

**2017 Study Abroad Antarctica: Humans and the Environment**  
*VT: GEOG 3954      SUNY: OAP 404      OSU: ENR 5790.01 and 5797.10*

**VT/SUNY Brockport-Specific Syllabus**

**Study Abroad Antarctica** includes a fall online course and a winter break, two week field excursion to Antarctica via Ushuaia, Argentina. The course is a collaboration among:

a) three universities in the U.S.: The College at Brockport, State University of New York (SUNY); Virginia Tech; and The Ohio State University;  
as well as

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 600 – 730 p.m. Eastern Time from August 30- December 6, 2017.

The field course begins with a group overnight flight from Miami, FL on December 15 and culminates with an overnight flight landing in Miami early morning on December 30. Group flight information and booking instructions are at

<https://secure.statravel.com/paymentform.htm/#/form/AUIP/1496256670260/321>

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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, OSU 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 Virginia Tech and Brockport 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, students work on one-of-three group field studies (with ship-board presentation and post-trip group paper submission), and submit journal entries (during the trip) and a post-trip synthesis essay and a media outreach assignment.

**Course objectives-** Students will:

1. Develop, through lectures and assigned readings, an interdisciplinary understanding of the biophysical and human dimensions of life in Antarctica, as well as its history and potential future.
2. Develop specialized knowledge, through independent study, of the issues in a specific, chosen area of Antarctic inquiry (e.g., history of science/exploration, environmental ethics, geology and global climate change, marine bird or 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. It is **expected** that students 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.

**\*\*\* There will be occasional opportunities for VT students to meet collectively in 136 Major Williams Hall on Wednesday evenings to view the online lectures. \*\*\***

**Field Course Attendance:** Punctual attendance and active engagement is required for all scheduled, program-related activities (e.g. group meetings, field excursions, lectures and student presentations) unless student receives course instructor approval- students will lose 10% of their final grade for chronic lateness or for each day or part-day they fail to participate. Participation in voluntary field activities is at the discretion of the student (with consultation of course instructors). **Please note**, 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— 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: College at Brockport

[http://www.brockport.edu/policies/docs/policy\\_on\\_student\\_academic\\_dishonesty.pdf](http://www.brockport.edu/policies/docs/policy_on_student_academic_dishonesty.pdf) ; Virginia Tech [www.honorsystem.vt.edu/](http://www.honorsystem.vt.edu/) ; Ohio State University <http://studentaffairs.osu.edu/csc/>

### **Special accommodations**

*On-line course:* Appropriate accommodations for special needs learners will be made by Dr. Resler and/or Drs. Davis or Krissek (if OSU student) if students forward to them 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:

**Virginia Tech** 540-231-0858

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

**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)

OSU 541-737-4098

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

*Field Component:* Students who need special learning or physical accommodations must provide formal SSD approval to Dr. Resler and/or Drs. Davis or Krissek (if OSU 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**

Virginia Tech and Brockport students will use Canvas, the Virginia Tech course management system. OSU students participating in the course will use Carmen, the OSU course management system. The same content will be posted on both OSU's Carmen system and VT's Canvas system, with the exception of the *Independent research project*, which is required for VT/SUNY-enrolled students (6 credits). Dr. Resler has provided log-in information to Brockport students for the VT Canvas system.

### **Course Assignments (Part A: online course; Part B: field course: Total 6 credits for VT/SUNY Brockport students)**

**Note: ALL due dates are EASTERN time!**

#### **Part A: Online Course (Fall semester)**

##### *1. Midterm assignment (20%) and final essay exam (20%)*

The midterm assignment and final essay exam are currently posted on the Canvas course page

- **Midterm assignment** submitted via the Canvas *midterm exam* using filename “*student lastname midterm assignment*” is due **before 11:59 p.m. on November 5**
- **Final essay exam** submitted via the Canvas *final essay exam* using filename “*student lastname final essay exam*” is due **before 11:59 p.m. on December 3**.

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

*2. Independent research project (20%):* Based on literature published in peer-reviewed journals, students develop a ~1500 word (~5 pages) research paper exploring a topic related to their area of interest or major. Topics must be approved by the instructor in advance (Resler for VT and SUNY-Brockport students), via a research proposal submission process.

- **Research paper proposal** submitted to the Canvas *research proposal* using filename “*student lastname research proposal*” is due **September 17, by 11:59pm**. The proposal includes a one paragraph summary statement and a bibliography containing at least 5 sources from the published literature.
- **Research paper outline** submitted to the Canvas *research outline* using filename “*student lastname research outline*” is due **November 12, by 11:59pm**. The outline includes a proposed title, topic and thesis, short sentence summary of each paragraph, and updated bibliography.
- **Research paper** submitted to the Canvas *research paper* using filename “*student lastname research paper*” is due **November 26, by 11:59pm**.

The approximately 1500 word final paper should use Times New Roman 12-point font, single-spaced, and one inch margins, and follow American Psychological Association (APA) citation guidelines (references and optional appendices not included in word limit). Grades will be penalized for late submission (10% loss/day late).

APA citation guideline example (author. (date). article title. *journal title*, volume #: pages.):

- Resler, L., Davis, T. and Krissek, L. (2017). Traveling With Students to Antarctica. *Journal of Off-the-Wall Academics*, 30:692-703.

3. *Three short essays (30% total; 10% each essay)*: Each ~300 word essay, currently posted in Carmen, draws on course lectures and readings as well as potential student research (essays < 250 words or > 350 words will be returned for author revision).

- **Essay #1** submitted via the Carmen *Essay #1 dropbox* using filename “*student lastname essay #1*” is due **before 11:59 p.m. on September 24**.
- **Essay #2** submitted via the Carmen *Essay #2 dropbox* using filename “*student lastname essay #2*” is due **before 11:59 p.m. on October 8**.
- **Essay #3** submitted via the Carmen *Essay #3 dropbox* using filename “*student lastname essay #3*” is due **before 11:59 p.m. on October 29**.

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 be 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.):

- Resler, L., Davis, T. and Krissek, L. (2017). Traveling with Students to Antarctica. *Journal of Off-the-Wall Academics*, 30:692-703.

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

## Part B: Field Course (Winter Break- December 15-30, 2017)

### 1. Field module (45%)

Students choose one of three field modules, depending on their area of interest. These in-depth group projects are based on field observations in Antarctica and Ushuaia. Module descriptions, readings, and support materials are posted in Canvas. The field course readings, course instructors, and ship-board field staff are resources to help you complete the modules- but not to provide you with the answers.

- Final group module/research project paper submitted via the Canvas *field module dropbox* using filename “*Student group name field module paper*” is due **before 11:59 p.m. on January 14, 2018.**

### 2. Student field journal and course synthesis paper (45%)

One of the objectives of this course is to enhance intellectual maturity and confidence through team work, 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 Canvas *synthesis paper dropbox* using filename “*student lastname synthesis paper*” is due **before 11:59 p.m. on January 14, 2018.**

### 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) 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 via the Canvas *media paper dropbox* using filename “*student lastname media paper*” is due **before 11:59 p.m. on January 14, 2018.**

## 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. You will need a speaker or headset to listen to the weekly online lectures, but will not need a microphone. The course syllabus, assignments, and weekly readings (listed in the schedule below) are posted in Carmen, as are the dropboxes 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 Canvas that are associated with the field module assignment and field journal assignment. Students can (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! (and 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. Dr. Resler expects to bring one of each of the following field guides that students can borrow, but you may want to bring your own:

- Carey, P. and Franklin, C. (2009). *Antarctica Cruising Guide*. Wellington, New Zealand: Awa Press.
- Shirihi, H. (2008). *The Complete Guide to Antarctic Wildlife*. Princeton, NJ: Princeton University Press.

## Grade assessment

All 6 credits will be registered in the fall; Students will earn an “X” in the fall and receive a grade change after completing the field course work. We estimate the Fall course workload is 60% of the overall 6-credit workload.

We anticipate that the grading scale for each will be:

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 %	

## Fall Course Schedule

**Week 1 -Wednesday August 30, 2017 (6 pm Eastern)**

**Presenter:** Mandala White (AUIP), Course Introduction

**Reading:**

- *Reflections at the End of the Earth*. 9-51. (Author: A. Filbert, former AUIP student)

**Week 2-Wednesday September 6, 2017 (6 pm Eastern)**

**Presenter:** Gabriela Roldan, Ushuaia and the Antarctic Peninsula

**Reading:** (Read one of the following):

- Bertram, E., Muir, S., & Stonehouse, B. (2007). Gateway ports in the development of Antarctic tourism. *Prospects for Polar Tourism*, 123-146.
- Elzinga, A. (2013). Punta Arenas and Ushuaia: early explorers and the politics of memory in constructing Antarctic gateway cities. *The Polar Journal*, 3(1), 227-256.

**Week 3- Wednesday September 13, 2017 (6 pm Eastern)**

**Presenter:** Gabriela Roldan, Ushuaia: Tourism destination or frontier town? The impacts of tourism at the end of the world

**ASSIGNMENT due:** Research paper proposal due by Sunday, September 17, 11:59pm, Eastern

**Week 4- Wednesday September 20, 2017 (6 pm Eastern)**

**Presenter:** Peter Carey, History of Antarctic Exploration

**Reading:**

- Martin, S. (1996). *A History of Antarctica*. Sydney: State Library of New South Wales Press. 17-31.

**ASSIGNMENT due:** Short Essay Question #1 by Sunday September 24 at 11:59 pm Eastern

**Week 5-** Wednesday September 27, 2017 (6 pm Eastern)

**Presenter:** Bryan Storey, Antarctic Geology

**Reading:**

- Cook, Y. and Storey, B. (2015). Chapter 2: A Continent Under Ice: The Geological Setting of Antarctica. In Liggett, D., et al (eds.) *Exploring the Last Continent*. Springer International: DOI 10.1007/978-3-319-18947-5\_2; 9-27.
- Storey, B., and Cook, Y. (2015). Chapter 3: A Long Journey South: Unravelling Antarctica's Geological History. In Liggett, D., et al (eds.) *Exploring the Last Continent*. Springer International: DOI 10.1007/978-3-319-18947-5\_3; 29-49.
- Atkins, C. (2015). Chapter 4: Looking Back to the Future: Palaeoclimate Studies in Antarctica. In Liggett, D., et al (eds.) *Exploring the Last Continent*. Springer International: DOI 10.1007/978-3-319-18947-5\_4; 51-65.

**Week 6-** Wednesday October 4, 2017 (6 pm Eastern)

**Presenter:** Oliver Marsh, Glaciology and Ice

**Reading:**

- Jouthin, I., Smith, B.E., and Medley, B. (2014). Marine ice sheet collapse potentially underway for the Thwaites Glacier Basin, West Antarctica. *Science*, 344(6185): DOI 10.1126/science.1249055, 735-738.
- Paolo, F. et al. (2015). Volume loss from Antarctic ice shelves is accelerating. *Science*, 348(6232), 327-330.

**ASSIGNMENT due:** Short Essay Question #2 by Sunday October 8 at 11:59 pm Eastern

**Week 7-** Wednesday October 11, 2017 (6 pm Eastern)

**Presenter:** Peter Carey, Antarctic Marine Ecosystems

**Reading:**

- Barnes, D. and Clarke, A. (2011). Antarctic marine biology. *Current Biology*, 12(12), 451-457.

**Week 8-** Wednesday October 18, 2017 (6 pm Eastern)

**Presenter:** Peter Carey, Antarctic birds

**Reading:**



- [https://en.wikipedia.org/wiki/List\\_of\\_birds\\_of\\_Antarctica](https://en.wikipedia.org/wiki/List_of_birds_of_Antarctica) (review list of birds at this website)
- [http://www.birdlife.org/sites/default/files/bycatch\\_booklet\\_2017\\_w.pdf](http://www.birdlife.org/sites/default/files/bycatch_booklet_2017_w.pdf)

**Week 9-** Wednesday October 25, 2017 (6 pm Eastern)

**Presenter:** Paul Broady, Terrestrial Ecosystems in Antarctica

**Reading:**

- Broadey, P. (2015). Chapter 10: Life on Land: Aquatic Ecosystems. In Liggett, D., et al (eds.) *Exploring the Last Continent*. Springer International: DOI 10.1007/978-3-319-18947-5\_10; 175-200.
- Broadey, P. (2015). Chapter 11: Life on Land: Non-aqueous Ecosystems. In Liggett, D., et al (eds.) *Exploring the Last Continent*. Springer International: DOI 10.1007/978-3-319-18947-5\_11; 201-228.

**ASSIGNMENT due:** Short Essay Question #3 by Sunday October 29 at 11:59 pm, Eastern

**Week 10-** Wednesday November 1, 2017 (6 pm Eastern)

**Presenter:** Neil Gilbert, Antarctic territorial claims and introduction to the Antarctic Treaty System

**Reading:**

- Dodds, K.J. (2010). Amongst the palm trees: ruminations on the 1959 Antarctic Treaty. *Polar Record*, 46(1), 1-2.
- Baker, F.W.G. (2010). Some reflections on the Antarctic Treaty. *Polar Record*, 46(1), 2-4.
- Beck, P.J. (2010). Fifty years on: putting the Antarctic Treaty into the history books. *Polar Record*, 46(1), 4-7.
- Berkman, P.A. (2010). Common interests in the international space of Antarctica. *Polar Record*, 46(1), 7-9.
- Bulkeley, R. (2010). The political origins of the Antarctic Treaty. *Polar Record*, 46(1), 9-11.
- Haward, M. (2010). Australia and the Antarctic Treaty. *Polar Record*, 46(1), 11-14.
- Joyner, C.C. (2010). The Antarctic Treaty and the law of the sea: fifty years on. *Polar Record*, 46 (1), 14-17.
- Rothwell, D.R. (2010). Sovereignty and the Antarctic Treaty. *Polar Record*, 46(1), 17-20.

**ASSIGNMENT due:** Midterm Assignment by Sunday November 5 at 11:59 pm

**Week 11-** Wednesday November 8, 2017 (6 pm Eastern)

**Presenter:** Gary Steel, Antarctic Psychology

**Reading:**

- Norris, K. et al. (2010). Future directions in Antarctic psychology research. *Antarctic Science*, 22(4), 335-342.

**ASSIGNMENT due:** Research paper outline due by Sunday, November 12, 11:59pm, Eastern

**Week 12-** Wednesday November 15, 2017 (6 pm Eastern)

**Presenter:** Neil Gilbert, Environmental Management, Environmental Protocol, and the CEP

**Reading:**

- Chown, S. et al (2012). Challenges to the Future Conservation of the Antarctic. *Science*, 337, 158-59.
- Tin, T. et al (2009). Impacts of local human activities on the Antarctic environment. *Antarctic Science*, 21(1), 3-33.

**Week 13-** Wednesday November 22, 2017

NO CLASS PRESENTATION- THANKSGIVING BREAK

**ASSIGNMENT due:** Research paper due by Sunday, November 26, 11:59pm

**Week 14-** Wednesday November 29, 2017 (6 pm Eastern)

**Presenter:** Bryan Storey, Antarctic Research: Exploring the BIG questions

**Reading:**

- Bentley, M. (2015). Recent Climate Change: Causes and Impacts of Climate Change in Antarctica. *Exploring the Last Continent*. Switzerland: Springer Int. Pub., 505-520
- International Association Antarctica Tour Operators (IAATO). *Climate Change in Antarctica: Understanding the Facts*.

**ASSIGNMENT due:** Final Essay Exam by Sunday December 3 at 11:59 pm, Eastern

**Week 15-** Wednesday December 6, 2017 (6 pm EST)

**Presenter:** Larry Krissek and Tommy Davis, Antarctic Field Excursion Orientation

**ASSIGNMENT due:** Field Course Annotated Bibliography by Sunday December 10 at 11:59 pm, Eastern

**Field Course Assignments due by Sunday January 14, 2018 at 11:59 pm Eastern**

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