Introduction to Information Systems (Info 102)

College of Computing & Informatics, Drexel University
Course Syllabus, Spring 2023

Tues and Thurs at 5–6:20 p.m.

Professor
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Course Overview

Course description
Introduces students to major types of information systems and their development and use in organizations. It emphasizes ways in which information systems can be used to help individuals and organizations meet their goals. It assumes basic knowledge of computing concepts.

Course purpose
This course provides a foundation of concepts and terminology related to information systems. As it is meant to be taken early on, this course aims to bring all students to a level of familiarity with software and information concepts that will be necessary throughout the program.

There are no prerequisites, co-requisites or restrictions for this course. This is a required course for students in the **Information Systems**, **Computing and Security Technology** and **Data Science** majors, as well as the **Human–Computer Interaction** minor. It is an option for students in the **Interdisciplinary Problem Solving** minor, and it can also be taken as an elective by students in many other programs.

Learning targets
As a result of your experience in this course, you should be able to:
- Discuss basic functions of major types of organizational information systems
- Explain uses of major types of organizational information systems
- Describe the life cycles used in developing information systems
- Discuss the impact of social media and ethics on information systems

In addition, as your teacher I will help you to:
- Self-reflect on your work and receive feedback gracefully
- Explore how concepts we'll learn in class can apply to other areas you're interested in
- Advocate for a human-centered approach to information system design
- Explore possible career interests in information systems

- Develop your skills of good thinking and related habits of mind such as love of learning, intellectual courage, intellectual humility, and practical wisdom.

What I think about teaching and learning

I love being a teacher, I love the material I get to teach, and I love bringing new voices into the fold. So my goal is not to "cover course content," but to welcome you into a community of learning that will serve you well for life. This goal guides my teaching philosophy and my choices as an instructor.

For example, the vast majority of our time together will be in activities and conversations. You will be talking, making, doing, teaching... This is what we call *active learning,* and it will help you develop your skills in collaboration, solidify your learning for the long term, spark creative thinking, and get you to have fun along the way. Long story short, you will not be sitting in class listening to me read PowerPoint slides (though on occasion I may give short lectures to share basic information).

I realize active learning can be challenging, particularly for people who are introverted or have any kind of anxiety. I have been there! I myself am an introvert. I do my best to create a comfortable learning environment where everyone feels psychologically safe and able to participate and learn to their best ability. I hope, over time, you will feel at home in the learning community we will build this quarter.

How to be a part of this class

Learning happens best in community. For our purposes, this means being present and being caring. This quarter, let mutual respect guide our time together, so that everyone can participate and enjoy the class. To be a part of this class, strive to do the following:

- **Attend each class session**, arriving a few minutes early so we can start on time.
- **Read the assigned readings and give yourself time to mull them over**, so you can participate meaningfully in our activities.
- **Do your best to get to know your classmates as the course goes on**. These are your allies—and future colleagues in life. The world is small. If you're on the shy side, challenge yourself to step just outside of your comfort zone when you're able.

What book you need

The required text for this course is *Introduction to Information Systems*, by Patricia Wallace (3rd ed., 2018). The 4th edition (2020) is also fine, but it's not different enough to warrant requiring it, given the expense. We'll be reading most of the book over the course of the quarter (see the schedule on the last page of this syllabus).

You'll be expected to do the scheduled readings prior to each respective class meeting. The readings are straightforward and relevant. There will be regular quizzes to help you gauge your comprehension and keep you on track. You will also have ample opportunity to develop mastery of the material in the readings through your work in the assignments.

Contacting me

Student–instructor interaction is an important part of any course. I am available to you, and I want to help you succeed in this course, in your program at Drexel—and in life. Please come to me with any questions, problems, discoveries or anything else you'd like to share. If you have a question

that may be of interest to others in the class (e.g., syllabus, readings, logistics, etc.), please ask it during class so that others can benefit. With personal or urgent questions, email me directly or speak to me before or after class.

I am available to meet with you during office hours or by appointment, and feel free to email me at any time. I check email twice a day, and I don't do it at night or on weekends. In our always-on society, it is important to set boundaries—firstly because healthy lives require off-time, and also because our academic activities require uninterrupted periods of time for reading, writing and thinking. Moreover, taking time for rest and pursuing leisure activities have been shown to improve productivity, creativity and accomplishment, as Alex Pang discusses in his book <u>Rest: Why You Get More Done When You Work Less</u>. I hope you will join me in living with more balance.

Course Components

Your performance in this course is made up of four components: Participation, Exams, two Homework assignments and a Term Project.

Class participation

We'll do in-class quizzes and other activities, generally building on the readings, that will be turned in for credit. Aim to be present and prepared at every class session.

Exams

There are two exams during this course; they are both individual, open book exams with multiple choice and true/false questions. The Midterm Exam will cover material from Weeks 1–4 and the Final Exam will cover material from Weeks 6–9.

Homework

There are two homework assignments: a Passion Project, due in Week 3; and a User Needs Analysis, due in Week 8. Details can be found on Blackboard.

Term project

The term project is a policy brief, a research-based document meant to inform technology policy at an organization, in government, etc. The project will consist of three parts:
- An initial proposal (the topic is largely going to be your choice!)
- A written policy brief of about 1,600 words
- A short presentation to share the key points of your policy brief and generate discussion

More details about the term project are on Blackboard.

Grading

<u>Research has demonstrated</u> that grades diminish students' learning, decrease students' interest in the subject matter, and prevent students from taking creative risks. Moreover, many students experience anxiety about grades. In this class, **we are here to learn, to become interested in information systems, and to take creative risks by trying new things** (not just following a rubric) —and we certainly don't need more anxiety in our lives. So we will take a different approach to assessment.

My intention with this class is to help you to work in an organic way, as you will after graduation. So while you will get a final grade in the class, I will not put quantitative grades on individual assignments. Rather, when I review your work, I will ask questions and make comments meant to engage your work rather than simply evaluate it. You, too, will reflect deeply on your work and that of your peers throughout this quarter, and we will discuss your learning and effort as the course progresses. We will do this throughout the course, but there are three things I will ask you to do as anchors for this process:

- **Goal-Setting**: During Week 1, we will set goals for our learning this quarter to give us each a concrete place to aim for in addition to the general course learning outcomes listed above.
- **Midterm Reflection**: Midway through the course, I will provide you with a link to an online form that will guide you through a reflection on your work thus far—what challenges you've overcome, how you're living up to my and your own standards, and what your goals are for the coming weeks. At the end, you'll be asked what letter grade you would give yourself for your work thus far. This is your chance to assess yourself realistically and challenge yourself to improve in the second half of the term. I will respond to your reflection, and we'll have a conversation if our respective assessments do not match.
- **Final Reflection**: Ahead of Finals Week, I will provide you with another link to an online form where you'll complete your final self-reflection for the term. Again, I'll ask you what grade you would give yourself. I prefer to give everyone the grade they would give themselves, I do reserve the right to make adjustments.

For reference, here is my interpretation of the letter grades:

- *A – Excellent:* You have demonstrated significant progress toward the learning targets for this course while exceeding expectations in effort, participation and results. Present at all class sessions with strong participation.
- *B – Good:* You have demonstrated progress toward the learning targets for the course while meeting expectations. Present at most class sessions with strong participation.
- *C – Acceptable:* You are making progress toward most of learning targets for the course. Hit or miss attendance.
- *D – Poor:* You do not meet the expectations of one or more of the learning targets for the course. Hit or miss attendance.
- *F – Failing:* You demonstrate no progress toward the learning targets for the course. Mostly absent from our class sessions.

I know this process is quite different from how we usually think about grades. If any of this causes more anxiety than it alleviates, contact me at any time to discuss your progress in the course. As the course goes on, you'll be able to track your progress in the My Grades section on Drexel Learn.

How to get a good grade

It's easy for school to become a game. Check the boxes, don't rock the boat, say nice things, and get that A. In this class, we're going to shake that up a bit. Like all shake-ups, it may be uncomfortable, but in the end it will be a chance for growth. To get a good grade in this class, pay special attention to these areas:

- **Participation**: A lot of learning will happen in our time together, and I don't want you to miss out. Plan to attend regularly, coming prepared and with energy to participate.

- **Assignments**: Use your assignments as an opportunity to demonstrate to me what you are learning. In your work, strive to integrate insights that have come up in conversations as well as the course readings.
- **Professionalism**: School is practice. Here's your chance to try out new systems and figure out what will work for you in life. Give it a serious try, and bring your best self to this class. That way you'll get the most out of this experience.

If you are worried about getting a good grade in this class, your best strategy should be to do the readings, ask questions often, complete the assignments diligently and on time, and engage earnestly with all your classmates.

Policies

Academic integrity

You're here to learn, and the university environment is set up to help you do that in a structured way. Please conduct yourself respectfully, and ultimately you'll learn the most you can. This includes academic integrity. In this course, as with any Drexel course, be honest about the work you did, and do your best with it. All work you submit must be your own work. Of course, we often incorporate ideas and content from others in our work, and that is fine, but you need to cite your sources to give credit where it is due. Strive to make clear your personal contribution and where you drew from others. This goes for books and articles, other people, and also AI tools (discussed specifically in the following section).

In this class, any forms of academic dishonesty will not be tolerated. This includes plagiarism (using others' intellectual work without reference) and cheating. I am obligated to report incidents of academic dishonesty to Drexel administration, and this may result in consequences such as failing the course. Note that a student who is found in violation twice (even if in two different courses) will be expelled from the university. For more information, please refer to the Provost academic integrity policy or to resources regarding Student Conduct and Community Standards. Please take this opportunity to learn the most you can this quarter by upholding your academic integrity.

A note on AI tools

We're living at an exciting time. A plethora of exciting AI tools have been released in recent years, including Microsoft 365 Copilot, Microsoft Bing Chat, GitHub Copilot, Open AI's ChatGPT, Facebook's LLaMA, Google's PaLM, Grammarly, Canva and more. Clearly these tools have the capacity to support human knowledge, work and creativity. However, these tools are not magic, and they have many limitations. In this class, you may choose to use these tools to support your work as a student. Doing so responsibly and thoughtfully is a way to increase your learning; but using them haphazardly may actually undermine your learning. If you choose to use an AI tool in your work in this course, please:

1. **Explain which parts of the work came from you and which from the AI tool, and acknowledge the human labor that went into developing the AI tool you used**. If you use AI-generated content or ideas, please don't claim credit for them. AI models have been trained on the work of thousands—if not millions—of under- or unpaid writers and artists and further refined by crowd-workers. By crediting the AI tool and acknowledging the underlying human

labor, you are (at least in a small way) giving credit where it is due, just like you'd want someone to credit you if they used your ideas later on.

2. **Explain how the AI tool helped improve the quality and/or creativity of your work**. Remember that AI models can only reproduce the past—they can't imagine new possibilities, whereas humans can. Leverage AI tools as a starting point for your creative process, not an end point. It may even be helpful to spend time generating ideas on your own before allowing your imagination to be directed by the AI tools. If you allow yourself to rely too much on AI tools, you may limit your future self from developing the skills (and neural pathways) needed to be creative on your own: generating new ideas, synthesizing existing ideas, writing compelling text, and designing other types of content. Strive for AI to be a partner, not a crutch.

3. **Fact check any claims you included from AI tools, and cite any primary/original sources**. Remember that AI is not magic. AI-generated content is frequently factually incorrect and often misleading because of inherent limitations in how these models are designed and currently work.

Speaking of attribution, these ideas were developed in discussion with Dr. Sukrit Venkatagiri at the University of Washington. If you're interested in more discussion of these points, see his article here.

Changes to the syllabus

I am here to help you learn, and I want to make sure we achieve the expected learning outcomes in this course. To do this, I may have to make some changes to the syllabus—for instance, if it becomes clear that we need to spend more time on some topic. I'll do my best to honor the syllabus as is, and I'll be sure to let you know about any changes as far in advance as possible.

Dropping the course

If you are considering whether to continue your enrollment in the course, please refer to the Course Add/Drop Policy and the Course Withdrawal Policy.

Student conduct

Drexel University adopted a student conduct policy requiring that all students have the responsibility to be aware of, and abide by, the University's policies, rules, regulations, and standards of conduct. The Student Conduct and Community Standards policy information is available in the Official Student Handbook.

Appropriate use of course materials

Some of the course materials provided to you may be the intellectual property of Drexel University, the course instructor, or others. Use of this intellectual property is governed by Drexel University policies, including the Acceptable Use Policy. Briefly, this policy states that course materials, including recordings, provided by the course instructor may not be copied, reproduced, distributed or re-posted. Doing so may be considered a breach of this policy and will be investigated and addressed as possible academic dishonesty, among other potential violations. Improper use of such materials may also constitute a violation of the University's Code of Conduct.

Participating in course evaluations

Student evaluations are a required element of every course. Evaluation forms are completely anonymous. They are confidentially used to make improvements in our curriculum and teaching. They are also used by administration in evaluating faculty performance, and in decisions about promotion, tenure and retention. Please take part in course evaluations.

Time management

Drexel University assumes that each credit-unit requires four hours of work per week (i.e., a 3-unit course means a student will spend about 12 hours per week on that course), including reading, participation and completing assignments. This is a three-credit course. Please plan accordingly.

Support and Recommendations

If you are experiencing anxiety, depression or other issues

Drexel offers free and confidential support for anxiety-related problems, depression, family concerns, relationship issues, adjustment issues, eating disorders, alcohol- and drug-related problems, and questions about gender and sexual identity, all through the Drexel Counseling Center. The Counseling Center is located at Suite 201 in the Creese Student Center at 3210 Chestnut. The telephone number is (215) 895–1415. **For emergencies, or to reach an on-call counselor after regular business hours, please call (215) 416–3337**. Learn more on the Counseling Center website.

If you need technical support

Get 24/7 technical support for Blackboard Learn from the Instructional Technology group online or by calling (215) 895–1224. For any other technical support (email, logins, etc.), Drexel University IT is here for you. You can contact them through email at consult@drexel.edu, by phone at (215) 895–2020, or by submitting the online Problem Report Form.

Support for equality and diversity

Drexel University strives to promote an environment of equality of opportunity and compliance with university policies and federal, state and local laws prohibiting discrimination based upon race, color, religion, gender, marital status, pregnancy, national origin, age, disability and veteran status. If you have a question or complaint concerning discrimination, harassment, and/or retaliation, contact the Office of Equality and Diversity online or at (215) 895–1405.

Coaching, mentorship and tutoring

The Center for Learning and Academic Success Services (CLASS) serves as the organizing department for a variety of programs and services that promote coaching, peer mentoring and tutoring at Drexel. The Center is located on campus at the Creese Student Center (3210 Chestnut Street), Suite 050.

Campus activities and community

Find the Student Handbook, conduct and community standards, and the Counseling Center at on the Student Life website. Consult this site for information on campus activities and student programs.

English help

The English Language Center offers English language instruction and support services to students, especially those who speak English as a second language. They are located at 229 N. 33rd Street. The telephone number is (215) 895-2022.

If you have a disability or are facing other challenges

The Office of Disability Resources (ODR) team coordinates reasonable accommodations for all Drexel students with disabilities to ensure a level playing field on which they can succeed. ODR

can also facilitate temporary adjustments for students with short-term impairments such as those due to accident, injury or illness. If you are a student with a disability, you are encouraged to register with ODR to request reasonable accommodations. This office is here to work with you, so reach out to them for assistance.

For any accommodations to be made, you will need to request a current Accommodations Verification Letter (AVL) in the ClockWork database (if you are new to the system, start by clicking "Online Intake"). These requests are received by ORD, who then issues the AVL to the appropriate contacts, such as professors. For additional information, visit the DR website, reach them by phone at (215) 895–1401 or email at disability@drexel.edu, or visit them in person in Suite 228 in the Main Building.

Free health services
The Student Health Center is located at 3401 Market St, Ste 105. You can call them at (215) 220–4700.

Career counseling
CCI Career Services offers help with job placement, job postings and credentialing. Outside our college, the Steinbright Career Development Center (SDLC) offers individualized career counseling, career fairs, career programs and resume workshops. The office is located at 3201 Arch Street, Suite 250, Philadelphia, PA 19104. The telephone number is (215) 895-2185.

Course Schedule

Week	Topic	Date	Reading	Assignments
1	Introduction and Overview	Apr 4	–	
		Apr 6	Ch 1	Goal setting due
2	Organizational Strategy	Apr 11	Ch 2	
		Apr 13	Ch 3	
3	Databases and Data Management	Apr 18	Ch 4	Hw1 due
		Apr 20	Ch 9	
4	Social Computing, Mobile Computing and Mobile E-Commerce	Apr 25	Ch 6	
		Apr 27	Ch 8	Policy brief proposal due
5	Midterm Review and Exam	May 2	–	*Review session*
		May 4	–	*Midterm exam*
6	Information Ethics, Privacy and Security	May 9	Ch 10	Midterm reflection due
		May 11	Ch 9	
7	Systems Development in the Enterprise	May 16	Ch 5	
		May 18	Ch 11	
8	Business Intelligence, Decision-Making and Strategic Planning	May 23	Ch 7	Hw2 due
		May 25	Ch 12	
9	Final Review and Exam	May 30	–	*Review session*
		Jun 1	–	*Final exam*
10	Project Presentations and Discussions	Jun 6	–	
		Jun 8	–	Policy brief due
				Final reflection due by Wed, Jun 14