DISCOVERY: THE HISTORY, POLITICS, AND FUTURE OF HUMAN EXPLORATION

Overview
This course uses an interdisciplinary approach, incorporating the sciences and the humanities, to explore the history and future of human exploration and discovery. It begins with the most distant story we can tell of early Homo sapiens venturing out of Africa some 60,000 years ago and ends with our reach into space—speculating on the future of human discovery. What are the catalysts for human beings to leave one place for another into the unknown? Often this has come as a response to climate changes, disasters, disease, and/or changes in food sources. In other cases the movement is caused by human conflict, seeking out new wealth and trade, or the development of a new technology that reduces the risks of travel. On some occasions the impetus has been simple human curiosity. In most cases these movements have had lasting effects on human politics and culture. This course takes a global approach—in some cases literally out of this world—to study the causes and effects of these human journeys. It also looks to the future to all that has not yet been explored to answer where we might go next and what impacts this may have. Texts include scientific studies, historical narratives, and primary source documents.

This is a hybrid (i.e., combination of in-person and online meetings) and a non-Western course.

Faculty
Mark M. Gray, Ph.D.
Research Associate Professor
Georgetown University and the Center for Applied Research in the Apostolate (CARA)
Office Hours: Thursday 5-6 p.m. and by appointment
Telephone: 202-687-0885; email: mmg34@georgetown.edu
**Learning Objectives**
After completing this course a student should be able to:

1. Utilize physical anthropology and biology to understand evolution and mobility of early humans and their biological ancestors
2. Conceptualize the importance of climate change, disaster, food source issues, and disease in human migrations
3. Describe the circular connection between technological development and “discovery cultures”
4. Explain economic and political motivations behind human journeys of discovery
5. Describe cultural and political problems arising from migration and contact between civilizations
6. Compare travel literatures to historical experience. Describe the impact of travel narratives on popular cultures
7. Explain the development of colonial systems and international slavery as well as the historical, social, and economic consequences arising from these institutions
8. Compare and contrast the history of human explorations undersea and in air/space. Describe the impact of military conflict on the development of undersea and air/space technologies
9. Describe the cultural importance of pseudo-journeys (e.g., in digital worlds, transcendental experiences through meditation or medication)
10. Demonstrate the linkages between trade and travel historically and in the present day
11. Compare the science fiction of space exploration to the real challenges posed by physics and human biology
12. Map out visions of the future of human explorations

**Textbooks (required)**
*Maps of Time: An Introduction to Big History*
David Christian
University of California Press (October 3, 2011)

*Pathfinders: A Global History of Exploration*
Felipe Fernández-Armesto
W. W. Norton & Company (October 17, 2007)

*Mankind Beyond Earth: The History, Science, and Future of Human Space Exploration*
Claude A. Piantadosi
Columbia University Press (January 1, 2013)

Note: Additional journal articles are discussed in the course and available on JSTOR. These are noted in the course schedule by week and listed at the end of the syllabus.

**Grading**
The final grade will be determined as follows:

- 93% to 100% = A, 90% to 92% = A-
- 87% to 89% = B+, 83% to 86% = B, 80% to 82% = B-
- 77% to 79% = C+, 73% to 76% = C, 70% to 72% = C-
- 67% to 69% = D+, 63% to 66% = D, Below 62% = F

Grades will be based on a combination of assignments, an exam, and a project/paper:

Class assignments represent 20% of your overall grade. One exam will be given at the end of the semester gauging your grasp of the material. This is 25% of your grade. The examination is open-book and open-note. The centerpiece of the course is a research project. These can be done individually (single-investigator) or in groups (i.e., co-investigators). The topic will be determined by you or your group in consultation with your professor. This project must focus on a non-western topic (note: this could include the experiences and impacts of Europeans in the non-Western world). Each project will be summarized in a research paper. Throughout the semester we will be discussing and developing these projects together as a class. Results will be presented at the end of the semester in an informal presentation session. This presentation and other in-class participation will account for 15% of your grade. The final paper should consist of a minimum of 3,000 words. This is worth 40% of your grade (due by May 14 through electronic submission).

In all your work that requires a reference please use APA style. This is the standard used in the Social Sciences.

Disabilities
If you are a student with a documented disability who requires accommodations or if you think you may have a disability and want to inquire about accommodations, please contact the Academic Resource Center at 202-687-8354 or arc@georgetown.edu.

Turnitin.com
Students acknowledge that by taking this course all required papers can be submitted for a Textual Similarity Review to Turnitin.com for the detection of plagiarism. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.

Extreme weather, Emergencies, and Instructional Continuity
During inclement weather or other emergencies on a day when we are scheduled to meet face-to-face, check the university’s Web site or call (202) 687-7669 for information on whether the university is open. If the university is open, this class will meet. If the university is closed, this class will meet through distance means such as online videoconferencing; check your e-mail for a message from me on how we will proceed in that situation. Due dates for written assignments submitted through Blackboard will not be changed due to campus closings.
The university recently has acquired the capability to send text messages and recorded messages about emergencies to cell phones and other mobile devices. Sign up on MyAccess.

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1 The paper should use a 12-point Times New Roman font and be double spaced with standard margins (1” top and bottom and 1.25” left and right). With these parameters a 3,000 word paper will be approximately 10 pages in length
**Georgetown Honor System**
All students are expected to follow Georgetown's honor code unconditionally. We assume you have read the honor code material located at [http://scs.georgetown.edu/academic-affairs/honor-code](http://scs.georgetown.edu/academic-affairs/honor-code), and in particular have read the following documents: Honor Council Pamphlet, What is Plagiarism, Sanctioning Guidelines, and Expedited Sanctioning Process. Papers in this course will all be submitted to turnitin.com for checking.
Submitting material in fulfillment of the requirements of this course means that you have abided by the Georgetown honor pledge:

*In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Georgetown Honor System: To be honest in any academic endeavor, and to conduct myself honorably, as a responsible member of the Georgetown community, as we live and work together.*

**Plagiarism**
In accord with university policy, all incidents of suspected plagiarism or other Honor Code violations will be reported to the Honor Council without fail.
If the Honor Council finds that a student has plagiarized or has violated the Honor Code in any other way, the student will receive a grade of F for the course.

**Policy Accommodating Students’ Religious Observances**
The following is university policy:
Georgetown University promotes respect for all religions. Any student who is unable to attend classes or to participate in any examination, presentation, or assignment on a given day because of the observance of a major religious holiday or related travel shall be excused and provided with the opportunity to make up, without unreasonable burden, any work that has been missed for this reason and shall not in any other way be penalized for the absence or rescheduled work. Students will remain responsible for all assigned work.
Students should notify professors in writing at the beginning of the semester of religious observances that conflict with their classes.

We have 15 class sessions (including the final exam meeting). Ten of these are in-person.
Attendance is very important. If you are going to be missing an in-person class please let the instructor know ahead of time. The five recorded/online lectures may be viewed on your own schedule during the week they are posted. You are responsible for obtaining course material missed during any absence. Consistent with the policies of the Liberal Studies program, having two or more absences for an in-person session may negatively affect your grade.
### Course Schedule

<table>
<thead>
<tr>
<th>Class</th>
<th>Topics, readings, and assignments</th>
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<tbody>
<tr>
<td>Distant Journeys</td>
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<tr>
<td><strong>Jan. 27</strong> I.</td>
<td>Ancient Seas: Early Asian and European Explorers; II. On Ancient Roads; III. Growing Empires and War; IV. Encounters with the “Other”</td>
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<tr>
<td><strong>Feb. 3 (online)</strong></td>
<td>I. Exploration in Early Literature; II. Spread of Salvation Religions: Evangelization and Pilgrimage</td>
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<td>Classical Explorations</td>
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<tr>
<td><strong>Feb. 10 (online)</strong></td>
<td>I. Europeans Meet “New Worlds”; II. Globalization and the Spread of Disease</td>
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<td><strong>Feb. 17</strong></td>
<td>Theater of the Mind: The impact of the printing press in Asia and Europe, expanding literacy, and the travel/quest tale</td>
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<td><strong>Feb. 24</strong></td>
<td>Frontiers: Colonialism and culture clash around the world; International slavery</td>
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<tr>
<td><strong>Mar. 2 (online)</strong></td>
<td>I. Enlightenment age and travel technology; II. Emergence of global capital markets, commodities, and trade</td>
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<td>Modern Explorations</td>
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<td><strong>March 16</strong></td>
<td>I. A New World Below: Under the seas; II. The National Geographic Generation; III. Travel in the Industrial Age</td>
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<tr>
<td><strong>March 23</strong></td>
<td>I. Dawn of Flight: balloons, dirigibles, gliders, and planes; II. World at War</td>
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<tr>
<td><strong>March 30 (online)</strong></td>
<td>I. Race to the Poles: North and South; II. World at War, cont.</td>
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<td>April 6</td>
<td>Other Modern “Journeys”: Quantum worlds, birth of the vacation, ideas of afterlife, and “tripping out”</td>
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<td><strong>Journeys Ahead</strong></td>
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<td>April 13</td>
<td>The Final Frontier?: Early journeys into space; International competition and the “Space Race”</td>
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<tr>
<td>April 20</td>
<td>(online): I. Second Lives: Traveling in digital worlds; II. “Post-modern Globalization”</td>
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<td>Assignment: Essay: Future of Space Travel</td>
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<tr>
<td>April 27</td>
<td>What’s Next?: The global race to get off the planet; Presentation discussions</td>
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<td><strong>TBA:</strong> Final Exam meeting</td>
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**Journal Articles to Be Discussed in Class** (sequential order; all available on JSTOR)


