

CARLETON UNIVERSITY SPROTT SCHOOL OF BUSINESS BUSI 2400 D / E WINTER 2022

FOUNDATIONS OF INFORMATION SYSTEMS

Instructor: Stanley Dam, P.Eng, MBA, BASc, SMIEEE, CISM, CISSP, PMP, MCP, A+ Office: Online (Email and/or MS Teams) Office Hours: By appointment only (email to set up appointment) Email: <u>StanleyDam@cunet.carleton.ca</u>

TA: TBD Office Hours: TBD Email: TBD

Modality: In-person, 12 x 3-hour weekly lectures

Prerequisites & Precluded Courses: None

Course Calendar Description from the <u>2021/2022 University calendar</u>:

This course helps students 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.

The best way to perform well in this course is to practice what you learn. Spend time coding, experimenting with, and manipulating the examples presented in class. Do assignments on your own, and keep up with your reading. Aim to get programs written at least 4 days before the due date. This gives you time to test your code, review it, and properly comment it and present it.

Learning Outcomes:

The student will be able to learn basics of management information systems (MIS), including people, processes and technology in an organizational context through the following:

- 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.

Required Materials:

- Kroenke, D., Boyle, R., Gemino, A. and Tingling, P. (2018). *Experiencing MIS* (5th Canadian Ed). Pearson Education Canada. Print ISBN: 978-0-134-71166-9
 eText ISBN: 978-0-134-89371-6
 eText w/MyLab ISBN: 978-0-134-99464-2 / 978-0-134-86159-3 / 978-0-134-86157-9
 (Note: MyLab and textbook online components are OPTIONAL)
 12-month eText ISBN: 978-0-136-53490-7 / 978-0-136-96300-4
- Python 3.x, latest version at https://www.python.org/downloads/
- Microsoft Excel, Access, and Outlook (all part of the Microsoft Office 365 suite): <u>https://carleton.ca/its/help-centre/get-microsoft-office-for-students/</u>
 - Note: Mac users can access the Microsoft Office suite via the PC virtual desktop at <u>https://cudesktop.carleton.ca</u>, log in using your MC1 credentials.

Supplemental Materials:

Python:

- Programming with Mosh <u>https://youtu.be/kqtD5dpn9C8</u> and <u>https://youtu.be/_uQrJ0TkZlc</u>
- W3schools <u>https://www.w3schools.com/python/</u>
- Python For Beginners <u>https://wiki.python.org/moin/BeginnersGuide/NonProgrammers</u>



- Saylor Academy. (2020, November 17). *CS105: Introduction to Python*. Retrieved from Saylor Academy: <u>https://learn.saylor.org/course/view.php?id=439</u>
- Horstmann, S., Necaise, R. (2019). *Python For Everyone* (3rd Edition). Wiley. ISBN: 978-1-119-49853-7
- Speight, A., (2020). *Bite-Size Python: An Introduction to Python Programming*. Wiley. Digital: 978-1-119-64382-1 Print: 978-1-119-64381-4

MS Excel:

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

MS Access:

- Microsoft Access Training Series: <u>https://support.microsoft.com/en-us/office/access-video-training-a5ffb1ef-4cc4-4d79-a862-e2dda6ef38e6</u>
- Tutorialspoint MS Access Tutorial Series: https://www.tutorialspoint.com/ms_access/index.htm

MS Outlook:

- While not covered in this course, Outlook is a foundational information systems tool used in practically every place of business worldwide. Your Carleton email account is fully integrated with the university's Outlook/Calendar/Exchange system. You would be well-served by using Outlook for your emailing, loading course schedules into your Calendar, and using the Calendar to arrange meetings and appointments.
- 12 minute Guide to Outlook video: <u>https://www.youtube.com/watch?v=WfSCfBntqPU</u>

Information Technology/Systems:

- Bourgeois, D. (2014). *Information Systems for Business and Beyond*. Open Textbook Challenge, Saylor Academy. Retrieved from Pressbooks: <u>https://bus206.pressbooks.com/</u>
- Felvegi, E., Lave, B., Shingledecker, D., Romey, J, et al. (2020 August). *Business Computer Information Systems*. University of Houston Libraries. Retrieved from Pressbooks: <u>https://uhlibraries.pressbooks.pub/bcis1305/</u>
- Gallaugher, J. (2021). *Information Systems: A Manager's Guide to Harnessing Technology*. Boston, MA: FlatWorld
- Saylor Academy. (2021, October 19). *BUS206: Management Information Systems*. Retrieved from Saylor Academy: <u>https://learn.saylor.org/course/view.php?id=41</u>



• Saylor Academy. (2020, October 29). *BUS303: Strategic Information Technology*. Retrieved from Saylor Academy: <u>https://learn.saylor.org/course/view.php?id=83</u>

https://www.cio.com
https://www.cioinsight.com
https://cmmiinstitute.com/resources
https://www.comptia.org/resources
https://www.computer.org
https://www.computerworld.com
https://hbr.org/topic/it-management
https://hbr.org/topic/technology-and-analytics
https://www.informationweek.com
https://www.isaca.org/resources/news-and-trends/industry-news
https://open.sap.com/courses
https://www.roberthalf.com/salary-guide/technology/descriptions
https://support.sas.com/en/books/free-books.html
https://www.vitalsource.com/en-ca/textbooks/business-economics/information-management

There are many other sources to learn about Information Systems, Python, Excel, and Access. Seek out other materials online, including <u>https://library.carleton.ca</u>. No single source contains enough examples or information to satisfy everyone.

Course Requirements & Methods of Evaluation (including due dates):

There is a Brightspace site for this course. All expected deliverables are to be submitted through Brightspace. It is important that you visit the site regularly to stay apprised of the course expectations.

Deliverables	Release Date	Due Date	Weight
Python Assignment	Thu Feb 03, 2022	Fri Feb 11, 2022, 11:59pm	15%
Take-Home Midterm Exam	Thu Feb 14, 2022	Fri Feb 18, 2022, 11:59pm	20%
Excel Assignment	Thu Mar 03, 2022	Fri Mar 11, 2022, 11:59pm	15%
Access Assignment	Thu Mar 24, 2022	Fri Apr 01, 2022, 11:59pm	15%
Take-Home Final Exam	TBD	TBD	35%
	·		100%

Assignments:

- Three assignments (individual, not group) are due on Carleton's Brightspace site at the date and time indicated above. Marks and marked assignments will be posted to Brightspace.
- After the assignment deadline, a solution to that assignment will be posted to Brightspace. Therefore, late assignments will not be accepted and will be tabulated as 0.



Exams:

Both mid-term and final exams are take-home. The mid-term covers material from Weeks 1-4. The final exam covers material from the entire course.

Missed Assignments/Exams:

The only valid excuse for missing an exam or an assignment deadline is for medical reasons or death in your immediate family, and must be documented with a medical certificate or death certificate. Any other reason (such as travel, etc.) will not be considered. If you miss the midterm test or a deadline for a reason that is not deemed as legitimate, your mark will be zero, otherwise separate arrangements will be made at the Instructor's discretion.

Deferred final exams are not granted for students who have made travel arrangements that conflict with the examination schedule.

Grade Changes:

Informal requests for grade increases are always denied unless there has been a mathematical error. The student may file an appeal of the final grade pursuant to Academic Regulations 3.3.4 and 3.3.5 (see Academic Regulation section below). I provide all documentation to the Appeal Committee.

Communication with Instructor:

I do not hold fixed office hours. I communicate with students through their student email accounts and Brightspace. It is your responsibility to check these mediums frequently – see <u>https://carleton.ca/its/help-centre/configure-your-mobile-phone/</u> to enable push email notifications on your Android/Apple devices.

If a live one-on-one discussion is required, please email me and I will send you an Outlook Calendar invite for an MS Teams conversation. You will need to use Outlook to confirm your appointment (see above). You can download MS Teams from https://www.microsoft.com/en-ca/microsoft-teams/download-app, and log in using your MC1 credentials.

Always use your Carleton student email address when communicating with faculty and staff - I will not respond to Gmail, Hotmail, or any other non-Carleton domains.

Please use a professional tone and format when writing emails, start your subject line with [BUSI 2400 A] (change section as needed), and ensure your signature shows your first name, last name, and student ID.

Questions applicable to the entire class should be posted on the Brightspace discussion group, to avoid me answering the same question repeatedly. I reserve the right to post your email to the Brightspace discussion group.



Course Schedule*: Week 1 Chapter 1 Assignment 1: WHY MIS • Python Jan.10-14 • The Importance of MIS Week 2 Chapter 2 **Business Processes and Decision** • Jan.17-21 Making • Python Session 1 Week 3 Chapter 3 Productivity, Innovation and • Jan.24-28 Strategy Python Session 2 • Week 4 Chapter 4 Using Information Technology • Jan.31-Feb.4 Hardware and Software • Python Session 3 • Chapter 5 Assignment 2: Week 5 Database and Content Management • Feb.7-11 Excel • **Excel Session 1 DUE: ASSIGNMENT #1** • Week 6 Chapter 6 Using Information Technology • Feb.14-18 • The Cloud **Excel Session 2** • **MIDTERM EXAM** • Feb.21-25 **READING WEEK** Week 7 Chapter 7 Organizations and Information • Feb.28-Mar.4 Systems • Excel Session 3 Week 8 Chapter 8 • **Decision Making and Business** Assignment 3: Mar.7-11 Access Intelligence Access Session 1 • **DUE: ASSIGNMENT #2** • Week 9 Chapter 9 Social Networking, E-Commerce • Mar.14-18 and the Web Access Session 2 • Week 10 Chapter Information Systems Management • Mar.21-25 10 Acquiring Information Systems • through Projects Access Session 3 • Week 11 Chapter Structure, Governance, and Ethics • Mar.28-Apr.1 11 and 12 Managing Information Security and • Privacy **DUE: ASSIGNMENT #3** • Week 12 Final exam review • Apr.4-8 **Final Exam** TBD • Apr.14-28 (TBD)

* While every attempt will be made to keep to the schedule above, circumstances may necessitate modifications during the semester.



Contribution to Learning Goals of the Program (<u>BCom</u>, <u>BIB</u>):

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



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, follower-ship 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.

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 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

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: <u>carleton.ca/equity/wp-</u> <u>content/uploads/Student-Guide-to-Academic-Accommodation.pdf</u>



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: <u>carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf</u>

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 <u>pmc@carleton.ca</u> 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. <u>carleton.ca/pmc</u>

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: <u>carleton.ca/sexual-violence-support</u>

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 <u>bcom@sprott.carleton.ca</u> or at <u>bib@sprott.carleton.ca</u>.

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: https://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 <u>https://carleton.ca/its/get-started/new-students-2/</u>

