THE OHIO STATE UNIVERSITY

FCOB Accounting and MIS / 7820-010
Topics In Management Information Systems
Autumn Term 2025 (second half)

Instructor:

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Office Hours: Wednesdays, 10am to 12pm; Mason Hall Room 231.

Class Meeting Schedule:

The course will begin on Wednesday 22nd October at 6:15pm and will consist of recordings of lecture materials and live interactive broadcasts via Zoom.

Course Description:

Technology underpins most aspects of the current economy of the US and other advanced nations. For example, electronic commerce (eCommerce) is worth a staggering $6.3 trillion in the US alone (nearly one third of the size of US GDP), but in 1995 it was practically zero. This growth has come with tectonic shifts in companies, markets and consumer behavior, and the pace of change is set to continue.

If you are working in the world of business as a finance professional, you need a broad understanding of the business models, underlying technologies, and social and legal impacts of information technology, whether you plan on working directly with technology or not. You will also want to have the tools at your disposal to quickly and effectively access and process information yourself. This course provides that introduction, together with a set of tools and techniques to enhance your efficiency.

There are two distinct parts of this course:

PART ONE Strategic Themes:

Pertinent topics for finance professionals doing work with Information Technology or departments closely linked to IT covering emerging topics and trends in technology and their likely impact for the company. This will include:

a. Introduction to IT Security (covering typical roles and functions within IT security organizations, vulnerability management, security tools).
b. Payment processing
c. IT governance & managing a portfolio of IT projects and assets
d. Strategic management of IT in organizations
e. Introduction to eCommerce
f. Mobile computing platforms
g. The cloud and cloud services
h. Artificial intelligence (AI) and machine learning.

We'll use real-life examples throughout, drawing on my personal experiences and publicly available sources.

This part of the course will be covered by pre-recorded lectures which will be published each week. Students will have a week to watch the class and then contribute to a discussion board about the class.

PART TWO Practical Lab:

Practical use of technology to access data and automate tasks, with a goal of providing a foundation to equip students with the skills to execute projects to improve efficiency of themselves and the teams they work in. ***This part of the course will be in Python 3*** and will not assume any prior knowledge of Python, though previous experience of any another programming language will be an advantage.
Class for this part of the course will be held live on Wednesday each week at 6:15pm and will be delivered live via Zoom (it will also be recorded).

Course Learning Outcomes:

By the end of this course, students should successfully be able to:

- Understand and describe the major business models, underlying technologies and social and legal impacts of information technology as they are used in Business today and the circumstances under which each of them is most applicable.
- Understand and describe the risks associated with the management of technology, and the steps which companies take to mitigate those risks.
- Apply the tools introduced during the course to extract, transform and process data from a variety of sources to enhance their efficiency and productivity in a business context.

Course Materials:

- As the material for the lectures is quite broad in scope, no single book covers all the ground. We will use my lecture notes and will regularly reference articles from The Economist magazine and other sources, some of which may need to be purchased. Set up a free account at www.economist.com to be able to access up to 3 free full articles each week
- **Recommended:** For the practical part of the course a good book to have is "Automate the Boring Stuff With Python" by Al Sweigart, published by the No Starch Press.
- **Recommended:** You may also find Learning Python (6th Edition) by Mark Lutz, published by O'Reilly to be a very useful reference, and this is available for free via the university Safari books online service. For these texts either physical or eBook versions are equally acceptable.

How This Course Works:

Mode of delivery: Part of this course will consist of recorded video lectures and part of lab-style online live classes. The live classes will also be recorded. Please see later notes on attendance and participation credits.
Pace of activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but are free to
Credit hours and work expectations: This is a **1.5-credit-hour course**. According to Ohio State policy, students should expect around an average of 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example).

Attendance and participation requirements: Students are encouraged to attend each live broadcast class at the scheduled time and attendance will be registered using TopHat. There is a significant element of course credit available for participation.

I. If a student chooses not to attend the live broadcast, then s/he can still earn the attendance credit by watching the recording of the live class and making a meaningful post on the discussion board about the class.
II. For the recording only components of the course, each student will be required to watch the recording within a week of its release, then make a meaningful post (or substantial reply to someone else's post) on the relevant discussion board.
III. There will be a weekly "office hours" session (Held on Wednesdays at 11am) during which additional questions can be asked and allowing for more in-depth discussion on course content.
IV. Additional individual meetings with the lecturer can be arranged and will be held "virtually".
V. We'll use Carmen throughout for communication and submission.
VI. Please do not be late on submissions – the required timing will always be clear (that's down to me) but will typically be 11:59 on the day the assignment is due. Points will be lost if submissions are late, up to and including the entire grade for the assignment
VII. All submissions (Assignments, Project Reports, Discussion Board posts, the Mid-Term and Final) will be subject to a plagiarism check using TurnItIn

Course technology:

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Baseline technical skills

- Basic computer, email and web-browsing skills
- Ability to use Zoom for attending live class broadcasts.
- Navigating Carmen: for questions about specific functionality, see the Canvas Student Guide.
- Using TopHat on phone or computer to register attendance.

Required equipment

- Computer: current Mac **(running MacOS Sonoma 14 or later)** or PC **(Windows 10 minimum)**. *If you have a choice of these, then PLEASE choose the PC as the installation of Python 3 on it is a little more straightforward and logical.*
- **IMPORTANT: If you do not have access to a computer meeting one of the two requirements above, then you will NOT be able to complete the class!**
- Your computer must have a high-speed internet connection with enough bandwidth to stream video and download large files.
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Required software

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found at go.osu.edu/office365help.
- Carmen Zoom
- You will need to install Python 3 on your computer. Information on how to do this will be posted on Carmen before the course begins and **you should complete this task before the first lecture**.
- Additionally, running Python involves access to and updating libraries (known as "modules") from the python library. We'll cover how to do this in class, so don't worry right now about the technicalities, HOWEVER **you will need the ability to do this on your computer**, which may be a problem if it's owned and managed by someone else, and functions have been locked down for security reasons (e.g. a company owned laptop). If you believe this is the case, then I would strongly advise you to either use a personal laptop on which you have full administrator rights or discuss being given local admin rights on your company laptop with your IT security department.

Carmen access

You will need to use BuckeyePass multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Grading and Evaluation:

Graded assignments may come in three forms, and students should note the expectations for each in the descriptions of our class assignments below.

- **Independent Work ( ):** Strictly non-collaborative, original-individual work. You may discuss this assignment only with your instructor. Discussions with other individuals, either in person or electronically, are strictly prohibited.
- **Collaboration Required ( ):** An explicit expectation for collaboration among students either in-class or outside (i.e. group work).
- **Optional-Collaboration ( ):** Students are permitted, but not required, to discuss the assignment or ideas with each other. However, all submitted work must be one's original and individual creation.

Course Element	Points / Weight	Assignment Type
Class Attendance and participation	20%	
Assignments	40%	
Exam (take-home format)	40%	
MAXIMUM COURSE POINTS	100%	

Course Assignments:

- Assignments are designed to develop and demonstrate your understanding of, and critical thinking associated with, the material. This will be part of the points awarded for the class, so you'll need to complete them and submit them. All assignments (including the final exam) will be in the form of short-answer essays, with approximately a week to complete them. There are no multiple-choice assignments.
- Rubric – each assignment (and the exams, and the project) will have a rubric attached to it in Carmen which should clearly show you what I'm looking for in grading the papers: PLEASE READ THEM!
- Formatting – Times New Roman, 12pt, double-spaced on everything please. A small amount of credit on each submission is for clear formatting.

Grading Scale:

- We're following the OSU Standard Grading Scale (percentages). A = 93-100, A- = 90-92.9, B+ = 87-89.9, B = 83-86.9, B- = 80-82.9, C+ = 77-79.9, C = 73-76.9, C- = 70-72.9, D+ = 67-69.9, D = 63-66.9, D- = 60-62.9, F = below 60.

Planned Course Schedule:

Whilst this is subject to change, that will typically only be because circumstances have changed (e.g. the class is able and wants to move more quickly on the lab sections). Any changes will be very clearly communicated and the process for the change being made will be transparent to you.

Wk	Lecture Topics	Lab	Assignments
1 (10/22)	Introduction to IT Security (covering typical roles and functions within IT security organizations, vulnerability management, security tools).	Introduction to Python – why python, getting set up, "hello world", variables, types, accepting input.	Practice problems from lab (non-graded)
2 (10/29)	Payment processing. Compliance regimes (PCI, ITAR, HIPAA).	Flow control, loops, decisions, comparisons, functions, strings.	Assignment One
3 (11/5)	IT governance & managing a portfolio of IT projects and assets Strategic management of IT in organizations	The range function Sets, lists, dictionaries and files – reading and writing data. Using Python Modules. Analyzing text using what we've covered so far.	Practice problems from lab (non-graded)
4 (11/12)	Digital transformation	Types, parameters, errors, strings and "random"	Assignment Two
5 (11/19)	Privacy	Useful Python Modules	
6 (12/3)	Big Data, Cloud and Analytics	Extracting data from websites 1	

Wk	Lecture Topics	Lab	Assignments
11/26	Thanksgiving Break – No Classes	Thanksgiving Break – No Classes	
7 (12/10)	Emerging Tech (including AI and machine learning).	Extracting data from websites 2 and using Application Programming Interfaces (APIs).	Final Exam

Academic integrity:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct (https://trustees.osu.edu/bylaws-and-rules/code) and this syllabus may constitute Academic Misconduct (https://oaa.osu.edu/academic-integrity-and-misconduct)

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University, or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Disability Services:

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue

Safety and health requirements:

All teaching staff and students are required to comply with and stay up to date on all University safety and health guidance, which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

Grievances and Solving Problems:

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, associate dean for programs in the college, and to the provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department

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