HIST 350: Science and Technology in the 20th Century

Overview

This introductory survey will cover the major scientific discoveries of the long 20th century and examine their repercussions over their contemporary societies. We will cover the birth of New Physics, genetic and eugenic studies, and psychology. We will then study the contribution of scientific discoveries to the industrial wars (ie, the First and Second World Wars), before focusing on the development of military science, space programs and spying systems in the Cold War. Finally, we will dig into the role of science in fostering a global world in the late twentieth century.

This course is 100% online. No presence required on campus.

Learning Outcomes

Undergraduate students who successfully complete this course will be able to:

- 1. Explain the development of key concepts in twentieth century science
- 2. Analyze the social and political forces that shape scientific communities
- 3. Analyze the use of science for military and social power

4. Demonstrate critical thinking about the historical significance of science in relations to broad social attitudes

Quizzes

Each Friday, you will be expected to take an open-notes quiz covering the lectures of the past week. These quizzes will be a mix of multiple-choice questions and fill-in-theblank sentences. The questions are not designed to test your memory (ex: when did x happen?). Instead, they will test your understanding of the material (ex: which of the following describes the most accurately the impact of x on the industrial output between [date] and [date]?)

CRN: 27730 Instructor: Dr. Dorothée Bouquet Email: <u>dbouquet@purdue.edu</u> Dates: May 17 – July 11 2021 Location: <u>purdue.brightspace.com</u> Office hours: online, by request

Materials

There is no textbook assigned for this course.

The documents you will be asked to read will be available on <u>Brightspace</u> or through a link given to you.

Milestones

Friday, 5pm: Writing Assignment + Quiz

All deadlines are set on EST

Assignments:

- 5 out of 6 essays: total 60%
- 7 out of 8 quizzes: total 40%

Total: 100 %

FAQ on Brightspace

Important links:

Brightspace Grief Absence Policy Disability Resource Center

Writing Assignments

At the end of each week, you will be expected to prepare a short writing assignment (1,000 words minimum). This assignment is individual. You must use your own words and ideas, or must properly cite if otherwise.

Academic Procedures and Regulations

Attendance

The University expects that students will attend online and traditional classes for which they are registered. At times, however, either anticipated or unanticipated absences can occur, especially with the current pandemic unfolding worldwide. Therefore, I will drop the lowest 1 quiz and essay grade out of everyone's final grade, so that everyone can skip 1 week of assignments if they need. If a student needs accommodation for more than 1 week of absence, they will have to contact the Office of the Dean of Students at (765) 494-1747 to discuss needs for support.

In the Event a Student is Quarantined/Isolated

If you become quarantined or isolated at any point in time during the semester, in addition to support from the Protect Purdue Health Center, you will also have access to an Academic Case Manager who can provide you academic support during this time. Your Academic Case Manager can be reached at <u>acmq@purdue.edu</u> and will provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely. Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify me via email or Brightspace. We will make arrangements based on your particular situation. The Office of the Dean of Students (odos@purdue.edu) is also available to support you should this situation occur

Initial Course Participation

I am required to report your "Initial Course Participation" to the Registrar's Office by 5/21, 12PM. To be "attending" this course, you need to complete all ICP activities, located in your folder "Get Started" on BrightSpace. If you do not complete them by the due date, you will be reported as "absent". It could lead to the revocation of your financial aid.

Accommodations

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at <u>drc@purdue.edu</u> or by phone (765) 494-1247.

Learning climate

Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University

Land Acknowledgment

We would like to acknowledge the ancestral home of the first people who lived on the land Purdue University now occupies. There are no monuments, signs, or named building that acknowledge the first people. We should do better. We must do more. The least we can do today is acknowledge those ancestral and historic people, including the Potawatomi and Miami, and acknowledge them for being the first stewards of this land.

Grading Scale

A+=97-100% A=94-97% A-=90-94% B+=87-90% B=84-87% B-=80-84% C+=77-80% C=74-77% C-=70-74% D+=67-70% D=64-67% D-=60-64% F=0-60%This course is NOT graded on a curve.

Disclaimer

In the event of a major campus emergency, the above requirements, deadlines, and grading policies are subject to changes that may be required by a revised semester calendar. Any such changes in this course will be posted once the course resumes on Blackboard or can be obtained by contacting the professor via email. believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. <u>Link to Purdue's</u> <u>nondiscrimination policy statement.</u>

Academic Dishonesty

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either <u>emailing</u> or by calling (765) 494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.

In accordance with Purdue's statement on academic dishonesty, I will report these following activities (starting with the first offense) as academic dishonesty to the Office of the Dean of Students:

- discussing or sharing any part of the quiz with a classmate before the deadline.
- having someone take your quiz on your behalf or taking the quiz under
- someone else's name.
 having someone else writing your assignment or writing someone else's assignment.
- plagiarizing the assigned readings without proper acknowledgment (with footnotes)

For the sake of this course, the following will **not** be considered to be dishonest:

- using your own notes during a quiz.
- discussing concepts and ideas you might include in a writing assignment.
- using facts and ideas from a third party (publication, website, etc) as long as it is properly attributed to the third party in your citations and footnotes.

Plagiarism

Plagiarism refers to the **reproduction of another's words or ideas without proper attribution** in your writing assignments. Plagiarism and other forms of academic dishonesty are **serious offenses**, and will be treated as such in this class. You are expected to produce your own work and to accurately cite all materials you have used.

In particular, these actions will be considered to be plagiarism:

- using words and phrases from a source without quotation marks and a footnote.
- paraphrasing or using ideas, concepts, or definitions from a source without a footnote.
- paraphrasing too close to the original text (even with a footnote)

Purdue Honors Pledge

As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue.

Classroom Civility

Purdue University is committed to fostering diversity and inclusion and welcomes individuals of all ages, religions, sex, sexual orientations, races, nationalities, languages, military experience, disabilities, family statuses, gender identities and expressions, political views, and socioeconomic statuses. Please respect the different experiences, beliefs and values expressed by everyone in this course. Behaviors that threaten, harass, discriminate or that are disrespectful of others will not be tolerated. Inappropriate behaviors will be addressed with disciplinary action, which may include being referred to the Office of the Dean of Students.

Basic etiquette rules:

- call me Dr Bouquet
- provide your name in your email
- proofread your emails; keep them professional

Repercussions for Academic Dishonesty:

See list of offenses on the left

These activities will result in a 0 on the assignment + report to the Dean of Students with the first offense.

Repercussions for Plagiarism:

1st offense = 0 on the assignment for the following cases:

 Quoted from the reading material or any other sources

How to Format a Footnote:

Book: [First Name] [Last Name], *Title* (Place of publication: Publisher, date), page numbers.

Example: Michael Pollan, *The Omnivore's Dilemna: A Natural History of Four Meals* (New York: Penguin, 2006), 99-100.

Article: [Last Name], [First Name]. "Title of the Article." *Journal Title*, Volume, no. Issue (Year/Date): page numbers.

Example: Phillips, David. "Aspects of Education for Democratic Citizenship in Post-War Germany." *Oxford Review of Education* 38, no. 5 (2012): 567–581.

■ Internet source: [link], (Date)

Example:

https://web.archive.org/web/20120319074606/http://www.cyf.gov.pl/historia_ang .html (4/21/19)

without quotation marks or a footnote

- Paraphrased the reading material or another source without proper references in a footnote
- Provided an incomplete citation that made it impossible for the reader to track down the source
- 2nd offense = 0 on the assignment
 + report to the Dean of Students.
 - Quoted from the reading material or from another source without quotation marks or a footnote
 - Paraphrased the reading material or another source without proper references in a footnote
 - Provided an incomplete citation that made it impossible for the reader to track down the source

Citation Style for History:

Chicago Manual of Style http://www.chicagomanualofstyle.or g/ home.html

Mental Health Statement

- If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try <u>WellTrack</u>. Sign in and find information and tools at your fingertips, available to you at any time.
- If you need support and information about options and resources, please see the <u>Office of the Dean of Students</u> for drop-in hours (M-F, 8am-5pm)
- If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact <u>Counseling and Psychological Services (CAPS)</u> at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office of the second floor of the Purdue University Student Health Center (PUSH) during business hours.

Schedule

Date	Assignments	Administrative
5/17-5/21 - Week 1: Science after 1900	 Monday 5/17, 11.59 pm: Participate to the discussion (in the Week 1 folder) Lecture 1: New Physics and New Sciences of Life Lecture 2: New Sciences of the Self Friday 5/21, 5pm: Quiz 1 due, covering Lectures 1 & 2 [No Essay 1] Friday 5/21, 12pm: complete the ICP survey in Week 1 folder > Getting Started 	5/17: First 8-Week Summer Module Begins 5/21: ICP reports due
5/24-5/28 - Week 2: Sciences in a World of Conflict, 1914-1918	Lecture 3: Science during the First World War and in post-WWI Weimar Germany Lecture 4: Science in the Western empires Friday 5/28 , 5pm: Quiz 2 and Essay 2 covering Lectures 3 & 4	
6/1-6/4 - Week 3: Sciences in the Interwar Period, 1918 - 1939	Lecture 5: Science in totalitarian regimes (Soviet Russia and Nazi Germany) Lecture 6: Science in capitalist regimes (United States) Friday 6/4 , 5pm: Quiz 3 and Essay 3 covering Lectures 5 & 6	5/31: Memorial Day (No Classes)
6/7-6/11 - Week 4: Sciences in the Second World War, 1939 - 1945	Lecture 7: Science and the Second World War Lecture 8: Trials of Science in the Atomic Age Friday 6/11 , 5pm: Quiz 4 and Essay 4 covering Lectures 7 & 8	
6/14-6/18 - Week 5: Sciences in the Cold War, 1945 - 1970	Lecture 9: <i>The Atomic Age</i> (1982) Lecture 10: Atomic Projects Friday 6/18 , 5pm: Quiz 5 and Essay 5 covering Lectures 9 & 10	
6/21-6/25 - Week 6: Sciences in the Cold War, 1945 - 1970	Lecture 11: Information Systems Lecture 12: Space Programs Friday 6/25 , 5pm: Quiz 6 and Essay 6 covering Lectures 11 & 12	
6/28-7/2 - Week 7: Toward Global Culture, 1970 -2001	Lecture 13: Science, Social Movements and Risk Management Lecture 14: Science in Clash between National and International Projects Friday 7/2, 5pm: Quiz 7 and Essay 7 covering Lectures 13 & 14	
7/6-7/9 - Week 8: Paths to Insecurities, 2001- Present	Lecture 15: The Switch from the Physical to the Life Sciences Lecture 16: India & China: The end of the American Hegemony? Friday 7/9, 5pm: Quiz 8 due, covering Lectures 15 & 16 [No Essay 8]	7/5: Independence Holiday Observed (No Classes) 7/9: First 8-Week Summer Module Ends (Grades due by 5 p.m. on 7/11)