



FOUNDATIONS OF INFORMATION SYSTEMS

BUSI 1401 A
FALL 2024

Instructor:	Ji Xu
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Office Hours:	Friday: 12:00 pm – 2:00 pm, on Zoom
TA:	TBA
Office Hours:	TBA
Email:	TBA
Modality:	IN-PERSON
Class Times:	Thursday: 8:35-11:25 am

Precludes: Additional credit for BUSI 2400.

Course Calendar Description (from the [2024/2025 University Calendar](#))

This course helps student to understand the critical role of information systems in organizations and their impact on social and ethical issues. Covers fundamental tools and skills for the development and management of information systems and business analytics in organizations.

Course Description

This course will help students understand the critical role that information systems play in the innovation and productivity of every Canadian industry. The Sprott School of Business recognizes the growing innovation gaps and the challenge of developing skills in our students for a fast-evolving and changing business environment where information and communication technologies (ICTs) play a significant role in the transformation. The skills needed are rooted in studies of both information technology and business. This course is the door to these topics for many students. Organizations are becoming more virtual, and people will be working with clients and colleagues, they may never meet face to face their skills using ICTs will determine their success in the workplace. Many jobs that are here today will be eliminated, and new jobs will take their place. Change will be driven by people familiar with both business knowledge and technology skills.

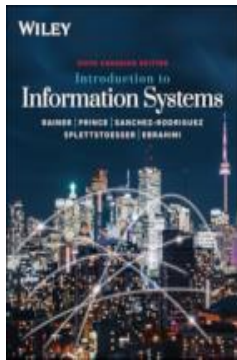
Drop Course Policy

The deadline for academic withdrawal follows the dates prescribed by Carleton University:
<https://calendar.carleton.ca/academicyear/>

Learning Outcomes

1. Develop basic skills for data analysis including programming, spreadsheets, and databases.
2. Understand what information systems are and the way they are used in organizations.
3. Explain the role information systems play in managerial decision-making.
4. Understand the impact ICTs have on productivity, innovation, and strategy.
5. Explain how information systems are used for competitive advantage.
6. Assess the challenges associated with the management of information systems.

Reading(s)/Textbook(s)/Required Materials



Introduction to Information Systems, the 6th Canadian Edition

R. Kelly Rainer, Brad Prince, Cristobal Sanchez-Rodriguez, Ingrid Spletstoeser-Hogeterp, Sepideh Ebrahimi

WILEY

ISBN: 9781394164479

<https://www.wileyplus.com/business-and-decision-science/introduction-to-information-systems-6ec-eprof22910/>

Lab and software

Python

- Python 3.12.4 <https://www.python.org/downloads/>
- IDLE IDE (comes with Python 3.12.4) (You can use other IDEs like PyCharm or Spyder)

Microsoft Excel

- This course requires either Microsoft Excel, Office 2019, or Office 365. Instructions for obtaining Office 365 through your school email account are provided on Brightspace.

Microsoft Outlook and Teams

- As communication outside of Brightspace will be facilitated through Carleton's email services, students are advised to access and become familiar with Microsoft Outlook and Teams. These services are available through web browsers as well as desktop applications.

Optional Readings and Technology

Python

Python For Everyone, 3rd Edition

Cay S. Horstmann, Rance D. Necaise

WILEY

Print ISBN: 978-1-119-49853-7

Bite-Size Python: An Introduction to Python Programming

April Speight

WILEY

Digital ISBN: 978-1-119-64382-1 | Print ISBN: 978-1-119-64381-4

Other Python Resources

- W3Schools Python Tutorial Series: <https://www.w3schools.com/python/>
- Saylor Academy. (2020, November 17). CS105: Introduction to Python. Retrieved from Saylor Academy: <https://learn.saylor.org/course/view.php?id=439>
- Programming with Mosh Videos: <https://youtu.be/kqtD5dpm9C8> and https://youtu.be/_uOrJ0TkZlc

Microsoft Excel

- Introduction to Excel Video: <https://www.youtube.com/watch?v=rwbho0CgEAE>
- Excel Tutorials: Open Excel, File->New, see the *Welcome to Excel* and other tutorials. They are pre-populated with sample data and instructions on using Excel's various functions.
- Saylor Academy. (2020, September 30). PRDV004: Spreadsheets. Retrieved from Saylor Academy: <https://learn.saylor.org/course/view.php?id=58>
- Saylor Academy. (2021, January 14). PRDV006: Spreadsheets II: Formatting and Functions. Retrieved from Saylor Academy: <https://learn.saylor.org/course/view.php?id=450>
- Saylor Academy. (2021, January 15). PRDV007: Spreadsheets III: Presenting Data. Retrieved from Saylor Academy: <https://learn.saylor.org/course/view.php?id=451>

Microsoft Outlook

While not covered in this course, Outlook is a foundational information systems tool used in practically every place of business worldwide. Students are advised to explore Microsoft for emailing, tracking course schedules with the integrated calendar, and using the calendar to arrange meetings and appointments.

Guide to Outlook Video: <https://www.youtube.com/watch?v=WfSCfBntqPU>

Methods of Evaluation / Grading Scheme / Course Completion Requirements

Final grades will be composed of the following:

Deliverables	Due Date	Weight
Discussion – Assignment 1		10%
Excel Assignment 2	Oct. 20 th , at 23:59	17.5%
Midterm Exam	Oct. 12 th <i>Midterm will be scheduled by the university. Note that it will take place outside of class time which can include Friday evening, Saturday, or Sunday.</i>	25%
Python Assignment 3	Dec. 1 st , at 23:59	17.5%
Final Exam	To be scheduled by the University	30%
	Total	100%

Note: There will be a Brightspace site for this course. All expected deliverables are to be submitted through the site. Students will find feedback there as well. It is important to visit the site regularly to stay on top of course expectations.

Midterm and Final Exam

Midterm

The midterm exam will cover content from lectures 1-5.

The midterm will be scheduled by the university. Note that it will take place outside of class time which can include Friday evening, Saturday, or Sunday.

Final Exam

The final exam will cover content from the entire course and will take place during the final exam period announced by the university.

Computing requirements

The minimum computing requirements for e-proctoring service are as follows:

- Hardware: Laptop
- OS: Windows 10, Mac OS 10.14, Linux Ubuntu 18.04
- Internet Browser: Google Chrome, Mozilla Firefox, Apple Safari, or Microsoft Edge

Note: Chromebooks, tablets (Android, iOS, Windows), and smartphones are **not** supported by CoMaS at this time. You must complete your exams using Windows-based or MacOS computers.

Deadlines for Deliverables & Statute of Limitations on Reassessments

The dates on which assignments are due will be openly published and students are expected to accept responsibility for organizing their affairs to meet the set deadlines. Please consult me at the soonest opportunity possible if you are unable to submit an assignment by the due date for any reason.

Assignment extensions or new deadlines are granted on a case-by-case basis.

Penalties for late assignment submission may be imposed using the following scheme:

- One day late will be accepted with a reduction of 25% of the total mark for the assignment.
- Two or more days late will not be accepted and receive a mark of zero for the assignment.

Assignments marks and feedback will be made available online. If a student believes that errors were made in assessment or marking, please provide the instructor with the original evaluation along with a short explanation of the objections. The deadline for requesting a re-assessment is 7 working days after the date on which an evaluation was made available to a student. As a result of the reassessment, the original evaluation grade may be raised, lowered, or left unchanged.

Deferred Examinations/Assignments

If you wish to defer a Formal Final Exam, you – the student – must reach out to the registrar’s office with the proper documentation prior to the deadline (please refer to <https://carleton.ca/registrar/deferral/> for dates). Once the request has been put through, your instructor will be notified for their approval. Your final exam will be formally scheduled. If you miss the deadline for applying for a deferral, please reach out to your instructor personally to discuss.

If you wish to defer a Midterm or an Assignment, please reach out directly to your instructor to discuss.

For more information or to apply for a deferral visit: <https://carleton.ca/registrar/deferral/>

Preparation and Participation

Lecture Exercises

During the lectures, students are expected to follow hands-on exercises in Python and Microsoft Excel. These hands-on exercises are designed to provide essential skills that are expected for students in future semesters. Exercise files will be available on Brightspace. This is important experiential learning that will help with the assignments and material cover in the midterm and final exams. Therefore, it is recommended that students spend time during each session working on them.

Expectations For Communications

Students are asked to monitor and use their Carleton provided e-mail account (cmail.carleton.ca) regularly and carefully (not personal email accounts such as Yahoo, Gmail or Hotmail) as this is the official conduit through which the instructor will communicate matters that concern the individuals.

The Instructor and Teaching Assistant will only respond to email messages from registered students using their cmail.carleton.ca email account and emails must contain a subject line that includes the following notation: BUSI1401 – Section – Student Name – Topic, updating Section, Student Name, and Topic as appropriate. All other unscheduled or unexpected communication will not be responded to. Students should expect an email response within two working days.

Students should ensure that they have set up their Brightspace account to receive notification of announcements to their cmail.carleton.ca email addresses as this is the official conduit through

which the instructor will communicate matters that concern the entire class. Email may also occur for course-wide matters to ensure communication has been delivered.

Discussion boards will be available to discuss course topics. It is expected to use these for asking questions that would pertain to the entire course. Student emails to the Instructor or Teaching Assistant on course-wide topics may be reposted to the boards, or the student redirected to a discussion board. Students should expect a discussion board response within one working day.

Communication from students to the Instructor, Teaching Assistant, and other students is expected to be thoughtful and professional. Disrespectful communication will not be tolerated. Students are advised to review the university’s guidance on electronic communication.

In order to stay updated with important notifications and announcements from Carleton University, please download the Carleton University App. This will ensure you receive timely information regarding your courses and other university-related updates throughout the term.

Class Attendance & Decorum

The course includes class lectures, group discussions, and participation activities. Class attendance is expected and is necessary to complete this course. Actions in the classroom environment should demonstrate intellectual engagement in the course content, as well as respect for classmates and the instructor. As such, any disruptions to the learning environment including but not limited to lectures, group chat, and course discussion forums will not be tolerated, and failure to comply with this policy can lead to disciplinary action, up to and including referral to the university judiciaries.

Course Schedule (Changes may occur)

Week #	Date	Topic
1	Sep 5	– Course Introduction and Administration – Introduction to Information Systems (Ch 1)
2	Sep 12	– Organizational Strategy, Competitive Advantage, and Information Systems (Ch 2) – Excel Session 1
3	Sep 19	– Ethics and Privacy (Ch 3) – Excel session 2
4	Sep 26	– Information Security and Controls (Ch 4) – Excel session 3
5	Oct 3	– Guest speaker, Data science (TBD) – Data and Knowledge Management (Ch 5) – Business Analytics (Ch 12) – Excel session 4 – Review for Midterm (set on Saturday, Oct 12)
6	Oct 10	– Telecommunications and Networking (Ch 6) – Wireless, Mobile Computing, and Mobile Commerce (Ch 8) – Excel session 5 – Review for Midterm (set on Saturday, Oct 12)
	Oct 12	– Midterm Exam
7	Oct 17	– E-Business and E-Commerce (Ch 7) – Excel tutorial – Assignment assistant – Python session 1
	Oct 21-25	– Fall Break

8	Oct 31	<ul style="list-style-type: none"> - Social Computing (Ch 9) - Python session 2
9	Nov 7	<ul style="list-style-type: none"> - Information Systems within the Organization (Ch 10) - Python session 3
10	Nov 14	<ul style="list-style-type: none"> - Customer Relationship Management and Supply Chain Management (Ch 11) - Python session 4
11	Nov 21	<ul style="list-style-type: none"> - Python session 5 - Acquiring Information Systems and Applications (Ch 13)
12	Nov 28	<ul style="list-style-type: none"> - Python tutorial - Assignment assistant - Assignment 3 due Dec 1 @ 11:59 pm - Assignment1 (Discussions in Brightspace) due Dec 6 @ 11:59 pm - Guest speaker: Federal Data & AI Governance (TBD) - Final exam information & Revision

Contribution to Learning Goals of the Program ([BCom](#), [BIB](#)):

Program Learning Goal	Competencies Not Covered	Competencies Introduced (only)	Competencies Taught But Not Assessed	Competencies Taught and Assessed
CHECK (X) ONE PER ROW				
BC1 Knowledge <i>Graduates will be skilled in applying foundational business knowledge to appropriate business contexts.</i>				X
BC2 Collaboration <i>Graduates will be collaborative and effective contributors in team environments that respect the experience, expertise and interest of all members.</i>			X	
BC3 Critical Thinking <i>Graduates will be discerning critical thinkers, able to discuss different viewpoints, challenge biases and assumptions, and draw conclusions based on analysis and evaluation.</i>		X		
BC4 Communication <i>Graduates will be effective and persuasive in their communications.</i>		X		
BI5 Global Awareness (BIB ONLY) <i>Graduates will be globally-minded.</i>		X		

ADDITIONAL INFORMATION

Course Sharing Websites

Materials created for this course (including presentations and posted notes, labs, case studies, assignments, and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Required calculator in BUSI course examinations.

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

Group work

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, followership, and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

Grading

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

Academic Regulations

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Requests for Academic Accommodation

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the *Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances*, are outlined on the Academic Accommodations website (students.carleton.ca/course-outline).

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy Accommodation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

Academic Integrity

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another’s ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated.

Process: If an alleged violation occurs, all relevant documentation will be forwarded to the Dean. If the allegation proves true, the penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. **For a first offence, at a minimum, the penalty assigned will normally be a zero on the submitted work and at least a minimum full grade reduction of the final course grade. For a second offence, at a minimum, the penalty assigned will normally lead to a suspension from studies.**

Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <https://carleton.ca/registrar/academic-integrity/>.

Sprott Student Services

The Sprott Undergraduate Student Services Office offers program advising and overall student success support. Our team is available to discuss your academic goals and your program progression plans. We can also work with you to develop strategies for success, including study skills for Business. If you experience any difficulty this term or if you would like to access support, please contact our team at bcom@sprott.carleton.ca or at bib@sprott.carleton.ca.

Centre for Student Academic Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

Important Information:

- Students must always retain a copy of all work that is submitted.
- All final grades are subject to the Dean’s approval.
- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all

email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://carleton.ca/its/get-started/new-students-2/>
