Environmental Research Methods and Ethics
ENVI 3500 (3 credits / 45 hours)

SIT Study Abroad Program:
Portugal: Sustainability and Environmental Justice

PLEASE NOTE: This syllabus represents a recent semester. Because courses develop and change over time to take advantage of unique learning opportunities, actual course content varies from semester to semester.

Description
The Environmental Research Methods and Ethics (ERME) seminar introduces students to the conceptual and practical tools for gathering primary data and the knowledge and skills that are essential to forming constructive relationships with organizations and/or individuals, which are necessary for completing an academic project in the cultural context of Portugal. The main emphasis is on the development of empirical tools and ethics of interactive research skills involving the collection of primary data. The seminar includes modules on sustainability research methods and qualitative and quantitative research methods and ethics in environmental studies. The seminar uses lectures, readings, and field assignments to prepare students to undertake field study in the cultural context of Portugal in strict observance of research procedures involving human subjects and the regulatory ethical norms defined by the Local Review Board (LRB) and SIT’s Institutional Review Board (IRB). The overall aim is to help students hone their experience-based learning processes and prepare them for the development of an Independent Study Project (ISP), which is largely based on the data gathered from primary sources.

Learning Outcomes
The Environmental Research Methods and Ethics course comprises 45 hours of instruction (3 credits). Upon completion of the course, students will be able to:

- Articulate their own positionality and operate independently, using cultural sensitivity, and local networks of trust built over the course of the semester;
- Design appropriate quantitative and/or qualitative methods and ethics for field research in sustainability and environmental studies;
- Apply comparative methods of research in sustainability and environmental studies;
- Analyze and process primary data gathered in the field and draw valid and ethical interpretations and conclusions;
- Integrate review of sample relevant literature, an outline of method, and anticipated ethical challenges and ways of addressing them to design an Independent Study Project proposal.

Language of Instruction
This seminar is conducted in English, but students will be exposed to vocabulary related to seminar content through in-country expert lectures and field visits in a wide range of venues.
Course Schedule

*Please be aware that topics and excursions may vary to take advantage of any emerging events, to accommodate changes in our lecturers’ availability, and to respect any changes that would affect student safety. Students will be notified if this occurs.

Module 1: Experiential Learning and Positionality in Field-Based Research
This introductory module is designed to introduce students to field-based research in a study abroad context. Students learn how to relate to local communities and individuals. Most particularly, this module allows students to discover the power of experiential learning and use it as a tool to connect to local communities and individuals and develop into reflexive researchers who are attentive to their own positionality in relation to the local communities in which they engage for their research.

Sessions and class discussions may include:
- Cultural adjustment cycle;
- Doing field-based research in a study abroad context;
- Experiential learning philosophy and the politics of culture in Portugal;
- Positionality and outsider/insider research.

Required Reading:

Module 2: Methods for Sustainability Research
This module focuses on the tools and methods required for conducting quantitative field research in sustainability. Sessions and class discussions in this module may include:

- Statistical analysis
- Cost-benefit analysis
- System dynamics modeling
- Geographic Information Systems (GIS)

Required Readings:

Recommended Readings:
Module 3: Research Methods for Environmental Studies
This module focuses on the tools of methods of research in environmental studies. Students learn from experts in the field skills to conduct human-centered approach to environmental issues. The module also includes discussions on the ethics of environmental research.

Sessions and class discussions in the module may include:

- Quantitative data sampling
- Quantitative methods and analysis
- The case study methods
- Data collection: surveying and interviewing
- Ethical issues in environmental research

Required Reading:

Recommended Readings:

Module 4: Project Proposal Development
Based on learning and engagement in the preceding course modules, this module focuses on ISP proposal development and guiding students through the development of the Human Subjects Review (HSR) application for review by the Local Review Board (LRB). This critical phase in the course involves both large student group meetings and individual student meetings with the academic director and the ISP advisor.

Sessions and class discussions may include:
- Writing an ISP proposal;
- Peer review of ISP proposal drafts;
- Writing the HSR application and ethics for research in social science;
- ISP proposal presentation to peers and roundtable discussion.

Module 5: ISP in the Context of Portugal
This module prepares the student for the ISP experience. It examines work-based norms and practices related to conducting research in Portugal. The module highlights the importance of applied methodology in the ISP experience and the expectations and responsibilities of the student.

Session 1: Preparing for the ISP
This introductory session prepares the student for the ISP. The session covers a range of areas that include how to approach and develop rapport with research participants, how to work collaboratively with the ISP advisor, and logistics of the ISP period, including travel, materials, and timelines. Students will also review the ISP assessment rubric.
Session 2: Work-Based Norms and Practices in Portugal
This session explores work-based norms and practices related to research in Portugal exploring such issues as how best to describe the ISP to potential research participants and others, gender norms, issues of language, and expectations for behavior while conducting research.

Session 3: ISP Applied Methodology
This session covers strategies of time management, networking strategies, and problem-solving research challenges.

Required Reading:

Recommended Readings:

Evaluation and Grading Criteria
Description of Assignments:

Practice Interview (15%)
Students are asked to conduct a practice interview with one of the members of their host family. They are asked to write a small reflection paper (2-3 pages) about their role and attitude towards their research subjects and the skills they brought to the interview to establish an ethical and safe environment for the interviewee. Students are also encouraged to explore how their own positionality along the lines of gender, sexuality, race, and class affected the set-up and wording of their questionnaire and consequently the outcome of the interview.

Podcast (15%)
During the semester students will be studying different qualitative research methods that they will use during their ISP period. This exercise is designed for students to apply many of these methods and ethics before going into the field to do their research project. The outcome of this exercise should be the elaboration of a Podcast where they should show creatively the use and understanding of what has been learned in class.

Field Work Journal (20%)
Students are expected to keep a work journal where they will document thoroughly all the activities and assignments carried out during the course. This will also continue during the Independent Study Project period. The work journal is submitted for review and evaluation two times during the semester.

Independent Study Project (ISP) Research Proposal (40%)
All students must develop a research proposal. The research proposal should address a theme related to the program, include research question and objectives, theoretical framework, methodology, and comply with the ethical standards learned throughout the course.

Participation (10%)
All students are expected to prepare for classes, attend and participate in all lectures, class discussions, field activities, and carry out all assignments and other activities prepared in the context of the Environmental Research Methods and Ethics course.

**Assessment**

- Practice Interview 15%
- Podcast 15%
- Field Work Journal 20%
- ISP Research Proposal 40%
- Class participation 10%

**Grading Scale:**
The grading scale for all classes is as follows:
- 94-100%  A
- 90-93%  A-
- 87-89%  B+
- 84-86%  B
- 80-83%  B-
- 77-79%  C+
- 74-76%  C
- 70-73%  C-
- 67-69%  D+
- 64-66%  D
- below 64%  F

**Grading Criteria**

An “A” grade for an assignment entails superior (not just “very good”) performance in terms of structure and organization of assignments, analysis, logical argumentation and consistency, and the provision of factual, numerical, and/or historical evidence.

**Expectations and Policies**

- **Show up prepared.** Be on time. Have your reading completed and points in mind for discussion or clarification. Complying with these elements raises the level of class discussion for everyone.
- **Have assignments completed on schedule, printed, and done according to the specified requirements.** This will help ensure that your assignments are returned in a timely manner.
- **Ask questions in class. Engage the lecturer.** These are often very busy professionals who are doing us an honor by coming to speak.
- **Comply with academic integrity policies** (no plagiarism or cheating, nothing unethical).
- **Respect differences of opinion** (those of classmates, lecturers, local constituents engaged with on the visits, etc.). You are not expected to agree with everything you hear, but you are expected to listen across difference and consider other perspectives with respect.

Please refer to the SIT Study Abroad Handbook for policies on academic integrity, ethics, warning and probation, diversity and disability, sexual harassment, and the academic appeals process.
**Disability Services:** Students with disabilities are encouraged to contact Disability Services at disabilityservices@sit.edu for information and support in facilitating an accessible educational experience. Additional information regarding SIT Disability Services, including a link to the online request form, can be found on the Disability Services website at http://studyabroad.sit.edu/disabilityservices.