

Syllabus for IS 350 Computers, Society and Ethics

Professor Fadi P. Deek

Important information, including a letter from the professor and the components of the course syllabus, along with some major policies on assignment submissions and deadlines, are included and reviewed below.

I. A Note From Professor Deek

Dear IS 350 students:

As the professor for the online section of IS 350 Computers, Society, and Ethics, I would like to welcome you to what I hope will be an exciting and rewarding semester in our “Virtual Classroom”.

We will be using Canvas for our interaction in this course. Canvas is a Learning Management System that includes features to support teaching and learning. All pertinent class information will be posted there. Detailed information for this course is provided in the course syllabus. Mr. Al Shahriar Rubel, a PhD candidate in the Informatics Department, will work with me as the Teaching Assistant for the course. Al Shahriar’s email is ar2633@njit.edu. Please email me in Canvas or at fadi.deek@njit.edu if you have any questions or concerns.

All normal class functions, such as homework and interaction with the instructor, TA, and other classmates will be conducted using Canvas. Although we will not physically see each other in the classroom, I will provide opportunities for us to meet during the semester as a group, sub-groups, or individually, on a volunteer basis for those who are interested and able to make it. I will provide more context on this in Canvas.

By now, many of you have already taken online classes before, but some may still be wondering how this learning experience is going to be different from others. In the traditional face-to-face class, we have an instructor taking a lead in communicating course material while students listen, take notes, ask questions, and get answers. Often, due to time limitations and other factors, many students never get to asking or answering questions. Furthermore, some students may be uncomfortable participating in class discussions. In the Virtual Classroom, the content as well as questions and their answers are entered into the learning management system. All questions/answers/comments can be seen by the instructor and classmates. There are no time constraints on when the class starts or ends, and you can fit the coursework whenever you have time during the week, 24 hours a day. However, you must submit the work by the stated due dates.

Please note that IS 350 is offered in multiple sections, different modalities, and taught by a group of committed instructors. It is also a “coordinated course”. As such, in general, all sections share common content, assessment, and learning objectives. However, we all have different backgrounds, skills, and interests, which gives some distinctiveness to what we do. For

my section, I have placed, appropriately, added emphasis on Artificial Intelligence. You will see this as we progress through the course. At this time, please take a look at the [instructor introduction](#).

Because of the absence of regular physical class meetings, you might be tempted to “skip a couple of weeks”. To avoid this, there will be electronic homework due every week, and you will be expected to log into “Canvas” at least **twice a week** during the semester to review current/new activities. This is an absolute attendance requirement.

I would like to wish you good luck in this semester and especially in this course. I hope that you will find it an exciting experience.

Sincerely,
Fadi P. Deek, PhD

P.S. At this time, please continue reading the entire content of the introductory module, "Important Information About This Course", and then move on to "Week 1" module.

II. Important Course Details

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The IS 350 course follows the latest NJIT guidelines on course delivery. There are a total of 14 modules in this course, one per instructional week. Each module is organized within a Summary Page that contains all we need to learn and everything we need to do that week. Starting with a section of “Opening Remarks” and “Learning Objective” regarding the module’s subject matter and ending with “Reminders” on important deliverables that are coming up or due, each module has three main sections: “I. Lectures”, “II. Readings”, and “III. Assignments”.

It is important to use the links of the module/summary pages to view what we will learn and what is required of you each week, and so you do not miss information you need to do the work timely and correctly. This format is to help you complete the requirements by the stated due dates and finish the course successfully.

Please read and familiarize yourself with additional course syllabus details below.

General Course Information

Catalog Description

Examines the historical evolution of computer and information systems and explores their implications in the home, business, government, medicine and education. Topics include automation and job impact, privacy, and legal and ethical issues.

Prerequisites

This course is an upper-level course designed for juniors and seniors. As prerequisites, IS 350 requires an introductory course in computing, an introductory course in the social sciences, and

an English composition course. Specifically, the required prerequisite courses for this course are:

A GER computing ([CS 100](#), [CS 101](#), [CS 103](#), [CS 104](#), [CS 113](#), [CS 115](#), or [BNFO 135](#)), AND one basic social science course ([STS 201](#), [ECON 201](#), [ECON 265](#), [ECON 266](#), [EPS 202](#), [STS 257](#) or [STS 258](#)), AND [HUM 101](#).

Course Goals

Upon the completion of this course, you should be able to:

- Explain beneficial and detrimental ways in which computing affects people, including the primary and secondary effects, and intended and unintended consequences.
- Utilize theories of ethical decision-making and professional codes of ethics to analyze difficult situations with computing aspects.
- Find and critically evaluate relevant literature pertaining to a situation of concern.
- Communicate about difficult issues in the computing sciences.

This is an ambitious set of goals, which meets several of the requirements for an ABET accredited degree in the Computing Sciences.

Graded Coursework Categories and Weights

1. **Weekly Discussions** – We will engage in robust discussions on the topics covered each week via entries in the Discussion Forum. This includes course content as well as current events related to ethics and technology. For each discussion topic, you are expected to post one original entry and reply to two classmates' entries with substantive thoughts that add to the discussion. A simple post such as "I agree" or "I disagree" is not considered substantive and will not receive credit.
2. **Weekly Quizzes** – To ensure you are prepared and understand the material, there is a short quiz most weeks on the relevant topics, typically covering the chapter for the week.
3. **Ethical Analysis Assignment** – The only way to truly understand ethics is to apply ethical theories to real-world situations. Individuals will be responsible for reading and analyzing an ethical case scenario using the analysis protocol presented in class.
4. **Current Events Assignment**– This is an individual assignment that focuses on an interesting and timely topic that you are assigned which demonstrates the impact of technology on society. There are several parts to this assignment. Key ones are to investigate a Current Events topic assigned to you to create a recorded presentation on this topic
5. **Group Debate** – As part of a team you will persuasively argue, in a debate format, about an ethical dilemma concerning technology. This will also be a **recorded presentation**. You will be assigned to a team, a topic, and position (pro or con).
6. **Midterm Report**
7. **Final Report**

Coursework Categories	Weight
Discussions	10%
Quizzes	10%
Ethical Analysis Assignment	10%
Current Events Assignment	15%
Group Debate Assignment	15%
Midterm Report	20%
Final Report	20%
Total	100%

Course Format

Most of the work will be at an individual pace, although there will be strict deadlines for each assignment. You will be responsible for reading the textbook and online materials, watching the videos, doing weekly postings and quizzes, and completing the major assignments and reports. All are mandatory. You will engage in other activities on-line, both individually and in a team. Time Required – This course requires a significant amount of work to help you achieve these goals. On average, you need to set aside up to 10 hours a week for this course, including discussion postings, lecture reviews, online activities, reading, studying the materials, homework and team activities.

Lectures & Readings – The lecture slides cover the major course content, further elaborating on the textbook. The videos supplement the textbook with important and timely content. Readings further enrich the textbook lectures and videos.

Learning Management System – The extensive course materials and other information are prepared to provide you an organized and successful learning experience are all in Canvas.

Textbook

Michael J. Quinn, Ethics for the Information Age, 8th edition (2020).

It is about \$40 for the online or downloadable PDF through [VitalSourceLinks to an external site.](#) while the bound textbook lists for more.

If you have a hard copy of the previous edition, it may be *mostly good enough*, but the weekly quizzes will come from the latest edition which has some new material.

Grading and Related Requirements

You can be *eligible* for an A if you do the following 3 things:

1. Post all assignments on time. Late assignments are not accepted.
2. Participate in online discussions. Discussions are a major part of the class. Late postings prevent replies from other students. All discussions must be posted before the due date.
3. For this course, the postings also count as attendance, but late postings will not be counted towards attendance.

If you will miss any assignment deadline or session, email me in advance. Otherwise, you will be disqualified from an A. (Emailing me does not necessarily earn back the A but is a required courtesy.)

Grading Scale:

A = 90 and up

B+ = 85 to 89

B = 80 to 84

C+ = 75 to 79

C = 70 to 74

D = 65 to 69

F = less than 65

Regarding the release of grades for course assignments:

For quizzes, grades will be released on the morning of each quiz deadline. Generally, the deadlines for quizzes are Sunday night at 11:59 PM, with a one-hour grace period (until 1:00 AM Monday morning). Thus, grades will be released on Monday morning. By then students would either have taken the quiz or it will be beyond the deadline to do so.

For discussions, grades will be released by the end of the week when these are due. This is because discussions will be graded manually as essays, which require more time and a conversation on each entry between me and our TA before they are released.

Attendance, Absence, and Lateness Policy

You are expected to attend every class.

Attendance will be counted such that you are present for a week only if you post all required submissions to the week's Discussion Forum.

Attendance is taken such that you are present for a week only if you post all required submissions to the week's Discussion Forum.

Each student is permitted three absences during the semester. Additional absences will affect the student's grade by one letter lower.

If you are absent up to three (3) times without a medical excuse, no effect on your grade.

Four (4) times will cause your grade to be lowered by one letter grade.

Five (5) or more times will lead to an automatic failure.

Medical Excuses need to be reported to the Dean of Students, who will determine if the absence is valid or not.

The Instructor will then decide whether or not the absence will be excused.

Procedure

Timing: From the date the grades for each assignment are posted, you have up to 7 days to dispute a grade. After this period grade rebuttals will not be considered.

Addressing your email: Email the instructor and copy the TA using the email addresses in the syllabus.

Subject of your email: Use the email subject header "IS350 [Assignment Number] [Very Brief Reason]".

Body of your email: In the email body include:

1. Assignment Number/Type
 - If a discussion grade, then the week, subject of your posting, and whether it was the original post or a reply.
2. Student Name and UCID
3. Your current grade
4. Your desired grade
5. Your justification, following the instructions below

Justification using Grading Rubric/Template: You must clearly justify why you believe you should deserve a different grade. This is the most important part. You have to explain using the rubrics (grading template) provided for each assignment why you deserve a different grade. If your justification is clear, well reasoned, and correct, and the desired grade matches your justification you will get the full credit.

- For example, if you believe you should get a 100 instead of a 70 and you justify it correctly, you will get the 100.
- However, if you instead deserved an 85 and asked for a 100, you won't get anything.

It's a "deserved amount or nothing" situation, so be truthful regarding the grade you think you deserve.

Office Hours

Al Shahriar Rubel is a PhD candidate in the Informatics Department, is working with me as the Teaching Assistant for the course. Al Shariar's's email is ar2633@njit.edu. Please email me in Canvas or at fadi.deek@njit.edu if you have any questions or concerns.

Office hours for the professor and the TA will be held using Zoom.

They will be on Monday 10:00 AM - 11:00 AM

The Zoom link is:

<https://njit-edu.zoom.us/j/2285419823?pwd=RFF4VUVrL21LMDFCa3c0MUErNVlVQT09>

In addition, there will be an office hour held by the TA on Tuesday 3:00 PM - 4:00 PM

The Zoom link is:

III. The Topics We Will Cover

The following topics will be the subject of our discussions, assignment, and projects in this course:

1. Introduction to the Subject of Ethics
2. Ethics--Ethical Thinking, Ethical Theories, and Ethical Analysis
3. More Ethics--Intended consequences, Unintended Consequences, and Tertiary Effects of an action
4. Professionalism and Codes of Conduct
5. Social issues, Equity, Gender, and Web 2.0
6. Privacy and Civil Liberties
7. Computers and Government
8. Work, Robotics, and Green Computing
9. Cybercrime and Cybersecurity

10. History of Computing and Perspectives
11. Professional and Legal Responsibilities
12. Digital Intellectual Property

IV. Artificial Intelligence Philosophy and Ethics Segments

Aiming to provide timely, relevant, and interesting course content, I have developed a series of segments on Artificial Intelligence philosophy and ethics for this course, designed to discuss challenges emerging in this ever-evolving field. There are a total of 14 segments, six focus on fundamentals and eight focus on applications. These thought-provoking AI segments are integrated seamlessly into course modules throughout the semester. In specific, these segments aim to cultivate technologically informed and ethically conscious students, with an understanding of the following topics:

1. Ethical Challenges with the Design and Development of Intelligent Systems
2. Algorithmic Fairness
3. Artificial Intelligence and Education
4. Artificial Intelligence and Healthcare
5. Artificial Intelligence and Gaming
6. Privacy and Surveillance
7. Artificial Intelligence and Agriculture
8. Artificial Intelligence and Energy
9. Artificial Intelligence and Climate
10. Robots and Work
11. Artificial Intelligence and Transportation
12. Artificial Intelligence and Finance
13. Deepfake Video Technology
14. Generative AI

Each module includes an overview section, learning outcomes, a video with integrated quiz questions, and discussion prompts. The videos delve into the ethical aspects of cutting-edge technologies, encouraging students to critically examine the implications of their use, both at individual and societal levels. Students are guided through exploring these complex issues while developing a sense of responsibility toward applying these technologies. The quiz questions interspersed throughout each video encourage student engagement and reinforce key concepts, enabling you and your students to assess their comprehension as they progress through the material. The discussion component encourages critical thinking and can foster substantive interactions among students.

V. Our Discussion Forum

The discussion forum is an important vehicle for our learning in this class and serves as a repository for our interactions. You will be making weekly entries in this forum that are part of your grade.

We are interested in your logic, reasoning, and persuasive argument. You can be concise and to the point; One strong paragraph answer will suffice.

Please keep the following additional guidance in mind when you write in the forum.

Your posts should:

- stay on topic,
- show understanding of assigned material by using its content appropriately,
- integrate knowledge from course content to support your remarks/arguments,
- ensure that your writing is free of grammatical, spelling, or punctuation errors, and
- be made early in the assignment period to give fellow students time to reply.

Your replies to other students' posts should:

- be substantive and reflect understanding of the writing of the persons you are replying to,
- show respect to others' opinions,
- provide constructive criticism to other students regarding their work,
- contribute new ideas and/or build upon the ideas of others, and
- move the conversation forward, or offer answers to questions raised by the persons you are replying to.

VI. Intellectual Property and Content Generation in Discussions/Assignments/Exams

There is an important point that I wish to remind you of, specifically that the central theme of this course is “ethics”. This is relevant to both the course topics and practice. As such, I would like to draw your attention to two readings in Week 1: The NJIT Policy on Plagiarism and Understanding Citations, as well as a quiz on the subject in Week 2.

Some similarity between your work and the writings of others is normal and expected. However, misappropriation of intellectual property and its unattributed use is not acceptable. Do use it, but acknowledge where it came from. The Turnitin similarity score (the percentage of a paper's content that matches to the tool's database) can serve as a guide to you regarding the appropriateness of a given overlap. Generally, somewhere between 10-15% is considered a good score to aim for. If your score is higher, please look carefully at your similarity report so you can understand how to reduce such similarity and thus your percentage.

An emerging related issue impacting all of us is the use of AI language models to generate new content, for example ChatGPT. The recommendation for this class on this subject is consistent with existing university policy on academic integrity.

It is fine to use AI-assisted tools for learning responsibly alongside your own critical thinking and writing skills. Such tools must not write your entire essays or assignments though. This kind of behavior is considered cheating and can result in serious consequences, including failing the assignment or the course, or even being expelled from the university.

Use generated content as a starting point to inform your work, brainstorm ideas, and prepare notes for your writings just as you do with your textbooks, library resources, and web materials. Also, there are instances when it may be necessary and appropriate to use text as written by others, including technology, which is acceptable when you include it within quotation marks and cite these sources in your work.

Finally, remember that these tools will provide the same or comparable content to you and others with similar requests. More importantly, there already exists technology that can detect AI-assisted/generated writings.