IE HUMANITIES

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Area Humanities

Number of sessions: 30

Academic year: 25-26

Degree course: FIRST

Number of credits: 6.0

Semester: 2º

Category: COMPULSORY

Language: English

Professor: **PATRICK DE OLIVEIRA**

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Dr. Patrick Luiz Sullivan De Oliveira was trained as a historian at Princeton University, and has previously taught at Princeton and Singapore Management University. His main field of research is the history of technology in nineteenth-century France and Western Europe, although he also works with comparative/connective approaches that incorporate both France and Latin America into a broader Atlantic world. He recently published a book with MIT Press titled *Ascending Republic: The Ballooning Revival in Nineteenth-Century France*. He has also published articles in *Past & Present*, *Notes and Records: The Royal Society Journal of the History of Science*, the *Journal of Urban History*, and other prestigious journals. His research has been supported by numerous institutions, including the Smithsonian National Air and Space Museum (where he has been both a predoctoral and postdoctoral Daniel and Florence Guggenheim Fellow), the Institut d'Études Politiques de Paris (Sciences Po), the Huntington Library, Art Collections, and Botanical Gardens, and the Linda Hall Library. De Oliveira was born and raised in Belo Horizonte, Brazil. He graduated with distinction from the University of Kansas with a B.A. in History and a B.S.J. in Journalism. Before turning to academia, De Oliveira dabbled in journalism and book publishing. He is committed to fostering bridges between academic research and broader audiences, and has published in various popular outlets, like *The Washington Post*, *Slate*, *The Age of Revolutions*, and *CartaCapital*. More information available at www.patrickdeoliveira.com.

Office Hours

Office hours will be on request. Please contact at:

Appointment link available on Blackboard.

Contact info: pdeoliveira@faculty.ie.edu (I check emails between 9am and 6pm on business days, so if you send an email at 6pm on Friday, you might not hear back until Monday morning).

SUBJECT DESCRIPTION

Technology and the Making of the Modern World

In this *history* course, we will explore how technology has shaped the modern world from the late 1700s to the early 2000s. Informed by Walter Benjamin's insight that "there is no document of civilization which is not at the same time a document of barbarism," the course's underlying premise is that technologies are not inherently forces of progress, but instead human creations that reorganize how power gets distributed across society. With that in mind, we will not be looking at the biographies of individual inventors, but instead focusing on how technologies from the early industrial revolution up to the early computer age have reconfigured social, economic, and cultural relationships around the world.

The course will unfold through chronologically arranged topics, such the emergence of factory work, the use of technology in imperial conquest, the technological ideologies constructed by totalitarian regimes, and the significance of domestic technologies to the gendered division of labor. The unifying theme weaving all these topics together will be that far from determining the course of history, technology is instead better understood as a site of contestation and negotiation for different visions of society, which means that we will also pay attention to the symbolic dimensions of technology.

Given that this is a history course, you should be prepared to read widely. Also, be attentive that while we will occasionally address contemporary issues, the majority of the course focuses on understanding technological changes that occurred more than one hundred years in the past.

LEARNING OBJECTIVES

- Develop analytical, critical, and creative thinking.
- Comprehensive reading ability of complex texts.
- Investigate, research, and obtain information.
- Learn about other cultures and human experiences.
- Write academic texts with different argumentation techniques.

The **Humanities** subject offers basic and well-established anchors that will help students carry out a deeper analysis of the reality in which they live. The humanities encourage critical thinking and provide the tools necessary to both analyze the ideas of others and defend their own. This subject provides the knowledge necessary not only to understand the world around us, but also the skills to construct ideas. In a global and interconnected world, it is important to be able to discriminate and think critically about the infinite amount of information to which we are exposed.

IE IMPACT OVERVIEW

IE IMPACT is a multi-bachelor, multi-school mandatory academic program for all IEU students whose mission is to foster the skillsets, mindsets, and toolsets we at IE University believe students need to develop into innovative problem-solvers who will lead positive change.

IE IMPACT learning journey begins with “pillar courses” in three of IE’s core values: the Humanities, Technology, and Entrepreneurship to help IEU students develop:

· humanistic approaches to interpersonal relations, decision-making, and critical thinking;

· familiarity with the technologies that are applied to solve some of the world’s greatest challenges; and

· entrepreneurial mindsets, know-how, and skills to identify and solve problems worth solving, and to create validated business models that enable solutions to be enduring and scalable to achieve a greater positive impact.

It culminates with the IE Challenge where students apply the skills, mindsets, and knowledge acquired in the three pillar courses to address problems framed within IEU’s core values of sustainability and diversity.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. The Professor’s main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following.

LECTURES: Lectures will provide you with the necessary context and information regarding the week’s topic and *promote the learning of* ***foundational and contextual knowledge***.

READINGS: Given that this is a history course addressing a complex topic, you should expect a substantial amount of reading—each week usually a set of primary sources and a scholarly source. *The readings promote learning through* ***critical analysis***.

DISCUSSIONS: Discussions will take form of spirited class-wide discussion of the lectures and readings. As such, look for connections, identify points of tension, and search for underexplored paths in both the lectures and the readings. This kind of preparation will make it easier for you to be an engaged participant in class. *The discussions promote learning through* ***constructive dialogue.***

Keep in mind that one of the foundations to the **humanities** is the creation and transmission of knowledge through texts. As such, **students are expected to read anywhere from 25 to 60 pages per week**, depending on the complexity of the texts assigned.

Learning Activity	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	20.0 %	30.0 hours
Discussions	6.7 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	13.3 %	20.0 hours
Individual studying	60.0 %	90.0 hours
TOTAL	100.0 %	150.0 hours

AI POLICY

The use of ChatGPT or any other AI platform or tool to generate either ideas or content (not including spelling/grammar check) is strictly prohibited in this course.

I do not use these tools to conduct my research or write my lectures, and I expect students to abide by the same standards. If there is evidence that you used these tools in your assignment, the penalties can range from failing the assignment up to failing the entire class. You will also be referred to the academic integrity committee, regardless of the extent of the violation.

This policy exists for the following reasons:

This class is designed for you to develop your own sophisticated understanding of the complex processes that have shaped the history of technology. If you rely on any kind of algorithmic system to make sense of those processes you are likely to fall prey to simplistic narratives that exclude marginalized voices, lack depth, and are deprived of nuance. Furthermore, because tools like ChatGPT are essentially "bullshit" machines, there is a high risk of encountering inaccurate results that are seemingly credible (these are tools that emphasize form over substance and are indifferent to the truth of their outputs).

Currently, there is no substantive evidence that tools like ChatGPT and DALL-E aid the learning process, especially as it pertains to critical thinking skills. In fact, these tools seem to negatively disrupt the learning process, with students (and faculty) often using them as shortcuts that avoid deep and meaningful engagement not only with the course material but also with one another as human beings. (If you are interested, have written about the pedagogical virtues of resisting ChatGPT in writing assignments for *Inside Higher Ed*).

Intellectual honesty is vital for a healthy academic community and for my fair evaluation of your work. Using AI opens up a whole can of worms regarding academic honesty, in particular the question of whether the thinking is really "your" thinking or the work is really "your" work. Furthermore, tools like ChatGPT were built by extracting the work produced by other people without compensating or crediting them for it (in economic terms, one could argue that companies like OpenAI have been operating through "primitive accumulation" by dispossession).

Companies like OpenAI have grown through the exploitation of workers from the global south and other marginalized groups. Examples here include paying Kenyan workers less than $2 per hour to filter through traumatic content, "digital sweatshops" in the Philippines, and prison labor in places like Finland. It seems especially pernicious to "benefit" from that exploitation in a course where one of the main goals is to understand the inequalities that have shaped the history of technology.

Tools like ChatGPT have serious negative environmental impacts. These range from the higher energy use required to supply all that computing power to the vast amounts of water needed to keep data centers cool (many of these being built in areas already struggling with drought, like Spain's own Castilla-La Mancha) one has to wonder whether this form of AI does not represent a step back in our goals to address the climate crisis. As such, avoiding these tools aligns with IE University's commitment to sustainability.

And, on a more personal note. We are all incredibly privileged to have the time and space to read, discuss complex topics, and craft interesting ideas. This kind of experience is not available to everyone, and there are thousands (probably millions) of people all over the world who would like to be standing in our shoes. This kind of experience does not come cheap: someone is paying for it—whether that's yourself, parents/relatives, private scholarships, government grants, etc. So please reflect on whether you want to spend this special opportunity to learn by trying to avoid doing the work necessary to learn. After all, doing so means that you are not only cheating in this class but, more importantly, also cheating yourself and your wider community. In a world where there is unrelenting pressure for us to passively embrace the latest technology and look for shortcuts (no matter the cost), I hope that this can be a space where we can have critical and truly personalized discussions that are unmediated by these deeply problematic tools.

(Policy adapted from Olivia Stowell, Ph.D. candidate at the University of Michigan)

PROGRAM

DISCLAIMER

Reading list is subject to changes. Guidance will be given on how to approach reading scholarly articles and primary sources.

SESSIONS 1 - 2 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge

SITUATING THE MACHINES:

Focus on how the humanities operate as a domain of knowledge and how its modes of inquiry may be different from other fields.

Readings:

William Cronon, "'Only Connect...': The Goals of a Liberal Education," *The American Scholar* 67, no. 4 (1998): pp. 73-80.

Langdon Winner, “Do Artifacts Have Politics,” in Major Problems in the History of American Technology, eds. Merritt Roe Smith and Gregory Clancey (Houghton Mi?lin Company, 1998), pp. 7-13.

The syllabus.

Book Chapters: Major Problems in the History of American Technology

SESSIONS 3 - 4 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

Industrial Revolution?

What was the industrial revolution and what were its effects on labor?

Readings:

Sources pertaining to the Lowell Factory Mills (about 30 pages).

SESSION 5 (ASYNCHRONOUS)

Read the following from Misa, *Leonardo to the Internet:*

Chapter 3: Geographies of Industry, 1740-1851 (pp. 57-91).

Book Chapters: Leonardo to the Internet: Technology and Culture from the Renaissance to the Present (Third Edition)

SESSIONS 6 - 7 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

“Tools of Empire” and “Measure of Men”

How did technology contribute to nineteenth-century European imperial expansion (both practically and ideologically)?

Readings:

Sources pertaining to the "civilizing mission" (about 30 pages).

SESSIONS 8 - 9 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

Empire and Mobility

How did technology help structure global networks in the nineteenth century?

Readings:

Sources pertaining to Transcontinental Railroad (about 30 pages).

SESSION 10 (ASYNCHRONOUS)

Read the following from Misa, *Leonardo to the Internet:*

Chapter 4: Instruments of Empire, 1840-1914 (pp. 92-121).

Chapter 5: Science and Systems, 1870-1930 (pp. 150-179).

Book Chapters: Leonardo to the Internet: Technology and Culture from the Renaissance to the Present (Third Edition)

SESSIONS 11 - 12 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

Artificial Light and Technological Systems

How did new lighting technologies throughout the nineteenth and early twentieth century transform urban life?

Readings:

Sources pertaining to urban lighting (about 30 pages).

SESSIONS 13 - 14 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

Sensory Overload

How did technological changes from the mid nineteenth century to the early twentieth century reshape the human sensorium?

Readings:

Sources pertaining to Futurism (about 30 pages).

SESSION 15 (LIVE IN-PERSON)

Midterm

SESSIONS 16 - 17 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

Fatigue, Taylorism, Fordism

How did new technological systems reshape industrial production and labor in the early twentieth century?

Readings:

Sources pertaining to Fordism (about 30 pages).

SESSIONS 18 - 19 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

Totalitarian Visions

How did technology factor into Stalinist and Nazi ideology?

Readings:

Sources pertaining to Nazi technology (about 30 pages).

SESSION 20 (ASYNCHRONOUS)

Read the following from Misa, *Leonardo to the Internet:*

Chapter 6: Materials of Modernism, 1900-1950 (pp. 150-179).

Chapter 7: The Means of Destruction, 1933-1990 (pp. 180-212).

Book Chapters: Leonardo to the Internet: Technology and Culture from the Renaissance to the Present (Third Edition)

SESSIONS 21 - 22 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

The Military-Industrial-Academic Complex & "Big Science"

How did the state shape large-scale technological initiatives in the mid twentieth century?

Readings:

Sources pertaining to the moon landing (about 30 pages).

SESSIONS 23 - 24 (LIVE IN-PERSON)

Sustainability Topics:

- Social Challenge
- Economic Development

Gender and Domestic Technologies

How did gender factor into the industrialization of household labor?

Readings:

Sources pertaining to the modern household (about 30 pages).

SESSION 25 (ASYNCHRONOUS)

Read the following from Misa, *Leonardo to the Internet:*

Chapter 8: Promises of Global Culture, 1970-2001 (pp. 213-246).
Chapter 10: Dominance of the Digital, 1990-2016 (pp. 281-318).

Book Chapters: Leonardo to the Internet: Technology and Culture from the Renaissance to the Present (Third Edition)

SESSIONS 26 - 27 (LIVE IN-PERSON)

Sustainability Topics:

- Social Challenge
- Economic Development

Computers: A Human History

How have humans been—and continue to be—central to digital technologies?

Readings:

Sources pertaining to diversity in computer history (about 30 pages).

SESSIONS 28 - 29 (LIVE IN-PERSON)

Wrapping Up + In-Class Writing Reflection

Students will complete an in-class reflection on their learning over the semester, connecting it to the overarching themes introduced in Session 1. Instructors may adapt prompts to their course, provided they still encourage broader reflection on the humanities.

Required Readings:

Revisit the readings from Sessions 1-2.

SESSION 30 (LIVE IN-PERSON)

Final Exam

EVALUATION CRITERIA

A note on participation: Good class participation involves preparing in advance by doing the readings, actively listening to your instructor and other students during class, joining class discussions, asking questions which are thoughtful and helpful, and being a good team member during classroom group work. Merely speaking in class will not earn you full marks for class participation. Moreover, using a smart device in class for non-class related activities is a distraction for you and everyone else; this will negatively affect your class participation.

criteria	percentage	Learning Objectives	Comments
Class Participation and Preparation	10 %		
Continuous Assessment	20 %		
Midterm Evaluation	30 %		In-class midterm (format TBD).
Final Evaluation	35 %		In-class final (format TBD).
Final Reflection	5 %		In-class written

** RE-SIT / RE-TAKE POLICY **

Students who must retake this course in the 3rd call must contact the IE Impact Program Management Team to find out if they must attend the sessions in person or not. If it is determined that Retake Students must attend the sessions in person, then they must abide by the IEU Attendance Policy.

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or “re-sit”) in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).

It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)

The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call.

Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., “notable” in the extraordinary call.

Re-takers: Students who failed the subject on a previous Academic Year and are now reenrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Compulsory

- Thomas J. Misa. (2022). *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present.* Third Edition. Johns Hopkins University Press. ISBN 9781421443102 (Printed)

I strongly suggest using a printed copy, for doing so will allow you to consult it during assessments (this does not apply to the digital copy).

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

Laptop Policy:

We live in an age of never-ending distractions, and that can present challenges for the kind of liberal arts education that informs this course—a model that is centered on human connection. My hope that the classroom can be a space for reflection that offers you a respite from the pressures of everyday life. As such, the use of laptops, phones, or tablets in class is not permitted, except in cases where they are integral to a particular assignment and cases involving accessibility measures. This means that during class you will need to take notes by hand.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.