and center with the looming climate crisis. We are at the cusp of an age when clean, reliable energy could become affordable for all as a human right, or fossil fuels will continue to be a dominant path to short-term profits. Puerto Rico reflects this very reality- teetering between becoming either an island of renewable microgrids or a natural gas distribution hub for the Caribbean.

During a required weeklong immersion in Puerto Rico, participants will have time to listen and learn about the opportunities and challenges that lie ahead. The week will be split between San Juan and the mountain town of Adjuntas. The main goal will be to gain insights from those caught in the struggle of rebuilding; the hard choices they must make and the complicated, sometimes messy path they are trying to forge. In Adjuntas, students will engage with the staff of an award winning community center, *Casa Pueblo*. This organization, led by Arturo Massol Deyá and his father Alexis Massol Gonzalez, has united much of the community around environmental stewardship. Other learning opportunities will include visits to historical and cultural sites, interaction with college students, and conversations with community leaders in San Juan and Adjuntas.

In weekly classes before the trip, participants will meet with members of the Puerto Rican diaspora; review a non-technical survey of energy options and the social and economic ramifications of each; and most importantly, examine their own life styles and enter into frank discussions about choices made on a daily basis that affect the environment.

Puerto Rico's story is being played out in thousands of villages and towns around the world, as we all struggle with the balance between personal comfort and convenience vs. our responsibility as Christians to our common home and the future of the planet. Post-trip, participants will choose a project that will engage them as active citizens, sharing what they have learned and encouraging others to pay closer attention to energy choices being made in their own lives.

The goals of this course are that each participant shall...

1. Gain an appreciation of the history, economics, politics, and cultural heritage of Puerto Rico.
2. Understand the energy options for the island and the economic/social/political implications of each.

3. Observe how a community can be united around a common cause and the characteristics of effective leadership.
4. Learn to listen with an open and informed mind, respecting each person's right to speak honestly based on his personal history and aspirations.
5. Examine her personal lifestyle and attitudes in regards to consumption in light of the immersion experience and Catholic Social Teaching.
6. Take steps to become an active citizen, considering ways to take a leadership role and advocate for those whose voices are muted.

Course Requirements

The seminar, *Puerto Rico: Roadmap to a Renewable Future* is a one credit course, graded "S" or "U." It may be used for the capstone credit for the Energy Studies Minor. In order to receive an "S" for the course, the following requirements must be met:

- Active participation in all on-campus classes
- Completion of assignments and final project
- Enthusiastic engagement in activities during mandatory week in Puerto Rico.

Class Expectations

In order to learn effectively as a group, each participant must be willing to share and listen. Living conditions in Puerto Rico will not be equivalent to Notre Dame dorm life and may require some tolerance and resiliency. To maximize the learning experience, students should be willing to...

- Complete required background readings and be prepared to discuss the materials.
- Be active listeners, absorbing what the speaker is saying rather than thinking about their responses.
- Show respect for informed opinions and disagree intelligently.
- Be willing to try new foods and experiences, showing appreciation for efforts put forth on behalf of the group.
- Step outside of personal comfort zones and allow the course to be life changing.

Grading

- Satisfactory:
 - All written assignments are on time, contain accurate insights into each topic, and are professionally composed.
 - There is active participation in each meeting, listening as well as speaking.
 - Behavior during the immersion experience shows respect for the host and fellow participants.
 - The final project is completed on time and reflects a strong connection between the activities in the course and a future commitment to civic engagement.
- Unsatisfactory:
 - This course is primarily designed to be a learning experience. Students who do not complete assignments, do not participate actively, or detract from the learning of others in the group will be warned and given an unsatisfactory grade if improvement is not made. The week in Puerto Rico is required for a satisfactory grade.

Academic Code of Honor and Dulac

All participants are expected to uphold the Academic Code of Honor pledge, "As a member of the Notre Dame community, I will not participate in or tolerate academic dishonesty." See the complete Student Guide

at <http://honorcode.nd.edu>. Violation of any portion of *DuLac*, including while in Puerto Rico, may result in a referral to the Office of Community Standards and may affect the course grade.

Note about Health and Accessibility Concerns

It is our hope that this seminar will be accessible to all who wish to participate. However, while in Puerto Rico, time will be spent outside in a hilly environment that some may find challenging. Please contact Anne Pillai, apillai@nd.edu, if you anticipate problems so that we can try to make appropriate accommodations. In addition, [the CDC recommends](#) some vaccinations and precautions that each participant should discuss with his health care provider in a timely manner.

Course Calendar

DATE	TOPIC	ASSIGNMENT DUE*
9.9.19	Introductions -Syllabus review	
9.16.19	-Puerto Rico: energy, economics, politics, Hurricane Maria -Watch documentary, <i>Blackout</i> , from PBS Frontline	Assignment #1
9.23.19 6-7:30pm*	-Catholic Social Tradition and energy ethics Guest: Fr. Terry Ehrman	Assignment #2
9.30.19	-Guest: Jeff DuBose; Solar energy overview -Casa Pueblo: Building a community -Characteristics of strong leadership	Assignment #3
10.7.19	-Puerto Rico: energy, history, politics, and culture -Guest: Yamil Colon; the current climate in PR	Assignment #4
10.14.19	-Trip preparation -Guest: Jaime Signoracci, NDI representative; 5-5:30 -Puerto Rican diaspora 5:45-6:30	
10/19-26	IMMERSION IN SAN JUAN AND ADJUNTAS (Required)	Daily Journaling
10.28.19	-Debriefing -What next- Active citizenship project planning	
11.4.19	-Presentation of final project	Assignment #5

All classes will be held in 100 Stinson-Remick, 5-6:30 pm except Sept. 23 which will begin at 6 pm.

Assignment #1:

Watch:

- Presentation by Arturo Massol Deyá from Casa Pueblo during Energy Week 2018; <https://energy.nd.edu/news-events/videos/>

Write:

- List five new insights that you gained from watching the video. This list is due before class begins.

Assignment #2:

Read:

- [Catholic Moral Traditions and Energy Ethics for the Twenty-First Century, Journal of Moral Theology, Vol. 5, No. 1 \(2012\): 1-36](#)
- [Laudato Si: On Care of Our Common Home](#) by Pope Francis
 - Read at least these sections: 13-26; 49;52-61;93-95;102-105; 164-165;172; 179-180; 217

Write:

- Write a 500-word reflection about new thoughts or insights that you have garnered in relationship to the themes of this seminar. Do NOT summarize what you have read. This paper is due before class begins.

Assignment #3:

Read:

- *Casa Pueblo, Cultivating Hope*, by Alexis Massol González

Write:

- Write a 500-word reflection about new thoughts or insights that you have garnered in relationship to the themes of this seminar. Do NOT summarize what you have read. This paper is due before class begins.

Assignment #4:

Each student will find an article from a major news source about Puerto Rico published within the past three months that brings the group up-to-date on relevant issues such as energy projects, new laws relevant to energy, community initiatives, etc. These must be pre-approved to avoid replication. List at least five main points from the article and put in the folder to share with the class.

Assignment #5:

Final presentation

It is the goal of this course to take students beyond “thoughts and prayers” and into the realm of active citizenship. As a Notre Dame student, you are called not to “hide your light under a bushel basket” but rather to be a leader and serve those on the margins. While in Puerto Rico, we will form groups and plan how to share what we’ve learned with the broader community. These projects might include such things as a letter writing campaign to Congress, an event on campus or in dorms, interaction with the Puerto Rican community on campus or in the South Bend community, or updating ND Energy’s webpage on Puerto Rico.

Journaling:

Participants will take time each evening to reflect on the days’ events and participate in a group conversation as time allows. These will be submitted for review after the trip.

Schedule in Puerto Rico

1. Saturday, October 19, San Juan
 - a. Arrive by Saturday evening
 - b. Group meeting and orientation
2. Sunday, October 20, San Juan
 - a. Tour historic San Juan
 - b. Conversation/Mass/meal with students at *Universidad del Sagrado Corazón*
 - c. Group meeting: first impressions
3. Monday/Tuesday, October 21 and 22: San Juan
 - a. Tomás Torres, Executive Director of the Institute of Competitiveness and Economic Sustainability for Puerto Rico (ICSE-PR)- energy policy history
 - b. Ramón Luis Nieves, former senator in government of Puerto Rico- energy law
 - c. Tour of capitol building

- d. Ricardo Álvarez-Díaz and Antonio Gárate-architects and city planning
 - e. Malu Blázquez Arsuaga, executive director, and Juan González Moscoso, project manager, of ReImaina Puerto Rico- project of Center for a New Economy think tank- future policy
 - f. Group meeting- what we know so far
4. Tuesday evening- Friday morning, October 22-25: Casa Pueblo, Adjuntas
- a. Learn about Casa Pueblo from the founding family
 - i. History
 - ii. How they built community
 - iii. Tour radio station, movie theater, aquaponics, forest school
 - b. Meet with members of the community regarding experience with solar
 - c. Meet with research from Univ of Michigan about gasification project
 - d. Service Project and meet families affected by it
 - e. Experience living on an unreliable grid
 - f. Begin group planning for final project
5. Friday afternoon, October 25
- a. Meet with Congressional delegation (canceled)
 - b. Return to San Juan
 - c. Free time
6. Saturday, October 26
- a. Depart San Juan

Attendance Policy

It is very important to attend every session pre/post immersion as well as participate each day in Puerto Rico. Only [University approved absences](#) will be excused and appropriate documentation should be provided. Notification of absences should be sent to the seminar directors as soon as possible. Make-up assignments cannot replace the team building that we hope to achieve. If you are part of interhall or club sports that will not allow you the flexibility to attend each class, you should not apply for this seminar.