

## Institute of Technology Entrepreneurship and Commercialization

### **Foundations of Digital Transformation & Entrepreneurship - 35692 - TIMG 5008 – A Time and Place**

Sep 06, 2023 - Dec 08, 2023, Tuesdays, 6:00 to 9:00 pm, Nicol Building, Room 3030

#### **Instructor**

David Hudson, PhD, Adjunct Professor, Technology Innovation Management Program, Sprott School of Business; e-mail: davidhudson@cunet.carleton.ca

#### **Class sessions & course materials**

Access to online course sessions, course materials and recorded videos will be provided through the new CU Brightspace system: <https://carleton.ca/brightspace/>. To access Brightspace you should use your CU credentials and select the “TIMG5008A Digital Transform and Entrepren (SEM) Fall 2023” course. To join a class session, you need to select *Video Conferencing Links / Zoom*, then *Zoom Meeting*, then *TIMG 5008 Online Channel-Tuesdays 6pm-9pm*. All recorded sessions should be also found there.

#### **Office hours**

The instructor can be reached via email and will be available for online meetings by preliminary arranged appointments.

#### **Calendar description**

Antecedents, patterns, and consequences of agile digital business transformation, digital business development, digital business model innovation, disruptive digital technology, digital entrepreneurship, marketing and sales for a digital age. Managing digital business transformation and development of new digital value propositions in new and existing companies. Prerequisite(s): TIMG 5001 and TIMG 5002.

#### **Target audience**

The course is designed for graduate students registered in the MDTE and the MENT options of the Technology Innovation Management (TIM) program. Students in other TIM program options and other programs are welcome to attend this course depending on space availability. However, all students will need to meet the academic standards of the TIM program. A preliminary meeting with the professor may be required before admission in the course is granted.

#### **Paul Menton Centre**

Students with disabilities requiring academic accommodations in this course are encouraged to contact a coordinator at the Paul Menton Centre (PMC) for Students with Disabilities to complete the necessary letters of accommodation. After registering with PMC, make an appointment to meet and discuss your needs with your instructor at least two weeks prior to requiring accommodation for assignments or presentations. This is necessary in order to ensure sufficient time to make the necessary arrangements.

## **Objective**

Enable students to acquire the competences to

- Distinguish between management, innovation and entrepreneurship practices focusing on a) using emerging digital technologies to enhance operational efficiencies (digitization or digital transformation of business processes), and b) pursuing the development of new digital value propositions, i.e., configuring people, processes and digital technologies to rapidly develop and innovate new digital offerings (digital entrepreneurship) as part of established and new companies, public and private organizations.
- Adopt digital transformation, innovation and entrepreneurship theories, frameworks and tools to develop actionable insights that could be valuable to managers and leaders of companies and organizations in the public and private domain committed to engage in a digital transformation pathway.
- Conceptualize and formulate the key elements of a company's digital transformation strategy: from a comprehensive evaluation of the business process improvement capacity of digital technologies such as blockchain, cloud computing, AI, IoT and cybersecurity, to creating a vision for new digitally inspired value propositions, to generating insights about what digital offerings customers are willing to pay for, to figuring out the technology and process platforms that would power the new digital offerings, to designing accountability frameworks that enable managers to achieve their strategic goals.
- Assess how the adoption of emerging digital technologies impact organizational strategy and ability to deliver on corporate expectations, operational needs, and mission priorities.

## **Student groups**

The class will be split in groups. Each student will work individually and in one of the groups to perform tasks in class, participate in informal group meetings and contribute to delivering the assignments. The constructive collaboration among group members is part of the group assignments. Leaving and changing groups for any reason will not be tolerated. Once formed, each group should establish a project management structure that will help collaboration between group members and maximize the value of the deliverables. Group members should meet on a weekly basis.

## **Group work and free loaders**

There will be zero tolerance for free loaders. A free loader refers to an individual who takes advantage of team members' efforts without contributing much in return. Group work is an important component of this course. Group conflicts are to be dealt with by the group in a way that is fair, respectful and fast. In case a non-contributing student is excluded from a group, he/she will need to deliver the assignment individually.

## **Plagiarism**

Plagiarism, including copying and handing in for credit someone else's work, is a serious instructional offense that will not be tolerated. Please refer to the section on instructional offenses in the Graduate Calendar for additional information. A case of plagiarism will be referred to the Chair of the Department and the Carleton University Ethics Committee. The instructor will not deal with the matter directly. The University has clear processes to deal with students who are suspected of plagiarism.

## Course assignments

### 1. **Assignment # 1 (group assignment, 30%): Digital transformation literature review**

Search academic research databases (examples of such databases are: Web of Science Core Collection; EBSCO; Business Source Complete; Google Scholar; or other databases) to create a list of 12-20 peer-reviewed academic articles on digital transformation with a focus on a specific subtopic of your group's choice. For example, you can search by using the following keywords: "digital transformation" AND "disruption" or "disruptive innovation"; "digital transformation" AND "value propositions"; "digital transformation" AND "business process improvement"; "digital transformation" AND "entrepreneurial opportunity"; "digital transformation" AND "competitive advantage"; etc. Examine the list of selected articles and engage in group discussions to identify key insights, lessons learned, frameworks and ideas that could be used by real-life businesses. Synthesize the results in the form of a ppt presentation (15 slides max) in a way that you can share what you have learned with the rest of the class.

**Deliverables:** A complete presentation (ppt or pdf document) and a 10-minute summary presentation that will be presented and discussed in class.

The grading of the assignment will be based on the following:

- How appropriate is the list of the selected research articles? Do the articles fit the content and the context of the course? How good are the articles in providing a basis for developing practical insights for real life businesses?
- The value/quality of insights and lessons learned from the articles.
- The quality of the presentation slides and the presentation itself.

### 2. **Assignment # 2 (group assignment, 25%): Digital transformation case study**

Consider the digital transformation of a firm or a set of firms based on a case study or small set of case studies referring to firms operating in a similar business domain. Case studies may be found using similar searches to those described above with the addition of "case study" as a keyword.

The case should be selected by the entire group (i.e., group members must agree on the selected case that relates to all). Discuss the technologies, digital transformation approaches or other business aspects of the case and how any learnings can be applied in practice. Use one of the frameworks discussed in Lecture 3 (Digital Transformation in Established Firms) and apply the framework as part of your analysis.

**Deliverables:** A complete ppt presentation (15 slides max; ppt or pdf document) and a 10-minute summary presentation that will be presented and discussed in class.

Evaluation will consider the following:

- How appropriate is the selected case?

- Does the case selected fit the content and the context of the course?
- Quality of the insights and lessons learned from the articles.
- Quality of the final presentation slides and the presentation itself.

**3. Assignment # 3 (group assignment, 25%): Digital transformation in a specific market sectors**

Investigate the state of digital transformation in one market sector: e.g. education, retail, entertainment, agriculture, public sector, utilities, etc. The market sector should be selected by the entire group and should be agreed with the instructor. Assess and report on the selected sector’s use of digital transformation.

Note that both academic and practitioner literature may be used for this assignment. Care must be taken with non-peer reviewed material (i.e., most practitioner literature) to avoid simple marketing or other literature with limited analytical content.

Evaluation will consider the following:

- What reference material is identified and used to discuss the state of digital transformation in the specific market sector?
- Does the sector lead or lag? What are the characteristics of the sector’s adoption of digital transformation technologies, techniques, or other elements discussed in the course?
- What is the quality of the complete presentation of insights and lessons learned from the articles?
- What is the quality of the summary presentation slides and the presentation?

**Deliverables:** A complete presentation (15 slides max; ppt or pdf document) that will be submitted and a 10-minute summary presentation that will be presented and discussed in class.

**4. Take home exam (individual assignment, 20%): Will be provided during the last class on Dec 5.**  
Take home exam is due before midnight on Dec 22, 2023.

**Student evaluation and assignment grading**

Final grade will be assigned using the following mark allocation:

	Assignment	Deliverable	Date	%
1	Digital transformation literature review (Group)	<u>1a</u> : 10-minute presentation in class	Tuesday, Oct 10	10
		<u>1b</u> : Final presentation slides submitted	Tuesday, Oct 17	20
2	Digital transformation case study (Group)	<u>2a</u> : 10-minute presentation in class	Tuesday, Nov 7	10
		<u>2b</u> : Final presentation slides submitted	Tuesday, Nov 14	15
3		<u>3a</u> : 10-minute presentation in class	Tuesday, Dec 5	10

	Digital transformation in a specific market sector (Group)	3b: Final presentation slides submitted	Tuesday, Dec 5	15
4	Take home exam (Individual)	To be provided at the last class session.	Tuesday, Dec 5 Due: Dec 22	20
			Total	100

## Class schedule

Session #	Date	Topic	Assigned readings & details
1	Tuesday, Sept 12	<ul style="list-style-type: none"> <li>• Introduction to course objectives</li> <li>• Discussion of assignments</li> <li>• <b>Foundations of digital transformation &amp; entrepreneurship</b></li> <li>• Student group formation</li> </ul>	<ul style="list-style-type: none"> <li>• This course outline document</li> <li>• Ch 1 of Lang, V. (2021). <i>Digital Fluency: Understanding the Basics of Artificial Intelligence, Blockchain Technology, Quantum Computing, and Their Applications for Digital Transformation</i></li> </ul>
2	Tuesday, Sept 19	<ul style="list-style-type: none"> <li>• Guest speaker – Stoyan Tanev</li> <li>• <b>Introduction to design thinking and application to digital transformation</b></li> <li>• Discussion / group work on Assignment # 1</li> </ul>	<ul style="list-style-type: none"> <li>• Materials provided by Guest speaker</li> <li>• Dorst, K. (2015). <i>Frame Innovation: Create New Thinking by Design</i></li> </ul>
3	Tuesday, Sept 26	<ul style="list-style-type: none"> <li>• <b>Digital transformation in established firms</b></li> <li>• Discussion / group work on Assignment # 1</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 1-6 of Ross et al. (2019). <i>Designed for Digital. How to Architect Your Business for Sustained Success.</i></li> </ul>
4	Tuesday, Oct 3	<ul style="list-style-type: none"> <li>• Guest speaker – Joel Martin, Chief Digital Research Officer &amp; VP Digital Technologies, National Research Council Canada</li> <li>• <b>Digital technologies</b></li> <li>• Discussion / group work on Assignment # 1</li> </ul>	<ul style="list-style-type: none"> <li>• Materials provided by Guest speaker</li> <li>• Ch 2-4 of Lang, V. (2021). <i>Digital Fluency: Understanding the Basics of Artificial Intelligence, Blockchain Technology, Quantum Computing, and Their Applications for Digital Transformation</i></li> </ul>
5	Tuesday, Oct 10	<ul style="list-style-type: none"> <li>• <b>Experimentation for digital transformation</b></li> <li>• Group presentations: Digital transformation literature review (10 minutes per group)</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 5 of Rogers, D. (2016). <i>The Digital Transformation Playbook</i></li> </ul>
	Tuesday, Oct 17	<ul style="list-style-type: none"> <li>• <b>Enterprise architecture</b></li> <li>• Discussion / group work on Assignment # 2</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 7 of Hoe, S. L. (2023). <i>Digital Transformation Strategy, Execution, and Technology</i></li> <li>• Ch 17 of Lamarre, E., Smaje, K. &amp; Zimmel, R. (2023) <i>Rewired: The McKinsey Guide to</i></li> </ul>

			<p><i>Outcompeting in the Age of Digital and AI.</i></p> <ul style="list-style-type: none"> <li>• Complete slides for assignment 2 to be submitted by start of class</li> </ul>
6	Tuesday, Oct 24	<i>Winter break</i>	
7	Tuesday, Oct 31	<ul style="list-style-type: none"> <li>• <b>Data/data governance</b></li> <li>• Discussion of Reality check lecture</li> <li>• Discussion / group work on Assignment # 2</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 4 of Rogers, D. (2016). <i>The Digital Transformation Playbook</i></li> <li>•</li> </ul>
8	Tuesday, Nov 7	<ul style="list-style-type: none"> <li>• Reality check – other factors</li> <li>• Group presentations: Digital transformation case study (10 minutes per group)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>To be discussed in class</i></li> </ul>
9	Tuesday, Nov 14	<ul style="list-style-type: none"> <li>• Guest speaker – Stoyan Tanev</li> <li>• <b>Digital value propositions and business models</b></li> <li>• Discussion / group work on Assignment # 3</li> </ul>	<ul style="list-style-type: none"> <li>• Materials provided by Guest speaker</li> <li>• Complete slides for assignment 2 to be submitted by start of class</li> </ul>
10	Tuesday, Nov 21	<ul style="list-style-type: none"> <li>• <b>Digital transformation roadmaps</b></li> <li>• Discussion / group work on Assignment # 3</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 7 of Ross et al. (2019). <i>Designed for Digital. How to Architect Your Business for Sustained Success.</i></li> <li>• Ch 5 of Lang, V. (2021). <i>Digital Fluency: Understanding the Basics of Artificial Intelligence, Blockchain Technology, Quantum Computing, and Their Applications for Digital Transformation</i></li> </ul>
11	Tuesday, Nov 28	<ul style="list-style-type: none"> <li>• Workshop on assignment 3</li> <li>• Interactive discussion and group work</li> </ul>	<ul style="list-style-type: none"> <li>• <i>No new readings</i></li> </ul>
12	Tuesday, Dec 5	<ul style="list-style-type: none"> <li>• Assignment 3 group presentations (15 minutes per group)</li> </ul>	<ul style="list-style-type: none"> <li>• Complete slides for assignment 3 submitted by start of class</li> <li>• Take home exam distributed. Due Dec 22.</li> </ul>

Take home exam is due before midnight on Dec 22, 2023.

## Recommended literature

### Main textbooks

Dorst, K. (2015). *Frame Innovation: Create New Thinking by Design*. MIT Press.

Hoe, S. L. (2023). *Digital Transformation Strategy, Execution, and Technology*. CRC Press.

Keyhani, M., Kollmann, T., Ashjari, A., Sorgner, A., & Hull, C., Eds. (2022). *Handbook of Digital Entrepreneurship*. Edward Elgar Publishing, Northampton, MA, USA.

Lang, V. (2021). *Digital Fluency: Understanding the Basics of Artificial Intelligence, Blockchain Technology, Quantum Computing, and Their Applications for Digital Transformation*. Apress Media, California

Ross, J., Beath, C., & Mocker, M. (2019). *Designed for Digital. How to Architect Your Business for Sustained Success*. Cambridge, Massachusetts: The MIT Press.

Rogers, D. (2016). *The Digital Transformation Playbook*. Columbia University Press.

Ronteau, S., Muzellec, L., Saxena, D., & Trabucchi, D. (2023). *Digital Business Models*. Walter de Gruyter GmbH, Berlin/Boston

## A more detailed literature list

### 1. Digital transformation

#### a) Books

Bota-Avram, C. (2023). *Science Mapping of Digital Transformation in Business. A Bibliometric Analysis and Research Outlook*. Springer.

Girasa, R. & Scalabrini, G. (2022). *Regulation of Innovative Technologies - Blockchain, Artificial Intelligence and Quantum Computing*. Palgrave Macmillan.

Hoe, S. L. (2023). *Digital Transformation Strategy, Execution, and Technology*. CRC Press.

Lang, V. (2021). *Digital Fluency: Understanding the Basics of Artificial Intelligence, Blockchain Technology, Quantum Computing, and Their Applications for Digital Transformation*. Apress Media, California

Lamarre, E., Smaje, K. & Zimmel, R. (2023) *Rewired: The McKinsey Guide to Outcompeting in the Age of Digital and AI*, Wiley.

Leonardi, P. M., & Neeley, T. (2022). *The digital mindset: what it really takes to thrive in the age of data, algorithms, and AI*. Harvard Business School.

Ma, X. (2023). *Methodology for Digital Transformation Implementation Path and Data Platform*. Springer.

Ross, J., Beath, C., & Mocker, M. (2019). *Designed for Digital. How to Architect Your Business for Sustained Success*. Cambridge, Massachusetts: The MIT Press.

Rogers, D. (2016). *The Digital Transformation Playbook*. Columbia University Press.

#### b) Articles

Armour, F., Kaisler, S., & Liu, S.Y.. (1999). Building an Enterprise Architecture Step-by-Step. *IT Professional*. 1. 31 - 39. 10.1109/6294.781623.

Björkdahl J. Strategies for Digitalization in Manufacturing Firms. *California Management Review*, 62(4), 17-36. doi:10.1177/0008125620920349.

- Cennamo C, Dagnino GB, Di Minin A, Lanzolla G. (2020). Managing Digital Transformation: Scope of Transformation and Modalities of Value Co-Generation and Delivery. *California Management Review*, 62(4), 5-16. doi:10.1177/0008125620942136.
- Correani A, De Massis A, Frattini F, Petruzzelli AM, Natalicchio A. Implementing a Digital Strategy: Learning from the Experience of Three Digital Transformation Projects. *California Management Review*, 62(4), 37-56. doi:10.1177/0008125620934864.
- Corsaro, D. & Anzivino, A. (2021). Understanding value creation in digital context: An empirical investigation of B2B. *Marketing Theory*, 21(3), 317–349.
- Guenzi P, Habel J. Mastering the Digital Transformation of Sales. *California Management Review*, 62(4), 57-85. doi:10.1177/0008125620931857.
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642-656: <https://doi.org/10.1016/j.jbusres.2020.10.033>
- Reddy, S. K., & Reinartz, W. (2017). Digital transformation and value creation: Sea change ahead. *GfK Marketing Intelligence Review*, 9(1), 10-17. Research Collection Lee Kong Chian School of Business. Available at: [https://ink.library.smu.edu.sg/lkcsb\\_research/5902](https://ink.library.smu.edu.sg/lkcsb_research/5902)
- Sahut, J.-M., Iandoli, L., & Teulon, F. (2021). The age of digital entrepreneurship. *Small Business Economics*, 56, 1159–1169. <https://doi.org/10.1007/s11187-019-00260-8>
- Schallmo, D., Williams, C., & Boardman, L. 2017. Digital transformation of business models — best practice, enablers, and roadmap. *International Journal of Innovation Management*, 21(8), 1740014, 17 pages.
- Singh, A., Klarner, P. & Hess, T. (2020). How do chief digital officers pursue digital transformation activities? The role of organization design parameters. *Long Range Planning*, 53(3), 101890, <https://doi.org/10.1016/j.lrp.2019.07.001>.

## 2. Digital entrepreneurship

- Keyhani, M., Kollmann, T., Ashjari, A., Sorgner, A., & Hull, C., Eds. (2022). *Handbook of Digital Entrepreneurship*. Edward Elgar Publishing, Northampton, MA, USA.
- Kraus, S., Palmer, C., Kailer, N., Kallinger, F., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-first century. *International Journal of Entrepreneurial Behavior & Research*, 25(2), 353-375. <https://doi.org/10.1108/IJEBR-06-2018-0425>.
- Nambisan, S. (2017). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029–1055. <https://doi.org/10.1111/etap.12254>.
- Sahut, J., Iandoli, L. & Teulon, F. (2021). The age of digital entrepreneurship. *Small Business Economics*. 56, 1159–1169. <https://doi.org/10.1007/s11187-019-00260-8>.
- Soltanifar, M., Hughes, M., & Göcke, L., Eds. (2021). *Digital Entrepreneurship. Impact on Business and Society*. Springer.



Zaheer, H., Breyer, Y., & Dumay, J. (2019). Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. *Technological Forecasting and Social Change*, 148, 119735.

### 3. Digital business models

Schallmo, D., & Williams, C. (2018). *Digital Transformation Now! Guiding the Successful Digitalization of Your Business Model*. Springer Briefs in Business.

Ronteau, S., Muzellec, L., Saxena, D., & Trabucchi, D. (2023). *Digital Business Models*. Walter de Gruyter GmbH, Berlin/Boston

Vaska, S., Massaro, M., Bagarotto, E., & Dal Mas, F. (2021). The Digital Transformation of Business Model Innovation: A Structured Literature Review. *Frontiers in Psychology, Sec. Organizational Psychology*, Vol. 11, <https://doi.org/10.3389/fpsyg.2020.539363>

Weill, P. & Woerner, S. (2018). *What's your digital business model? Six questions to help you build the next-generation enterprise*. HBR.

### 4. Design thinking and digital transformation

Danneels, L., Viaene, S. Identifying Digital Transformation Paradoxes. *Bus Inf Syst Eng* 64, 483–500 (2022). <https://doi-org.proxy.library.carleton.ca/10.1007/s12599-021-00735-7>.

Dorst, K. (2015). *Frame Innovation: Create New Thinking by Design*. MIT Press.

Dorst, K. (2015). Frame Creation and Design in the Expanded Field. *she ji The Journal of Design, Economics, and Innovation* 1 (Autumn): 22-33. <http://dx.doi.org/10.1016/j.sheji.2015.07.003>

Jiao R, Luo J, Malmqvist J, Summers J. (2022). New design: opportunities for engineering design in an era of digital transformation. *Journal of Engineering Design*, 33(10), 685-690. doi:10.1080/09544828.2022.2147270.

Kretschmer T, Khashabi P. Digital Transformation and Organization Design: An Integrated Approach. *California Management Review*. 2020;62(4):86-104. doi:10.1177/0008125620940296

Magistretti, S., Tu Anh Pham, C., Dell'Era, C. (2021). Enlightening the dynamic capabilities of design thinking in fostering digital transformation. *Industrial Marketing Management*, 97: 59-70, <https://doi.org/10.1016/j.indmarman.2021.06.014>.

Marx, C. (2022). Design Thinking for Digital Transformation: Reconciling Theory and Practice. In: C. Meinel, L. Leifer (eds.), *Design Thinking Research, Understanding Innovation*. Springer Nature Switzerland AG 2022, [https://doi.org/10.1007/978-3-031-09297-8\\_4](https://doi.org/10.1007/978-3-031-09297-8_4), pp. 57-77.

Rodgers, P., Innella, G. & Bremner, C. (2017). Paradoxes in Design Thinking. *The Design Journal*, 20:sup1, S4444-S4458, DOI:10.1080/14606925.2017.1352941

Rodgers, P. & Bremner, C. (2019). A is for anthropocene: an A–Z of design ecology. *LA+ Interdisciplinary Journal of Landscape Architecture*, 9, 110-115. <https://eprints.lancs.ac.uk/id/eprint/90154>

Vendraminelli, L., Macchion, L., Nosella, A. and Vinelli, A. (2023). Design thinking: strategy for digital transformation. *Journal of Business Strategy*, Vol. 44, No. 4, pp. 200-210. <https://doi.org/10.1108/JBS-01-2022-0009>

Van Leeuwen, J., Rijken, D., Bloothoofd, I., Cobussen, E., Reurings, B., & Ruts, R. (2016). Thematic Research in the Frame Creation Process. Published in: *Service Design Geographies. Proceedings of the ServDes.2016 Conference*. Linköping Electronic Conference Proceedings 125 (2016) 352-364: [https://ep.liu.se/en/conference-article.aspx?series=ecp&issue=125&Article\\_No=29](https://ep.liu.se/en/conference-article.aspx?series=ecp&issue=125&Article_No=29).

## 5. Data governance

Bollweg, L. (2022). *Data Governance for Managers. The Driver of Value Stream Optimization and a Pacemaker for Digital Transformation*. Springer.

Maffeo, L. (2023). *Designing Data Governance from the Ground Up. Six Steps to Build a Data-Driven Culture*. The Pragmatic Programmers, LLC.

Olesen-Bagneux, O. (2023). *The Enterprise Data Catalog. Improve Data Discovery, Ensure Data Governance, and Enable Innovation*. O'Reilly Media, Sebastopol, CA 95472.

Reichental, J. (2023). *Data Governance for Dummies*. John Wiley & Sons, Hoboken, NJ.

## **Appendix: ADDITIONAL INFORMATION**

### **Group work**

The Spratt 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 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**

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

#### **Pregnancy 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](http://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](http://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](mailto: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](http://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](http://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](http://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. 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. 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 student services office, located in 710 Dunton Tower, offers academic advising, study skills advising, and overall academic success support. If you are having a difficult time with this course or others, or just need some guidance on how to successfully complete your Sprott degree, please drop in any weekday between 8:30am and 4:30pm. Our advisors are happy to discuss grades, course selection,

tutoring, concentrations, and will ensure that you get connected with the resources you need to succeed! <http://sprott.carleton.ca/students/undergraduate/learning-support/>

### **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](http://carleton.ca/csas).

### **Important Information:**

- Students must always retain a hard 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 <http://carleton.ca/ccs/students/>
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