2018 Study Abroad Antarctica: Humans and the Environment

ASU: FIS 394   SUNY: OAP 404/VT Geog 3954   Ohio State: Earthsc and ENR 5790.10 & 5797.10

**Ohio State-Specific Syllabus—with Lecture Schedule & Assignment Due Dates**

Study Abroad Antarctica includes an autumn all semester online course and a winter break, two-week field excursion to Antarctica via Ushuaia, Argentina and returning via Punta Arenas, Chile.

The course is a collaboration among:

a) four universities in the United States: SUNY Brockport, State University of New York; Arizona State University; Virginia Tech University; and The Ohio State University;
b) three partners in New Zealand: American Universities International Programs (AUIP), University of Canterbury, and Gateway Antarctica: Centre for Antarctic Studies and Research.

Fall course lectures are webcast in real-time Wednesdays 6–7:30 p.m. Eastern Time from August 22 to December 6, 2017.

The field course begins with a group overnight flight from Miami, Florida on December 14 and culminates with an overnight flight landing in Miami on the early morning of December 30.

**Instructors—Ohio State**

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**Instructors—Arizona State**

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**Instructor—SUNY/VT**

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**Course description**

Antarctica is a wondrous place—the “coldest, windiest, driest, highest, quietest, most remote, and least understood continent on earth.” It has been an object of human speculation for millennia and a prize for explorers, sealers and whalers, scientists, and geostrategists for more than two hundred years. The course examines this unique corner of the world and provides a broad overview of its human and natural history. Special attention is given to Antarctica’s physical and ecological systems as well as human activity in the region, sustainable tourism, and use of south polar resources.

During the pre-trip course, Ohio State students attend weekly online lectures, write 3 short essays, complete a midterm project and final essay exam, and submit an annotated bibliography of their field course readings. Students enrolled through Arizona State and SUNY also prepare an independent research paper in their area of interest, to justify the larger number of credits they receive for the pre-trip course.

During the two-week Antarctic excursion via Ushuaia, Argentina and Punta Arenas, Chile, students will work on one-of-five group field studies (with post-cruise presentations in Punta Arenas and post-trip group paper submission), and submit journal entries (during the trip) and a post-trip synthesis essay and a media outreach assignment (after return to the US).
Course objectives

Students will:

1. Develop, through lectures and assigned readings, an interdisciplinary understanding of the biophysical and human dimensions of life in Antarctica, its history and its potential future.
2. Develop, through independent study, specialized knowledge of the issues in a specific, chosen area of Antarctic inquiry (e.g., history of science and exploration, environmental ethics, geology and global climate change, marine bird, southern forest conservation, etc.).
3. Develop, through field study, critical appreciation of issues in exploration, exploitation, conservation, and sustainable tourism in the Antarctic region.
4. Enhance intellectual maturity and confidence through teamwork, cross-cultural engagement, and self-reflection.

Fall Online Lecture Attendance

Viewing all online lectures (live or archived) and active participation in online discussions is required. All students must view the online lectures live (unless they receive prior approval from course instructor to watch taped version) so that they can write in questions for the presenters and stay on top of coursework. Students are expected to prepare questions during each lecture.

Ohio State students will meet in 129 Mendenhall Laboratory on Wednesday evenings, 6–7:30 pm, to view the online lectures together with Professors Carey and Lyons.

Field Course Attendance

Punctual attendance and active engagement are required for all scheduled, program–related activities (e.g. group meetings, field excursions, lectures and student presentations) unless a student receives course instructor approval. Students will lose 10% of the final grade for chronic lateness or for each day or part-day a student fails to participate. Participation in voluntary field activities is at the discretion of the student (with consultation of course instructors). Please note that students must not leave the group without consent of faculty leaders.

Academic honesty

Students are expected to conduct themselves in a professional manner and produce honest and ethical academic work. Academic dishonesty will not be tolerated. This includes giving false reasons for missing assignment deadlines, tolerating academic dishonesty of others, and plagiarism (i.e., copying and/or representing another person’s words or ideas as one’s own). All academic work must meet the standards for academic honesty for your university:

SUNY College at Brockport [http://www.brockport.edu/policies/docs/policy_on_student_academicdishonesty.pdf](http://www.brockport.edu/policies/docs/policy_on_student_academicdishonesty.pdf)
Arizona State University [https://provost.asu.edu/academic-integrity/policy](https://provost.asu.edu/academic-integrity/policy)
Ohio State University [http://studentaffairs.osu.edu/csc/](http://studentaffairs.osu.edu/csc/)

Special accommodations

On-line course: Appropriate accommodations for special needs learners will be made by Drs. Lyons or Carey for Ohio State students, by Dr. Wetmore for Arizona State students or by Dr. Bosch for SUNY students if students forward to the professor the official approval by their institution’s Services for Students with Disabilities (SSD). Students who believe they are eligible for accommodations but who have not yet obtained approval through SSD should contact SSD at their respective university:

Arizona State University 480-965-1234 [https://eoss.asu.edu/drc/services](https://eoss.asu.edu/drc/services)
SUNY Brockport 585-395-5409 [http://www.brockport.edu/policies/docs/procedures_for_accessing_services_.pdf](http://www.brockport.edu/policies/docs/procedures_for_accessing_services_.pdf)
Field Component: Students who need special learning or physical accommodations must provide formal SSD approval to Dr. Wetmore (if Arizona State student), Drs. Lyons or Carey (if Ohio State student), or Dr. Bosch (if SUNY student) at least 8 weeks before the beginning of the field program. After that time, we cannot guarantee accommodation. Some voluntary activities involve moderate exercise.

Course Management Software
Ohio State students participating in the course will use Carmen, the Ohio State course management system.

Course Assignments (Part A: Ohio State online course, 1 credit; Part B: Ohio State field course, 3 credits)

Part A: Online Course (Fall semester)
1. Midterm assignment (30%) and final essay exam (30%)
The midterm assignment and final essay exam are posted in the Carmen course page
   - **Midterm assignment** submitted via the Carmen midterm assignment box using filename “student lastname midterm assignment” is due **before 11:59 p.m. on November 4**.
   - **Final essay exam** submitted via the Carmen final essay exam box using filename “student lastname final essay exam” is due **before 11:59 p.m. on December 2**.

Grades will be penalized for incorrect filenames and for late submission (10% loss/day late).

2. Three short essays (30% total; 10% each essay)
Each ~300-word essay, posted in Carmen, draws upon course lectures and readings and on potential student research (Any essay < 250 words or > 350 words will be returned for author revision).
   - **Essay #1** submitted via the Carmen Essay #1 assignment box using filename “student lastname essay #1” is due **before 11:59 p.m. on September 23**.
   - **Essay #2** submitted via the Carmen Essay #2 assignment box using filename “student lastname essay #2” is due **before 11:59 p.m. on October 7**.
   - **Essay #3** submitted via the Carmen Essay #3 assignment box using filename “student lastname essay #3” is due **before 11:59 p.m. on October 28**.

Grades will be penalized for incorrect filenames and for late submission (10% loss/day late).

Format of Essays: Essays should be structured into four main parts.
   - **Introduction:** Outline background to the question and set out your framework for discussion (~ 50 words).
   - **Discussion:** Address 2–3 key issues from readings you think are the most important. The discussion should thoughtful, well-written, and persuasive, supported by evidence from the literature. Be sure to clearly separate main discussion points (~200 words).
   - **Conclusion:** Sum up discussion and provide clear set of concluding points (~50 words).
   - **References:** These are not included in your word limit. You should use class readings and lectures, and cite these in the body of the essay and reference list, using the American Psychological Association citation guidelines mentioned below. You should also use at least one additional reference from the peer-reviewed literature, which you have found yourself. Please cite this/these and add to references at the end of the essay.

APA citation guideline example (author, date, article title. journal title, volume #: pages.):
3. Field course bibliography (10%)

As advance preparation for the Antarctic excursion, each student will identify a preferred field module as part of the Midterm Assignment. After formal assignment by course instructors, each student will complete the electronically reserved readings for that module (readings posted on Carmen) and submit an annotated bibliography (one paragraph description of the topic, arguments, and evidence of each source) via the Carmen field bibliography assignment box using filename “student lastname field bibliography” by before 11:59 p.m. on December 9. Grades will be penalized for incorrect filenames and for late submission (10% loss/day late).

Part B: Field Course (Winter Break, December 14–30, 2018)

1. Field module (40%)

Students choose one of three field modules, depending on area of interest. The in-depth group projects are based on field observations in Antarctica and Ushuaia. Module descriptions, readings, and support materials are posted on Carmen. Field course readings, course instructors, and ship-board field staff are resources to help you complete the modules, but not to provide the answers to you. This is a group assignment and only one paper will be submitted by the group, to be submitted by the group leader. All students in a group will receive the same grade.

- Final group module/research project paper submitted via the Carmen field module box using filename “Student group name field module paper” is due before 11:59 p.m. on January 13, 2019.

2. Student field journal and course synthesis paper (40%)

One of the objectives of this course is to enhance intellectual maturity and confidence through teamwork, cross-cultural interaction, and self-reflection. The field journal assignment includes directed reflection on the course as well as student experiences, observations, and interactions with the Antarctic environment and other ship passengers. Students submit their journal entries for review during the excursion to course instructors, and they use these entries to produce a post-trip 4–6 page course synthesis paper.

- Synthesis paper submitted via the Carmen synthesis paper assignment box using filename “student lastname synthesis paper” is due before 11:59 p.m. on January 13, 2019.

3. Retrospective Media Outreach project (10%)

Produce a media story (e.g., newspaper article, blog, video, public presentation, poster) or an educational outreach activity (~500 words) that describes how you benefited from the course, raises awareness of this study abroad course, or educates others about Antarctica. It must include details on BOTH your academic and personal experience related to both the online and field course components. The final product should (a) be sufficiently professional so you could submit it to your college newspaper or study abroad office and (b) explain how you plan on using your project for outreach.

- Retrospective Media Outreach project submitted to the Carmen media paper assignment box using filename “student lastname media paper” is due before 11:59 p.m. on January 13, 2019.

4. Participation (10%)

The travel portion of this program will be greatly rewarding, but also arduous. In order to get the most out of the experience we will be working together, learning from each other, and leaning on one another at times. Thus, it is imperative that you not only attend all of the lectures and activities, but also that you engage and participate in them, and that you work to make the trip a beneficial experience for all. To emphasize this, a portion of your overall grade will be based on your engagement. Participation points are given to students who are good citizens on the trip. Those who
go out of their way to build community and support others will have points added. **Students who show up for official program activities drunk or suffering the effects of alcohol or other substances will not be allowed to participate and their grade will be reduced accordingly.**

### Readings, Lectures and Other Class Material

#### Online Course

Fall semester lectures (60–75 minutes each) are coordinated by American Universities International Programs (AUIP) and delivered by experts from the University of Canterbury’s Gateway Antarctica: Centre for Antarctic Studies and Research. Before the fall online course begins, students will receive by email a username and password with instructions for logging into the online lecture site. We shall meet as a class in 129 Mendenhall Laboratory to participate in the lectures together as a class. If you have an excuse to participate from somewhere other than our classroom, you will need a speaker or headset to listen to the weekly online lectures, but will not need a microphone. Course syllabus, assignments, and weekly readings (listed in the schedule below) are posted in Carmen, as are the boxes for all assignments.

#### Field Course

**PLEASE NOTE:** Before departing for the Antarctic excursion, students need to assemble and bring (in print or electronic form) all readings and materials posted on Carmen that are associated with the field module assignment and field journal assignment. Students can either: (a) print the documents and compile them in a notebook or (b) organize them in digital form on a notebook or laptop to bring on the field course. **You must have these documents in Antarctica. Remember that there is no internet access while onboard the ship.**

**Recommended:** Antarctic wildlife field guides are very helpful for students conducting the seabird field project. You may want to bring your own copy of one or both of these books:


#### Grade assessment

Final grades for Ohio State students will be assigned separately for the pre-departure (online) course (1 credit) and for the field course (3 credits). We anticipate that the grading scale for each will be:

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93.0–100 %</td>
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<tr>
<td>A-</td>
<td>90.0–92.99 %</td>
</tr>
<tr>
<td>B+</td>
<td>87.0–89.99 %</td>
</tr>
<tr>
<td>B</td>
<td>83.0–86.99 %</td>
</tr>
<tr>
<td>C+</td>
<td>77.0–79.99 %</td>
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<tr>
<td>B-</td>
<td>80.0–82.99 %</td>
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<tr>
<td>C</td>
<td>73.0–76.99 %</td>
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<tr>
<td>C-</td>
<td>70.0–72.99 %</td>
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FALL COURSE SCHEDULE

Week 0—Wednesday, August 22, 2018 (6 pm Eastern daylight time). This meeting is for Ohio State.
Instructors: Berry Lyons and Anne Carey
Topic: Welcome and course introduction
Reading:

Week 1—Wednesday August 29, 2018 (6 pm Eastern)
Presenter: Larry Krissek, Ohio State University
Topic: Welcome and course introduction
Reading: none

Week 2—Wednesday September 5, 2018 (6 pm Eastern daylight time)
Presenter: Gary Steel, Lincoln University
Topic: Antarctic psychology
Readings:

Week 3—Wednesday September 12, 2017 (6 pm Eastern daylight time)
Presenter: Peter Carey, SubAntarctic Foundation for Eco-systems Research
Topic: History of Antarctic Exploration
Reading:

Week 4—Wednesday September 19, 2017 (6 pm Eastern daylight time)
Presenter: Peter Carey, SubAntarctic Foundation for Eco-systems Research
Topic: Antarctic Marine Ecosystems
Reading:

ASSIGNMENT due: Short Essay Question #1 due by Sunday September 23 at 11:59 pm Eastern daylight time in the Carmen assignment box

Week 5—Wednesday September 26, 2017 (6 pm Eastern daylight time)
Presenter: Peter Carey, SubAntarctic Foundation for Eco-systems Research
Topic: Antarctic birds
Reading:
Towards Seabird-Safe Fisheries: Global Efforts & Solutions

Week 6—Wednesday October 3, 2017 (6 pm Eastern daylight time)
Presenter: Gabriela Roldan, Gateway Antarctica
Topic: Ushuaia and the Antarctic Peninsula
Readings: Read one of the following
Bertram, E., S. Muir, and B. Stonehouse, 2007, Gateway ports in the development of


**ASSIGNMENT due: Short Essay Question #2 by Sunday October 7 at 11:59 pm Eastern daylight time.**

**Week 7**—Wednesday October 10, 2017 (6 pm Eastern daylight time)
**Presenter:** Gabriela Roldan, Gateway Antarctica
**Topic:** Ushuaia: Tourism destination or frontier town? The impacts of tourism at the end of the world
**Reading:** none

**Week 8**—Wednesday October 17, 2017 (6 pm Eastern daylight time)
**Presenter:** Oliver Marsh, Gateway Antarctica
**Topic:** Glaciology and ice
**Readings:**
http://dx.doi.org/10.1016/j.gloplacha.2017.04.008

**Week 9**—Wednesday October 24, 2017 (6 pm Eastern daylight time)
**Presenter:** Paul Broady, University of Canterbury
**Topic:** Terrestrial Ecosystems in Antarctica
**Readings:**

**ASSIGNMENT due: Short Essay Question #3 by Sunday October 28 at 11:59 pm Eastern daylight time**

**Week 10**—Wednesday October 31, 2017 (6 pm Eastern)
**Presenter:** Neil Gilbert, Antarctica New Zealand
**Topic:** Antarctic territorial claims and introduction to the Antarctic Treaty System
**Readings:**


ASSIGNMENT due: Midterm Assignment due by Sunday November 4 at 11:59 pm Eastern standard time

**Week 11**—Wednesday November 7, 2017 (6 pm Eastern standard time)
**Presenter:** Bryan Storey, Gateway Antarctica  
**Topic:** Antarctic geology  
**Readings:**  


**Week 12**—Wednesday November 14, 2017 (6 pm Eastern standard time)  
**Presenter:** Neil Gilbert, Antarctica New Zealand  
**Topic:** Environmental Management, Environmental Protocol, and the CEP  
**Readings:**  


Wednesday November 22, 2017  
**NO CLASS—THANKSGIVING BREAK**

**Week 13**—Wednesday November 28, 2017 (6 pm Eastern standard time)  
**Presenter:** Bryan Storey, Gateway Antarctica  
**Topic:** Antarctic Research: Exploring the BIG questions  
**Readings:**  
Bentley, M. J., 2015, Recent Climate Change: Causes and Impacts of Climate Change in Antarctica. in *Exploring the Last Continent*, Chapter 25, in D. Liggett et al., (eds.). pp. 505–520.

ASSIGNMENT due: Final Essay Exam due by Sunday December 2 at 11:59 pm Eastern standard time.

**Week 14**—Wednesday December 5, 2017 (6 pm Eastern)  
**Presenter:** Larry Krissel, Ohio State  
**Topic:** Antarctic Field Excursion Orientation  
**Reading:** None  
ASSIGNMENT due: Field Course Annotated Bibliography due by Sunday December 9 at
ASSIGNMENT due: Field Course Assignments due by Sunday January 13, 2019 at 11:59 pm Eastern standard time

- Group Field Study Report
- Course Synthesis
- Retrospective Media Outreach Project

Note that this syllabus is subject to change. It is your responsibility to read email from the instructors and to check Carmen regularly for alterations made as events occur.