



DIVA – DIGITAL IMAGING AND VISUAL ARTS

SCHOOL OF DIGITAL IMAGING AND VISUAL ARTS
DEPARTMENT OF INFORMATION TECHNOLOGY
COURSE TITLE: ETHICS OF DIGITAL TECHNOLOGIES
COURSE CODE: DIITET350
3 semester credits

1. DESCRIPTION

The course focuses on the ethical implications that emerged with the rise of digital technologies. The latter have deeply impacted on human social dynamics, generating new types of flows of information and communication. Meanwhile, data about us are increasingly present in the digital sphere. This has raised concern about privacy, transparency, and social justice at large. The continuous interactions with and through digital technologies fuel the need to understand the moral and philosophical repercussions of being digital selves. The course explores various ramifications of ethical concerns in the digital era, incorporating real-life case studies so as to stimulate students' capacity to develop an ethical standpoint within the sector of IT and AI.

2. OBJECTIVES

Upon successful completion of this course, students will:

- Recognize the main ethical implications related to digital technologies.
- Be able to employ instruments to tackle ethical challenges in the IT sector.
- Gain knowledge about the correlation between AI and social justice.
- Identify the main ethical concerns in terms of privacy, transparency, human rights, and intellectual property across digital technologies.

3. REQUIREMENTS

This course is open to students of Junior or Senior Standing.

4. METHOD

This course consists of lectures, class discussions, projects, and workshops. Mediums for instruction used will include, but are not limited to, interactive and hands-on activities which challenge thought processes, academic texts and studies, videos, slides, guided problem solving, and experiential and/or field learning activities where applicable.

5. TEXTBOOK – FURTHER READINGS – RESOURCES

TEXTBOOK:

- Rogerson, Simon. *The Evolving Landscape of Ethical Digital Technology*. Auerbach Publications, 2021.

The Textbooks are pre-ordered and available at: Paperback Exchange in Via delle Oche 4r or laFeltrinelli Via dei Cerretani 40R. Textbooks may also be available for purchase online or in e-book format.

The textbook is mandatory for successful completion of the course.

Where applicable, additional materials, handouts and/or notes will be provided by the instructor.

FURTHER READINGS AND RESOURCES

Enriquez, Juan. *Ethics in the age of technology*. Available here:

<https://www.youtube.com/watch?v=iiAirfn-lBI>

Lin, Patrick. *The ethical dilemma of self-driving cars*. Available here:

<https://www.youtube.com/watch?v=ixIoDYVfKA0>

Techtopia. *Can artificial intelligence become sentient, or smarter than we are - and then what?* Available here: <https://www.youtube.com/watch?v=lcUk1cYWY9I>

What was Bentham's Panopticon? A computer model. Available here:

<https://www.youtube.com/watch?v=Myal-NSIIGA>

LIBRARIES IN FLORENCE

The FUA-AUF library is located in Corso Tintori 21. Please consult the posted schedules for official opening times. Also note that the library is for consultation only and it is not possible to borrow materials. The library is equipped with a scanner and internet access so that you may save or email a digital copy of the pages needed.

Students may also utilize additional libraries and research centers within the local community:

BIBLIOTECA PALAGIO DI PARTE GUELFA

Located in Piazzetta di Parte Guelfa between Piazza della Repubblica and Ponte Vecchio. Please consult the library website for hours of operation:

http://www.biblioteche.comune.fi.it/biblioteca_palagio_di_parte_guelfa/

BIBLIOTECA DELLE OBLATE

Located in via dell'Oriuolo 26. Please consult the library website for hours of operation:

www.bibliotecadelleoblade.it

THE HAROLD ACTON LIBRARY AT THE BRITISH INSTITUTE OF FLORENCE

Located in Lungarno Guicciardini 9. Please consult the library website for hours of operation. This library requires a fee-based student membership. For information: www.britishinstitute.it/en

6. FIELD LEARNING

Please consult your Official Registration for any mandatory field learning dates. Field Learning Activities cited in Official Registrations are an integral part of the course and also include an assignment that counts towards your final grade, details will be provided on the first day of class.

7. COURSE MATERIALS

No additional course materials are necessary.

8. COURSE FEES

Course fees cover course-related field learning activities, visits, and support the instructor's teaching methodologies. Book costs are not included in the course fee. The exact amount will be communicated by the instructor on the first day of class.

9. EVALUATION – GRADING SYSTEM

10% Attendance

20% Participation and Assignments

20% Midterm Exam

20% Final Project

30% Final Exam

A = 93-100 %, A- = 90-92%, B+= 87-89%, B = 83-86%, B-=80-82%, C+ = 77-79%, C=73-76%, C- =70-72%, D = 60-69%, F= 0-59%, W = Official Withdrawal, W/F = Failure to withdraw by the designated date.

10. ATTENDANCE – PARTICIPATION

Academic integrity and mutual respect between instructor and student are central to the FUA-AUF academic policy and reflected in the attendance regulations. Student presence is mandatory and counts toward the final grade.

Absences are based on academic hours: 1 absence equals 3 lecture hours.

Two absences: 6 lecture hours, attendance and participation grade will be impacted.

Three absences: 9 lecture hours, the final grade may be lowered by one letter grade.

Four absences: 12 lecture hours, constitutes automatic failure of the course regardless of when absences are incurred.

Please note:

- The above hours refer to lecture hours. Please note that the contact / credit hour policy in the academic catalog includes additional distribution ratios according to delivery category.

Ex: 1 absence equals 6 FL/SL/Lab hours or 9 EL hours.

- Hours may be distributed in different formats according to the academic course schedules.

LATE ARRIVAL AND EARLY DEPARTURE

Arriving late or departing early from class is not acceptable. Two late arrivals or early departures or a combination will result in an unexcused absence. Travel is not an exceptional circumstance.

TRAVEL (OR DELAYS DUE TO TRAVEL) IS NEVER AN EXCUSE FOR ABSENCE FROM CLASS.

It is always the student's responsibility to know how many absences he or she has in a course. If in doubt, speak with your instructor!

Participation: Satisfactory participation will be the result of contributing to class discussions by putting forth insightful and constructive questions, comments and observations. Overall effort, cooperation during group work, proper care of work space and tools, responsible behavior, and completion of assignments will be assessed. All of the above criteria also apply to Field Learning and site visits.

11. EXAMS – PAPERS – PROJECTS

The **Midterm Exam** accounts for 20% of the final course grade. **The time and date of the exam cannot be changed for any reason.**

Format: the exam is divided into three sections:

- Part I: 10 Multiple choice questions. Each correct answer is worth 2 points, for a total of 20 points.
- Part II: 10 short-answer questions. Each correct and complete answer (concise explanations, main ideas, key words, names, etc.) is worth 5 points, for a total 50 points.
- Part III: two essay questions; each correct and complete answer is worth 15 points (based on content, vocabulary, detail, etc.) for a total of 30 points.

The **Final Project** accounts for 20% of the course grade. This is a 1500-words essay evaluating a real-life case study wherein an ethical concern has raised in relation to IT and/or AI. The Final Project will be presented in class during the last lecture, with the support of PowerPoint slides.

The Final Project should incorporate:

- The presentation of the case study.
- The ethical concerns generated by the case study.
- The ethical resolutions that could or should be implemented to ensure the well-being of the users.
- A bibliography, as well as in-text citations, comprising at least 3 sources.

The **Final Exam** accounts for 30% of the final course grade. **The time and date of the exam cannot be changed for any reason.** Format: the exam is divided into three sections:

- Part I: 10 Multiple choice questions. Each correct answer is worth 2 points, for a total of 20 points.
- Part II: 10 short-answer questions. Each correct and complete answer (concise explanations, main ideas, key words, names, etc.) is worth 5 points, for a total 50 points.
- Part III: two essay questions; each correct and complete answer is worth 15 points (based on content, vocabulary, detail, etc.) for a total of 30 points.

The Final Exam is cumulative.

12. LESSONS

Lesson 1	
Meet	In class
Lecture	The significance of ethics in IT and AI. The ethical frontier of the cyberspace.
Objectives	Understand the role of ethics in the context of digital technologies. Identify the main ethical concerns related to IT and AI. Be aware of the leading theories of ethics in IT and AI.
In-Class Activity	'Hack the other' game. In pairs, look at the other person's social media traces, and profile them. Then discuss, with a focus on the ethical concerns that may emerge.
Readings/ Assignments	Read: Rogerson, Ch. 1-4

Lesson 2

Meet	In class
Lecture	Information Ethics: privacy, property, and crime in the digital world. The work of Norbert Wiener and Jeremy Bentham.
Objectives	Identify the key issues of privacy, property, and crime from an ethical standpoint. Gain knowledge about tourism technology. Become familiar with the idea of the Panopticon created by Jeremy Bentham Become familiar with the work of Norbert Wiener.
In-Class Activity	Discuss the implications of the Panopticon in present-day reality.
Readings/ Assignments	Read: Rogerson, Ch. 5. Watch: <i>Ethics in the age of technology</i> by Juan Enriquez. Watch: <i>What was Bentham's panopticon? A computer model.</i>

Lesson 3	
Meet	In class
Lecture	The ethics of software development project management. The practical aspect of Information Ethics. Ethical concerns in the tourism industry.
Objectives	Understand the main ethical challenges arising during software development. Be able to assess the integrity of information, which relies upon computer-based IS. Recognize strategies to improve project management from an ethical point of view.
In-Class Activity	In groups, strategize on a given project management layout that is ethically aware.
Visit	Practical exercise in the city center of Florence, one of the top-10 most photographed city in the world. Analysis of privacy and transparency threats.
Readings/ Assignments	Read: Rogerson, Ch. 6-9

Lesson 4	
Meet	In class
Lecture	Risk assessment, challenges, and opportunities of Information Systems Ethics.
Objectives	Be able to engage in risk assessment in relation to ethical concerns. Become familiar with the Software Development Impact Statement (SoDIS) process. Evaluate challenges and opportunities of Information System Ethics.
In-Class Activity	Create a timeline of the ethical changes in relation to IT and AI from when you were born to today.
Readings/ Assignments	Read: Rogerson, Ch. 10-11 (Group) Assignment 1: Each group looks at 10 streets and maps the presence of CCTV cameras, private cameras, and tourism traffic. Submit a report elucidating the results in relation to privacy and transparency.

Lesson 5	
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Meet	In class
Lecture	Ethics and social justice in digital technologies. Different digital ethics in different countries: social costs and benefits.
Objectives	Identify the impacts of digital technologies on social justice and human rights. Gain knowledge on the ethical approaches used by diverse countries. Recognize key factors that lead various countries in different ethical directions.
In-Class Activity	Evaluation of real-life case studies of threats to social justice in the digital space. Option: discussion of Electronic Patient Records (EPRs).
Readings/ Assignments	Read: Rogerson, Ch. 12-13

Lesson 6	
Meet	In class
Lecture	Cinematic and literary representations of digital ethics. Movies: Ex Machina, Her, The Lives of Others. Documentary: Don't F**k With Cats: Hunting an Internet Killer. Books: 1984, Data and Goliath.
Objectives	Become familiar with a variety of books and movies related to digital ethics. Identify the key themes in books and movies for ethics in IT. Recognize the role of the arts in educating individuals about digital ethics.
In-Class Activity	Discuss the underpinning notions of Ex Machina and the other sources chosen. Define the topics of the final project.
Readings/ Assignments	Watch the movie: Ex Machina, by Alex Garland. Read/watch at least 1 other book/movie/documentary relating to digital ethics. Assignment 2: Submit short report of the movie, elucidating at least 3 ethical concerns in relation to IT and AI.

Lesson 7	
Meet	In class
Lecture	Midterm Exam

Lesson 8	
	Academic Break

Lesson 9	
Meet	In class
Lecture	Conducting a digital existence: reevaluating ethics, society, and politics. E-Democracy: the case study of online voting proposals.
Objectives	Gain knowledge about the ethical implications of the digital sphere for socio-political purposes. Identify the key challenges and opportunities of Internet voting. Recognize the self as the relationship between physical and virtual being. Become familiar with the concept of the digital avatar.
In-Class Activity	Engage in a socio-political group discussion online. The discussion is anonymous. Then discuss the experiencing using a SWOT model.
Readings/ Assignments	Read: Rogerson, Ch. 14-15

Lesson 10	
Meet	In class
Lecture	Evaluation of the E-Society: local and global considerations.
Objectives	Identify the main issues related to a digital world that is globally connected yet locally sensitive. Become familiar with some ICT mischances. Recognize the ethical extent to which reality can shift to being electronic.
In-Class Activity	Read and discuss Rogers' Chapter 18: <i>Grey Digital Outcasts and COVID-19</i> .
Readings/ Assignments	Read: Rogerson, Ch. 19-21 (Group) Assignment 3: Discuss a case study where a global digital decision or scenario has impacted a local context. 800 words per group. Present your results in class.

Lesson 11	
Meet	In class
Lecture	Handling moral dilemmas as IT professionals. Theory and practice behind the ethical challenges of computing.
Objectives	Identify the main complex decisions that computer professionals have to face. Gain knowledge about the practical tools that might be used in addressing such challenges and the style of educational preparation that could be used.
In-Class Activity	Discuss the case of self-driving cars. Identify additional dilemmas related to IT and AI, and discuss these in groups.
Readings/ Assignments	Read: Rogerson, Ch. 22-23 Watch: <i>The ethical dilemma of self-driving cars</i> by Patrick Lin.

Lesson 12	
Meet	In class
Lecture	Blended learning environment: digital ethics and education. Focus on Experiential Learning Via Industrial Stories (ELVIS).
Objectives	Recognize the threats and benefits of the software-supported learning framework within the context of education. Identify how literature and poetry on IT can create a blended learning environment. Be able to assess the current ICT ethics educational strategy. Gain knowledge on the tools that can be implemented to extend computer education to all ages.
In-Class Activity	Discuss the poems of Rogerson's Chapter 25, <i>Poetical Potentials: The Value of Poems in Social Impact Education</i> . Discuss how education can support ethical advancements.
Readings/ Assignments	Read: Rogerson, Ch. 24-26 Assignment 4: Go to a public library and assess if and how a blended learning environment is endorsed. Submit a 300-words report.

Lesson 13	
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Meet	In class
Lecture	Envisioning the future: recurring themes, patterns, and room for change. AI: sentient, smart, or human?
Objectives	Identify the recurring themes related to ethics in digital technologies. Recognize the main changes that should be incorporated to ensure ethical uprightness in the IT realm. Identify the key concerns related to the rising human-likeness of AI.
In-Class Activity	In groups, create a concept map of the recurring themes. Present this to the class and discuss.
Readings/ Assignments	Read: Rogerson, Ch. 27 and <i>Conclusion</i> . Watch: <i>Can artificial intelligence become sentient, or smarter than we are - and then what?</i>

Lesson 14	
Meet	In class
Lecture	Presentation of Final Projects. Revision for the Final Exam.
Objectives	Be able to clearly present the ethical concerns of a real-life case study. Be able to provide potential solutions to the concerns of the selected case study.
In-Class Activity	Present the Final Project, and engage in Q&As with other students.
Readings/ Assignments	Submit Final Project and slides.

Lesson 15	
Meet	In class
Lecture	Final Exam