



COURSE SYLLABUS
IST195 – Introduction to Information Technology



Information Technologies – IST195			
Semester	Fall 2023	Instructor	Jeff Rubin
X (Twitter)	@jhrubin	Email	jhrubin@syr.edu
Class Time	M/W 10:35 a.m. – 11:30 a.m.	Office Hours	TA's – Daily – times TBD
Class Location	Grant Auditorium	Office Location	327 Hinds Hall
Lab Hours	Fridays, 8:25 am – 2:00 pm	Lab Location	010/013 Hinds Hall
Graduate Assistants	Lauren Hardee-Chase , Noah Goldie , Andrew Hanrahan , Adediwura Ayo-Aderele , Shashank Guda		
TAs email	IST195GA@gmail.com		

Course Description:

State-of-the-art technologies in the field; Computer architectures, telecommunication networks, software design and application; Issues in information management and technology use.

Additional Course Description:

The information age has arrived in a rush: Everyone in the U.S. has a computer or can go to the public library to use one. I can email, text, Tweet (X), Facebook message, Snapchat, Zoom, or even send a Tik Tok to my boss, friends, and family anytime I like from about any point on the globe. I can buy groceries, a car, or a house online using cryptocurrency. I can find a job or a spouse using social networking tools. I could (but did not) use Generative AI to write this syllabus!

How does it all work? What do you need to know about all this technology to succeed in life? How is it possible to keep up with the rapid pace of innovation in information technology? You probably don't want to be a programmer or engineer, so why must you know about all this information technology? In IST195, we will explore all these questions by enhancing information technology literacy even if you know little or nothing about how computers, networks, and software work; this course will provide a grounding that will get you started on a path of lifelong learning about technology. This course will serve you well regardless of whether you see your life and future career as focused on information technology. Information technology will substantially affect your life whether you like it or not and whether you pay attention to it. Either way, the goal is to have you reach the end of the semester knowing twice as much about information technology as you do now.

Prerequisite:

None

Audience:

This course is open to all undergraduate students at Syracuse University. No prior information technology knowledge is required.

Credits:

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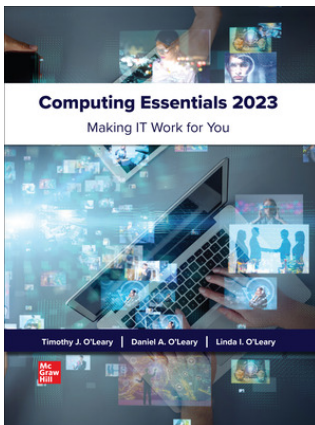
Learning Objectives:

- ♦ Recall key terms and definitions related to standard information technologies.
- ♦ Describe at a basic or intermediate level the workings of the Internet, databases, Internet security, and productivity applications.
- ♦ Evaluate consumer and business-focused information technology products and services.
- ♦ Analyze and/or criticize the impact of information technology on contemporary life.
- ♦ Demonstrate information ethics concerning intellectual property, cyber-crime, privacy, or related matters.
- ♦ Explain how various forms of information technology will intersect with their career, industry of interest, and personal lives.

Shared Competencies:

In IST195, our class projects, labs, and exams ensure that our students meet the expectations of one of the university-shared competencies: **Information Literacy and Technological Agility**, defined as the Identification, collection, evaluation, and responsible use of information. Effective, ethical, and critical application of various technologies and media in academic, creative, personal, and professional endeavors.

Required Texts / Supplies:



Computing Essentials 2023: Making IT Work For You - eBook

Authors: Timothy O'Leary, Linda O'Leary, Daniel O'Leary
Publisher: McGraw-Hill

This eBook is available through **Orange Instant Access**. You are automatically enrolled, and the book is available via Blackboard

You will have until **September 11, 2023**, to decide if you would like to remain enrolled in OIA. If you opt-out, you are still responsible for obtaining the materials elsewhere. After **September 11, 2023**, the cost of your material (\$45.88) will be charged to your SU Bursar account.

Course Requirements and Expectations:

Lectures:

This class will meet in Grant Auditorium on campus. All lectures will take place on Mondays & Wednesdays from 10:35 a.m. – 11:30 a.m. Eastern Time. Attendance is mandatory. You are expected to be in Grant Auditorium unless approved to be remote. You are encouraged to ask questions. Attendance will be taken.

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The lecture content is the subject of all exams throughout the semester. To prepare for the lecture, read the chapter in the textbook due that week before the lecture.

Labs:

There is one lab for each week of the course. Collectively, the 14 labs count for about one-fourth of your grade. Lab assignments are available on Blackboard on the Monday before the lab session, and students are advised to familiarize themselves with the steps involved in the lab in advance of their session. Labs are designed so students with little or no experience in the topic area can follow the instructions and complete the lab.

If you don't have the software to complete the lab, you can use <http://rds.syr.edu>

If you need any help in any lab:

1. You should attend in person lab on Friday.
2. The Professor and the TAs will **NOT** answer **ANY** questions about labs via email. If you have questions about the lab or find difficulties, you **MUST** attend the lab session on Friday.

All labs must be submitted to Blackboard by 11:59 PM on Friday.

Labs must be submitted in the file format indicated in each lab (i.e., .PDF, .xlsx, etc). Submitting an assignment in an incorrect format will result in a deduction of 1 point. Any student who submits more than two assignments in the incorrect file format will receive a zero on the subsequent assignments. Students are responsible for ensuring that the file they submit is readable and in the correct format. Unreadable or corrupt files may receive a zero (0) for that assignment at the professor's discretion.

Exams:

The course will have two mid-semester exams, each drawing entirely upon the lecture material. No make-up exams will be offered.

A comprehensive final exam counts for about one-quarter of your grade and will be held during the final exam slot for this course: **Thursday, Dec 14th, 3:00 – 5:00 p.m.** Please take note of the date and time of your exam and make your travel plans accordingly. University rules mandate that I cannot give an early final or change the exam date or time. You may have other exams that day: Your responsibility is to prepare appropriately and take the exam at the appointed time, regardless of how many exams you have that day. A study guide will also be available on Blackboard as the exam approaches. Individuals who miss their exam due to a medical or family emergency need to provide a verified excuse from the University's Division of Student Affairs.

Quizzes:

For the first 13 weeks of the semester, a short quiz with ten multiple-choice questions will be available on Blackboard in the Weekly Quizzes section. The quiz questions will pertain to the chapter you read before the lecture. The quizzes will be available on Monday and must be completed by 11:59 PM Sunday. I WILL NOT extend the deadline for reading check submissions beyond Sunday night, so don't ask. You are responsible for ensuring you complete the quiz before it is due each week. Neither

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technical difficulties nor off-campus travel excuses you from this responsibility. In addition, a pre-lab UNIX quiz will count as part of your overall quiz grade.

Projects:

This course has three projects. The first project has you researching and writing about ethics related to information technology. The second project has you developing an entrepreneurial idea and writing about how technology can enhance your idea. For the third project, you create a PowerPoint deck and teach someone something about information technology.

Late Work:

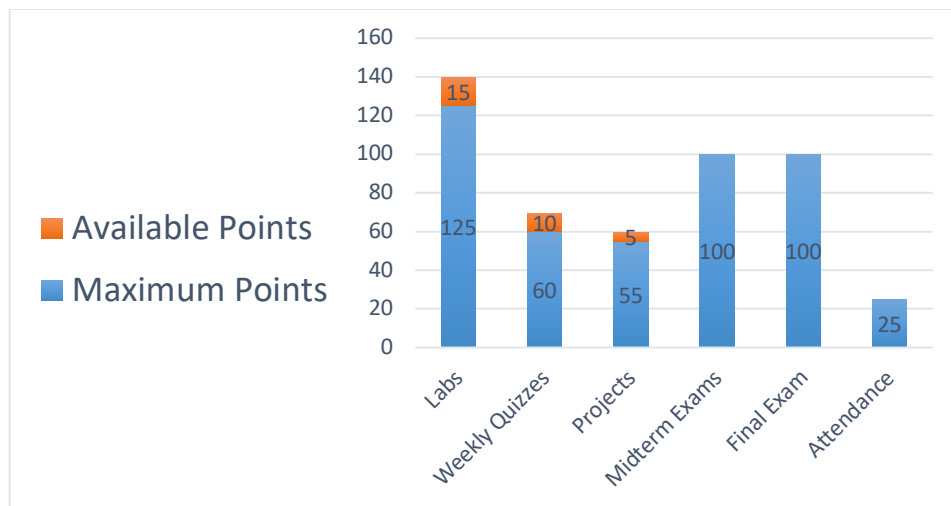
With few exceptions, late work is not accepted in IST195. If the Professor approves your late work, you will lose 50% of the available points.

Use of Class Materials and Recordings:

The course instructor's intellectual property is the original class materials (handouts, assignments, tests, etc.) and class session recordings. You may download these materials for your use in this class. However, you may not provide these materials to other parties (e.g., websites, social media, or other students) without permission. Doing so violates intellectual property law and the student code of conduct.

Grading:

The following table describes an approximate grading breakdown for the course based on a system of 465 points. These allocations are subject to change, which I will announce in class. You are responsible for tracking your grade status throughout the semester, and no adjustments to letter grades will occur because of modifications to these allocations.



Grading:

In the case of labs, projects, and reading checks, there are more points within the assignments than are needed to achieve the maximum in each category. In labs, there are 14 labs at 10 points apiece, so 140

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points are available for you to achieve the maximum of 125 points. With projects, you need to amass 55 out of 60 available points. Within weekly quizzes, you only need to amass 60 points, but 70 points are available. This is called compensatory grading. This compensatory approach is the mechanism in the course that allows for the occasional mistake or slipped deadline. As a result, please don't ask me for extensions or whine about harsh grading.

One last thing you should consider: Attendance and exams do not have this compensatory factor built in. Your attendance is worth 25 points in total. The first two exams are 50 points each, with no scaling or curve. The cumulative final is worth 100 points.

Grading Tables

According to the following scheme, the numeric total you have amassed during the semester will translate into a letter grade.

Min Points	Max Points	Min %	Letter
440	465	95%	A
417	439	90%	A-
398	416	86%	B+
384	397	83%	B
370	383	80%	B-
352	369	76%	C+
338	351	73%	C
324	337	70%	C-
277	323	60%	D
0	276	0%	F

Grading Note:

Achieving an A in this course requires a **minimum of 95% of the available points**. As a result, only a select few of the highest-achieving students will attain an A for the semester. At the end of every semester, I get several requests from students who have come within a few points of the next highest letter grade category to please, please boost their grade so that they can get into another school or who's who or something else, but I never do it. The time to worry about getting an A in the course is ALL SEMESTER LONG, and the way to do it is to study hard and participate in every class.

Earning Research Credit through the CITRA Portal

This course participates in the Communication, Information, and Technology Research Alliance (CITRA) Research Pool. This is a shared resource for students interested in participating in scientific research conducted by Newhouse or iSchool faculty and students, and you can earn credit for this course in exchange for volunteering for those studies.

At any time during the semester, you can visit <https://ischool.syr.edu/citra/> to read more about the study participation opportunities. Note that there may not *always* be studies available, and you might not be eligible for all studies, but that the list of studies is updated frequently, so you should check for

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new studies throughout the semester. For each study listed, there are specific instructions for how to sign up and participate—if you have questions, please email the researcher listed directly.

When you sign up for a CITRA study, you will earn 1 credit for every 30 minutes of study-participation time (although some studies could be worth more or less, depending on what you are asked to do). Each credit is worth **.5 points for our class**, and you are limited to earning **10 credits** for the semester. Each CITRA Credit can be assigned only to one course, and study participation must be completed by the last class day of the semester.

Finally, it is important to understand that it is *not mandatory* that you participate in research to earn course credit. Suppose you would still like to earn course credit but are not interested in volunteering for any of the CITRA Pool studies. In that case, you may contact the coordinators of the CITRA Pool for more information about alternative credit activities. For iSchool courses, your contact is the CITRA coordinator Dr. Jaime Banks (banks@syrr.edu). You may also email those contacts for any other questions, comments, or concerns about the CITRA program.

Syracuse University Policies:

Syracuse University has a variety of policies designed to guarantee that students live and study in a community respectful of their needs and those of fellow students. **The policies and services are listed on the new Syracuse University Senate-approved syllabus appendix titled, ‘Syracuse University Student Policies and Services.’ These statements are an official part of this course syllabus.**

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Course Schedule:

Week/ lecture, the topic for the week/lecture, and the required readings are in the columns below.

Week	Date	Chapter(s) to Read	Meeting	Topic Covered
I	Aug 28	Chapter 1 Information Technology	Lecture 1	Class Intro / IT & Your Career
I	Aug 30		Lecture 2	History of Computing
I	Sep 1		Lab 2	PowerPoint Introduction Lab
II	Sep 4	Chapter 2 The Internet	<i>No Class</i>	<i>No class – Labor Day</i>
II	Sep 6		Lecture	Social Media
II	Sep 8		Lab 2	LinkedIn Lab
III	Sep 11	Chapter 3 Application Software	Lecture 1	Spreadsheet Essentials Review Project 1
III	Sep 13		Lecture 2	Data Analytics
III	Sep 15		Lab 3	Excel Lab
IV	Sep 18	Chapter 4 System Software	Lecture 1	Operating Systems Project 1 – Part 1 Due
IV	Sep 20		Lecture 2	Linux O/S
IV	Sep 22		Lab 4	Linux Quiz and Lab
V	Sep 25	Chapter 5 The System Unit	Lecture 1	Computing Components
V	Sep 27		Lecture 2	Bits & Bytes RFID/NFC/BLE
V	Sep 29		Lab 5	Hardware Lab
VI	Oct 2	Chapter 6 Input & Output	Exam	Exam #1
VI	Oct 4		Lecture 2	Internet of Things
VI	Oct 6		Lab 6	Data Visualization Project 1 – Part 2 Due
VII	Oct 9	Chapter 7 Secondary Storage	<i>No Class</i>	<i>No Class – Fall Break</i>
VII	Oct 11		Lecture	Cloud Computing Introduce Project 2
VII	Oct 13		Lab 7	Cloud Computing Project 2 – Idea Due
VIII	Oct 16	Chapter 8 Communications	Lecture 1	Security
VIII	Oct 18		Lecture 2	Privacy & Ethics

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VIII	Oct 20	and Networks	Lab 8	Security Lab
IX	Oct 23	Chapter 9 Privacy, Security & Ethics	Lecture 1	Networks
IX	Oct 25		Lecture 2	Artificial Intelligence
IX	Oct 27		Lab 9	Networking Lab
X	Oct 30	Chapter 10 Information Systems	Lecture 1	Blockchain Project 2 – Video Due
X	Nov 1		Lecture 2	eBusiness / Digital Transformation Project 2 – Video Comments Due
X	Nov 3		Lab 10	Blockchain Lab
XI	Nov 6	Chapter 11 Databases	Exam	Exam 2
XI	Nov 8		Lecture 2	Databases
XI	Nov 10		Lab 11	Database Lab Project 2 – Paper Due
XII	Nov 13	Chapter 12 Systems Analysis and Design	Lecture 1	Project Management Project 3 Introduced
XII	Nov 15		Lecture 2	Web Development
XII	Nov 17		Lab 12	Project Management Lab
Nov 20 - 26		No Class – Thanksgiving Break		
XIII	Nov 27	Chapter 13 Programming Languages	Lecture 2	Web Development
XIII	Nov 29		Lecture 2	Web Accessibility
XIII	Dec 1		Lab 13	Web Development Lab Project 3 - Due
XIV	Dec 4		Lecture 1	Careers in IT
XIV	Dec 6		Lecture 2	Review for Final Exam
XIV	Dec 8		Lab 14	Job Search Lab
XIV	Dec 11		Lecture 1	Review for the Final Exam
FINAL	Dec 14	FINAL EXAM		3:00 – 5:00 p.m.