

2015 Study Abroad Antarctica: Humans and the Environment

VT: BIOL 3954 SUNY: OAP 404.61 OSU: ENR 5790.01

This is an online course integrated with 2 weeks of field studies in Antarctica and Ushuaia, Argentina. This course is collaborative effort between Virginia Tech; the State University of New York; Ohio State University; American Universities International Programs; University of Canterbury, New Zealand; and Gateway Antarctica: Centre for Antarctic Studies and Research. Webcast lectures will be delivered every Wednesday from 26 Aug to 02 Dec. The field course starts in Ushuaia, Argentina on 18 Dec (departing Miami, FL on 17 Dec) and ends on 30 Dec, returning to Miami on 31 Dec.

Instructors

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Course description

Antarctica is a wondrous and unique place. It is the “coldest, windiest, driest, highest, quietest, most remote, and least understood continent on earth.” The south polar region 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. This course examines this forbidding and enchanting corner of the world and provides a broad overview of the human and natural history of Antarctica. Special attention is given to Antarctica’s physical and ecological systems, human activity in the region, sustainable tourism, and use of south polar resources. Students “attend” weekly online lectures, write short essays, complete midterm and final exams, prepare an independent research paper in their area of interest, prepare an annotated bibliography of their field course readings, and then participate in a two-week field study in Antarctica and Ushuaia, Argentina during the 2015 winter break.

Course objectives

By the end of the program students will:

1. Develop, through lectures and assigned readings, an inter-disciplinary understanding of the biophysical and human dimensions of life in Antarctica, as well as its history and its future.
2. Develop specialized understanding, through independent study, of the issues in one specific area of Antarctic inquiry related to their major (e.g., history of science/exploration, environmental ethics, geology and global climate change, marine bird or southern forest conservation, etc.).
3. Develop, through field-based studies, a hands-on understanding of issues in exploration, exploitation, conservation, and sustainable tourism in the Antarctic region.
4. Enhance intellectual/personal maturity and self-confidence through cross-cultural understanding and self-reflection.

Attendance

Lectures: Viewing all the online lectures (live or archived) and active participation in online discussions is required. It is **highly recommended** that students view the online lectures “live,” rather than waiting to view the recorded versions at a later date. Viewing the lectures live will allow students to easily ask questions about the material, and encourage them to keep up with the coursework.

Field Course: Punctual attendance and active engagement at all scheduled, program-related activities is required, including group meetings, discussions, field excursions, lectures and any other scheduled activities. Participation in field exercises is voluntary and at the discretion of the student; however, should you wish not to participate you must inform the instructor and an alternate activity will be assigned. An excused absence or decision not to participate in one or any of these field activities will not affect your course grade. During the field studies, no student is to leave the group without consent of the faculty leader. Unless an absence is approved by the course instructor, students will lose 10% of their final grade for each day or part-day they fail to participate. Any unexcused absences *or continued late arrival* to program activities may, at the discretion of the faculty leader, be grounds for dismissal from the program.

Academic honesty

You are expected to conduct yourself in a professional manner and be honest and ethical in your academic work. Academic dishonesty will not be tolerated. Academic dishonesty includes copying the work of others, tolerating the academic dishonesty of others, giving false reasons for failure to take a test, and plagiarism—representing the words or ideas of another person as one's own. All academic work must meet the standards for academic honesty for your university. Each student is responsible for reviewing these standards. See: Virginia Tech: www.honorsystem.vt.edu/; College at Brockport: http://www.brockport.edu/policies/docs/policy_on_student_academic_dishonesty.pdf; Ohio State University: <http://studentaffairs.osu.edu/csc/>

Special accommodations

On-line class component: Accommodations are collaborative efforts between students, faculty and Services for Students with Disabilities (SSD). Students with accommodations approved through SSD are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through SSD should contact SSD at their respective university (Virginia Tech: 540-231-0858; SUNY: 585-395-5409; OSU: 541-737-4098).

For more information see:

VT: <http://www.ssd.vt.edu/accommodationdescriptions.htm>

SUNY: [http://www.brockport.edu/policies/docs/procedures_for_accessing_services .pdf](http://www.brockport.edu/policies/docs/procedures_for_accessing_services.pdf)

OSU: [http:// www.ods.ohio-state.edu](http://www.ods.ohio-state.edu)

Field Component: Any student with a disability who needs an accommodation or other assistance in this course must contact the institution at least 8 weeks before the field program begins. After that time, we cannot guarantee that such needs can be accommodated. Some activities involve moderate exercise such as hiking, and participation in these is voluntary.

Course management software

All students participating in the course will be using Virginia Tech's course management software, Scholar.

Course work requirements (Part A: online course; Part B: field course)

Part A: Online course (Fall semester)

1. Midterm and final exams (40%)

The midterm and final exams are take-home and open notes, and may draw material from the online lectures and associated readings. Exam dates are as listed on the course schedule. Completed exams should be posted online in your Scholar Dropbox by the submission deadlines. *Your exams must have the following filename formats: "***lastname midterm exam***" or "***lastname final exam***". Grades will be penalized for not using the correct filename. See due dates under Lecture Topics and Course Schedule below.

2. *Independent research project (25%):* Based on literature published in peer-reviewed journals, students will develop a ~1500 word typed project exploring a topic related to their area of interest/major. Topics must be approved by the instructor in advance, via a research proposal submission process. **Proposals** should be posted online in your Scholar Dropbox using the filename format: "***lastname research proposal***". The proposal should include (a) a one paragraph summary statement and (b) a bibliography containing at least 5 sources from the published literature. A research paper **outline** and **final research paper** should be submitted in the same manner as above (including the digital filename format). Grades will be penalized for not using the correct filename. See the Lecture Topics and Course Schedule section for due dates. The final paper should be typed using Times New Roman 12-point font, single-spaced, and one inch margins. (References and appendices are not included in the word limit). Late submissions will receive a penalty of 10% for each day or part thereof that they are late. All material must be typed and referenced using the American Psychological Association citation guidelines; for example,

Smith, M.A. and Jones, H.K. (2010). This is the title of the article. *Title of Journal*, 30:692-703.

3. *Short essays (25%)*: Students must write three short essays during the semester. Essay questions will be based on the lectures, readings and additional student research. Students must post their written essays on Scholar by no later than 11:59pm on Sunday the week it is due; use the filename format “***lastname essay 1 (2, or 3)***”. Grades will be penalized for not using the correct filename. Essays not posted in the Scholar Dropbox site by 11:59pm on Sunday the week they are due will receive a penalty of 10% for each day or part thereof that they are late. Each essay is to be approx 300 words long (+/- 10 words). Essays less than 250 words or more than 350 words will be returned to the author for revision. See the Lecture Topics and Course Schedule section for due dates.

Format of Essays: Essays should be structured into four main parts.

Introduction: Outline the background to the discussion question and set out your framework for discussion (approx 50 words).

Discussion: Address 2-3 key issues from the readings that you think are the most important. The discussion should contain thoughtful analysis, be very well written using persuasive arguments supported with evidence from the literature and should display originality in your thinking. Make sure you clearly separate your main discussion points (approximately 200 words).

Conclusion: Sum up the discussion and provide the reader with a clear set of concluding points (approx 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 above. 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.

4. *Field course bibliography (10%)*: As part of the advance preparation for the field course, each student must choose one of the optional field modules, complete the readings for that module and submit a bibliography via their online Scholar Dropbox using the filename format: “***lastname field bibliography***”. Grades will be penalized for not using the correct filename. See the Lecture Topics and Course Schedule section for due dates.

Part B: Field Course (Winter Break)

1. Field module (45%)

Students will choose one of three field modules, depending on their area of interest. These modules are in-depth independent exercises based on field observation in Antarctica and Ushuaia. The modules to be completed are outlined in the field course reading materials. The field course readings and the field staff are your sources to help you complete the modules. The field experts are there as resources to help you complete the modules but not to provide you with the answers; their role is to guide you in discovering them yourselves.

2. Articulated learning and reflection assignment (45%)

One of the objectives of this course is to enhance intellectual/personal maturity and self-confidence through cross-cultural understanding and self-reflection. This articulated learning assignment requires regular journaling that includes directed reflection on student observations, experiences and interactions with the Antarctic environment and with other ship passengers from around the world. It also requires students to reflect on the learning process associated with the field module and create connections between their field studies and the online course. Students will submit their periodic journal entries to the faculty leader for review and use these entries to produce a final 4-6 page reflection paper. Instructions and due date will be provided.

3. Retrospective Media Outreach project (10%)

Produce a media story (e.g., newspaper article, blog, video, public presentation, poster, etc.) or an educational outreach activity that describes how you benefited from the study abroad experience, raises awareness of this study abroad course, or educates others about Antarctica. The final product 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 a professional quality piece that you can submit to your college newspaper or education abroad office and (b) explain how you plan on using your project for outreach. Completed projects should be posted online in your Scholar Dropbox by the due date (to be determined). Detailed instructions will be provided.

Readings, Lectures and Other Class Material

Online classes

Fall semester lectures are coordinated by AUIP, in affiliation with the University of Canterbury's Gateway Antarctica: Centre for Antarctic Studies and Research. Each lecturer will deliver a 60 – 75 minute presentation. You will be emailed a username and password with instructions on how to log into the online lecture site. You will need a set of speakers or headset to listen to the weekly online lectures, but will not need a microphone. Readings will be assigned for each class at least one week before the online lecture. Please check the VT Scholar site for readings and course information.

Field course

Required: Before departing the U.S. for the field program you will need to have all required materials available; these include readings and supporting materials for completing coursework, plus some general helpful information. You must bring this to Antarctica, as copies will not be available there. You will be able to access the necessary materials via the online course site and download them to your computer. You then will need to either (a) print the documents and compile them in a notebook or (b) organize them in digital form on a notebook or laptop computer to bring on the field course.

You must have these documents with you while in Antarctica!

Recommended: An Antarctic wildlife field guide will be helpful for students conducting the seabird field study project. Dr. Blanc will have 3 field guides (Shirihai 2008) that students can borrow, but you may want to own your own copy. Here are two recommendations:

Carey, P. and Franklin, C. 2009. Antarctica Cruising Guide: Includes Falkland Islands, South Georgia and Ross Sea. Awa Press, Wellington, New Zealand.

Shirihai, H. 2008. The Complete Guide to Antarctic Wildlife: Birds and Marine Mammals of the Antarctic Continent and the Southern Ocean, Second Edition. Princeton University Press, Princeton, NJ.

Grade assessment

Final grades for all credits will be assessed together and as follows:

A	93.0 - 100 %	B+	87.0 - 89.99 %	C+	77.0 - 79.99 %	and so on.....
A-	90.0 - 92.99 %	B	83.0 - 86.99 %	C	73.0 - 76.99 %	
		B-	80.0 - 82.99 %	C-	70.0 - 72.99 %	

See next page for fall lecture topics and course schedule. . .

Lecture Topics and Fall Course Schedule:

Lectures are on Wednesdays at 6pm Eastern Time unless otherwise noted

26 August, 6:00pm EDT	Lori Blanc, Virginia Tech	Welcome and introduction to the course	
2 September, 6:00pm EDT	Peter Carey, AUIP	History of Antarctic exploration	Due: First online essay, Sunday 6 Sept by 1159pm
9 September, 6:00pm EDT	Neil Gilbert, Antarctica New Zealand	Antarctic territorial claims and an introduction to the Antarctic Treaty System	
16 September, 6:00pm EDT	Gabriela Roldan, International Antarctic Centre	Ushuaia and the Antarctic Peninsula today	Due: Second online essay, Sunday 20 Sept by 1159pm
23 September, 6:00pm EDT	Bryan Storey, Gateway Antarctica	Antarctic geology	
30 September, 6:00pm EDT	Sean Fitzsimons, University of Otago	Physical geography of Antarctica	Due: Independent research paper proposal, Sunday 4 Oct by 1159pm
7 October, 6:00pm EDT	Oliver Marsh, Gateway Antarctica	Glaciology and ice	
14 October, 6:00pm EDT	Paul Broady, Department of Biological Sciences	Terrestrial ecosystems: Plants around, on and in Antarctica	Due: Third online essay, Sunday 18 Oct by 1159pm
21 October, 6:00pm EDT	Craig Franklin, University of Queensland	Antarctic marine ecosystems	Midterm handed out
28 October, 6:00pm EDT	Peter Carey, AUIP	Antarctic birds	Due: Midterm, Sunday Nov 1 by 1159pm
4 November, 6:00pm EST	Neil Gilbert, Antarctica New Zealand	Environmental management, the Environmental Protocol and the CEP	Due: Research paper outline, Sunday Nov 8 by 1159pm
11 November, 6:00pm EST	Bryan Storey, Gateway Antarctica	Antarctic research: climate change	
18 November, 6:00pm EST	Gary Steel, Lincoln University	Antarctic psychology	Due: Research paper, Sunday 22 Nov by 1159pm
25 November	No lecture	Thanksgiving Break	Final exam handed out by 29 Nov
2 December	Lori Blanc, Virginia Tech	Field project overview and preparation	Due: Final exam, Sunday 6 Dec by 1159pm
9 December	No lecture	Field bibliography, project preparation	Due: Field course annotated bibliography, Friday 11 Dec by 1159pm