

# ITIS 5401P Managing Information Systems in Organizations Winter 2022

Instructor: Professor Gerald Grant Office: 7032 Nicol Building Telephone: 613-520-2600 Ext. 8006 Fax: 613-520-4427 E-mail: gerald.grant@carleton.ca Office Hours: Thursday 11:00 a.m. – 12:30 p.m. (make an appointment by email) Location: Nicol Building 4030 or Zoom https://carleton-ca.zoom.us/j/97610659409?pwd=U0dqakdEbnExdzIEL3JJeFBwalJzQT09 Meeting ID: 976 1065 9409 Passcode: 5401P Schedule: Ottawa

> Friday March 25, 2022 (8.35 a.m. – 1:00 p.m. 2:00 p.m. - 5:25 p.m.) and Friday April 8, 2022 (8.35 a.m. – 1:00 p.m. 2:00 p.m. - 5:25 p.m.) Final Paper (Brightspace online): Monday April 25, 2022, 11:59 p.m.

# **INTRODUCTION**

Digital information technology (DIT) services and systems are central to the business models of almost all organizations around the world. Without them organizations would face severe difficulties delivering on their strategic objectives. Investments in DIT and the related services consume a substantial portion of the investment budget of organizations and therefore require focused attention from both business and DIT managers. The main challenge facing organizational executives is how best to allocate scarce investment resources among the many options for such investments, including DIT, while assuring that the value sought from the spending is delivered. By adopting a services perspective, with the focus being on what the customer values and is willing to pay for, organizations should be able to move beyond technical fixes to provide DIT-based services that are robust, high quality, efficient, effective, and valuable.



# 2021/2022 GRADUATE CALENDAR DESCRIPTION:

Key issues in managing of information systems in organizations. Business and information technology challenges faced by managers and how decisions are made about acquiring, deploying, and using information technologies to achieve business objectives.

# **COURSE DESCRIPTION:**

This course addresses key issues in managing of information systems in organizations. It covers the business and information technology challenges faced by managers and how decisions are made about acquiring, deploying, and using information technologies to achieve business objectives. A central focus of the course is how organizations derive superior business value from their investments in IT systems and services.

# **LEARNING OBJECTIVES:**

On completion of this course students are expected to have developed an understanding of:

- Key issues facing leaders in making decisions about DIT service delivery in organizations.
- The business imperatives for making investments in DIT systems and services.
- DIT service governance approaches and arrangements.
- Key issues in managing DIT service performance and risk
- Value realization from investments in DIT services and systems.
- The critical roles of strategic business and digital leadership in creating the context for value creation and delivery.

# Prerequisites:

Graduate Standing

# The School of Business enforces all prerequisites.

# **Drop Course Policy**

The deadline for academic withdrawal is the last day of classes (each term).

# **COURSE PROCEDURES AND GRADING:**

The course will be based around readings from the book "The Value Imperative: Harvesting Value from your IT Initiatives" and the case depicted in the book "The Adventures of an IT Leader", lectures, and additional readings from selected sources that illustrate key issues in

#### ITIS 5401P Managing Information Systems in Organizations – Winter 2022 – Ottawa

information systems management. **Students are expected to have read both books before the start of class.** They are expected to actively participate in the discussions and all associated class activities. The final course grade will be derived as follows:

Group Case Analysis	20%
Individual Assignments	20%
Final Paper	50%
Class participation	10%
Total	100%

#### **Deferred Final Examination:**

Students unable to write a final examination because of illness or other circumstances beyond their control must contact the instructor and the MBA office in writing to request a deferred exam. Permission may be granted when the absence is supported by a medical certificate and or appropriate document/s to support the reason for the deferral.

# **REQUIRED READING AND ADDITIONAL READING**

**Required Reading:** Grant, G. and Collins, R. (2016) The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.

**Case book**: Robert D. Austin, Richard L. Nolan, Shannon O'Donnell (2016), The Adventures of An IT Leader, Boston, MA: Harvard Business Press. (ISBN: 978-1-633-69167-4). *Both books are available in electronic format or in print at Amazon.com and other sources* 

# **Additional References:**

- Broadbent, M. and Kitzis, E. S. (2005) The New CIO Leader: Setting the Agenda and Delivering Results, Boston: HBS Press (available at leading bookstores)
- Pearlson, K. E. and Saunders, C. S. and Galletta (2016) Managing and Using Information Systems: A Strategic Approach – 6<sup>th</sup> Edition, Hoboken, NJ, John Wiley and Sons.
- McNurlin, B. C., Sprague, R. H. and Bui, T. (2009) Information Systems Management in Practice, 8<sup>th</sup> Edition, Upper Saddle River, NJ: Pearson- Prentice Hall.

Additional Readings will be drawn from a variety of sources. These are listed in the course schedule.

#### **Online resources:**

Brightspace Learning Management - <u>https://brightspace.carleton.ca/d2l/home</u> Zoom - <u>www.zoom.us</u> for online synchronous class delivery

ITIS 5401P Managing Information Systems in Organizations – Winter 2022 – Ottawa

Gartner <u>https://www.gartner.com/home/feed</u> (must use Carleton VPN and access through the Carleton Library databases). Gartner is a global research and consulting company that provides insights on digital IT management and technology issues.

Online Magazines: <u>CIO, CIO Insight, Datamation, Baseline, Wired, Fortune, Information Week, Business Week,</u> Forbes, Techrepublic, Architecture and Governance, among others.

IT Service Management Forum International (ISTMFi) http://www.itsmfi.org/

ITSMF Canada <u>http://www.itsmf.ca/</u>, ISACA <u>https://www.isaca.org/pages/default.aspx</u> , The Open Group <u>www.theopengroup.org</u> APM Digest http://apmdigest.com/

# GROUP AND INDIVIDUAL ASSIGNMENTS

# **Group Analysis of the IVK Corporation Case**

As part of the learning experience in this course we will follow the exploits of Jim Barton, the new CIO at IVK Corporation, as he struggles to understand his new role as CIO and manage the challenges that the corporation faces in delivering value from IT investments. Each session, students working in groups, will present an analysis of the relevant issues being faced by Jim and his team as described in the chapters assigned for that week from the book *Adventures of an IT Leader*.

The presenting group is expected to synthesize the chapters assigned and analyze the significant issues raised. The analysis **<u>must employ</u>** theoretical ideas presented in class or relevant readings (those assigned and others deemed relevant by the group). In doing the presentation the team is expected to use a variety of strategies that will encourage class participation (example: debates, dramatization, video, etc.). Credit will be given for creativity in presenting the case. Please review the Generic Guidelines for Case Discussion Leadership and Case Presentation Evaluation documents, available on Brightspace, to see how the presentation will be assessed.

# **Individual Assignment**

A series of discussion points or questions, related to each session, will be posted. Each student will be required to do individual write-ups (consisting of 2-3 double-spaced pages) of <u>two (2) of</u> <u>the discussion points/questions</u> posted. The objective is to have students give due consideration to the issues emanating from the IVK case and help them prepare for the class discussion. Well thought out and written responses are expected. The professor will assign each student for one (1) of the discussion issues. Each student will choose an additional assignment to complete the two (2) required. The assignments are listed in the Group Case and Individual Assignment document on Brightspace. You <u>may not</u> write up an individual question on the same case/topic your group is presenting. There will be no make-up papers for those missed. Late

ITIS 5401P Managing Information Systems in Organizations – Winter 2022 – Ottawa

submission of individual assignments will not be accepted after discussion on the topic has taken place in class. <u>Please check the individual assignment evaluation criteria posted on</u> <u>Brightspace for guidance.</u> The assignments are due prior to the start of class on the day it will be discussed.

#### Final Paper: Interview with a Business or IT Leader

Each student will conduct an interview with a local Chief Information Officer /IT manager or a business manager with responsibility for making decisions about IT investments (e.g. Chief Financial Officer, VP of Marketing, etc.). Using the model of the value realization cycle (VRC) in Chapter 5 of Grant and Collins (2016) the interview should cover the following questions: (1) what is the main strategic goal of the organization and how does the investment made in digital information systems fit with the overall strategy? (2) What is the investment in digital information systems that the organization is making and what value is being sought from such investment? (3) What digital information technology asset was (will be) created by the investment and what processes were (will be) used to acquire the asset? (4) How was (will) the asset (be) applied in the organization and what impact has (will) it had (have) on the business operations? (5) Was the intended outcome achieved? If so how? (What are the expectations for achieving the outcomes sought?) The questions should not simply be answered separately. The interview should be written up as a short case study in narrative format and should cover the questions along with other relevant information. The document should contain an introduction, a description of the organization and setting, the strategic issue faced by the organization, and a narrative write-up of the answers to the questions above. It should have a conclusion and also include a discussion of your personal point of view including **two lessons**, from what you have learnt in class (through the cases and readings), that you would like to pass on to the person you interviewed.

The document should be submitted by 11:59 p.m. (23:59) on **Monday April 25, 2022** to Brightspace.

# **Class Participation:**

Participation by students in class discussion and activities is an important part of this course. Effective participation is possible only by regular class attendance and active pre-class preparation. Given the compressed schedule, you should read the required case and readings before the course begins. You will not gain participation marks simply by asking an obligatory question or two. Nor will such marks be based on the number of questions or comments made. Participation grades will reflect the total impact the student has had on the class over the term, through significant and insightful comments, and a demonstration of good problem-solving and analytical skills.

#### **Summary of Deliverables**

Deliverable	Submit to	Due Date	% of Grade
			01000
Two (2) Individual Assignments	Brightspace	By start of class on date case is assigned (see schedule)	20
Group Case Presentation (as assigned)	Brightspace	By start of class on date case is assigned (see schedule)	20
Final Paper: Interview with Business or IT Leader	Brightspace	By Monday April 25, 2022 by 11:59 p.m.	50

#### **Assignment Submission**

All written assignments including the group project should be submitted to the Professor **via Brightspace**, on the day they are due. The assignments should be submitted in <u>MS Word</u> <u>format</u>. No printed document is required. All documents should have the student's name, number, email address and course section.

It is the student's responsibility to ensure that all assignments are received in an accessible format on or before the due date. Assignments are due at the time indicated. Late assignments will be marked down by 10% for every calendar day late.

# **Contribution to Program Learning Goals (MBA):**

MBA Learning Goal	Not Covered	Introduced	Taught but Not Assessed	Taught <u>and</u> Assessed
MB1 Leadership and Collaboration Graduates will be equipped for leadership and collaboration.				~
<b>MB2 Communication</b> Graduates will be effective communicators				1
MB3 Critical Thinking and Problem Solving Graduates will be skilled in critical thinking and problem solving.				~
MB4 Functional Knowledge		✓		

Graduates will have functional knowledge of all areas of business.			
MB5 Global Business Graduates will have an appreciation of the global environment of business.		✓	
MB6 Ethical Reasoning Graduates will be skilled in ethical reasoning and decision- making.		✓	

# <u>ITIS 5401 Managing Information Systems in Organizations Winter 2022 – Ottawa</u> <u>Tentative Class Schedule</u>

Dates	Topic/Textbook Readings	Cases	Additional Readings (CU Library Online Resources)	Practitioner's Perspective **
March 25 Session 1	Introduction and Class Organization Business and IT challenges for today's organizations Grant, G. and Collins, R. (2016) Chapter 1: Business and IT Challenges in Today's Organization, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.	Case: IVK-1: The new CIO IVK-2: CIO challenges	<ul> <li>Kappelman, Leon; Maurer, Chris; McLean, Ephraim R.; Kim, Kevin; Johnson, Vess L.; Snyder, Mark; and Torres, Russell (2021) "The 2020 SIM IT Issues and Trends Study," MIS Quarterly Executive: Vol. 20 : Iss. 1, Article 8. Available on Brightspace.</li> <li>Gerth, A. B., and Peppard, J. (2014) How newly appointed CIOs take charge, <i>MIS</i> <i>Quarterly Executive</i>, 13(3), 159-173.</li> </ul>	Kane, G., Palmer, D., Phillips, A., Kiron, D., Buckley, N. (2019) Accelerating Digital Innovation Inside and Out, MITSIoan Management Review access at <u>https://sloanreview.mit.edu/projects/accelerating-</u> <u>digital-innovation-inside-and-out/</u> Digital Business Ambition:Transform or Optimize? <u>https://www.gartner.com/document/3995632?ref=solr</u> <u>All&amp;refval=277677662</u> (must access through the Carleton Library online databases). Jeanne Ross: Digital Disruption: Transforming your company for the Digital Economy <u>https://www.youtube.com/watch?v=6Wq6xQxaLGE</u>
March 25 Session 2	IT Leadership and the cost and value of IT investmentsGrant, G. and Collins, R. (2016) Chapter 2: The Value Cycle, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.Grant, G. and Collins, R. (2016) Chapter 3: The Engineering	IVK-3: CIO leadership IVK-4: the cost of IT IVK-5: the value of IT	How to succeed as a CIO when you come from a non- IT background <u>https://www.gartner.com/document/code/428684?ref=a</u> <u>uthbody&amp;refval=</u> (must access through the Carleton Library online databases). Grant, G. G. (2010) Editorial:	CapGemini (2018) Understanding Digital mastery today <u>https://www.capgemini.com/wp-</u> <u>content/uploads/2018/07/Digital-Mastery-DTI-</u> <u>report 20180704 web.pdf</u> XO Talk – Transformational CIO <u>https://www.youtube.com/watch?v=t0DuYxlkmII</u> <u>https://youtu.be/66evG9S2lfw</u>
	Model of Business-IT Alignment, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.		Reconceptualizing the concept of business and IT alignment: from engineering to agriculture, <i>European Journal of</i> <i>Information Systems</i> , 19, pp. 619-624.	Deliotte Global CIO Larry Quinlan https://www.youtube.com/watch?v=2IjaXhgDzYY CIO Insight – Seven Roles of Highly Effective CIOs Top Leadership Qualities of CIOs https://www.techrepublic.com/article/top-ten- leadership-qualities-of-successful-cios/

Dates	Topic/Textbook Readings	Cases	Additional Readings (CU Library Online Resources)	Practitioner's Perspective **
				Five Habits of Wildly Unsuccessful CIOs https://www.techrepublic.com/article/the-seven- habits-of-wildly-unsuccessful-cios/
March 25 Session 3	Harvesting Value from IT investmentsGrant, G. and Collins, R. (2016) Chapter 4: The Agricultural Model, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.Grant, G. and Collins, R. (2016) Chapter 5: The Value Realization Cycle, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan.	IVK-6: Project Management IVK-7: The Runaway Project IVK-10: Crisis IVK-11: Damage	The Agile Admin "What is DevOPs https://theagileadmin.com/what-is-devops/ Fernandez, D. J. and Fernandez, J. D. (2008) Agile Project Management: Agilism vs Traditional Approaches, <i>Journal of</i> <i>Computer Information Systems</i> , Winter, 10- 17. Savage, M. (2002) Business continuity planning, <i>Work Study</i> , 51(5), 254-262.	A Pragmatic Guide to Getting Started with DevOps https://www.ca.com/content/dam/ca/us/files/ebook/a- pragmatic-guide-to-getting-started-with-devops.pdf 2020 Strategic Roadmap for Business Continuity Management https://www.gartner.com/document/3981203?ref=solr <u>All&amp;refval=277679958</u> (must access through the Carleton Library online databases). Lindros, K. and Tittel, E. (2017) How to create an effective business continuity plan, CIO.com July 18. https://www.disasterrecovery.org/
April 08 Session 4	Governing IT services.Grant, G. and Collins, R. (2016)Chapter 6: Governing IT services,in The Value Imperative:Harvesting Value from ITInitiatives, New York, PalgraveMacMillanGrant, G. and Collins, R. (2016)Chapter 8: IT InvestmentPortfolio: Harvesting Value fromIT Initiatives, New York,Palgrave MacMillan	IVK-8: IT Priorities IVK-9: IT and the board of directors IVK-12: Communication	Andriole, S. (2009) Boards of Directors and Technology Governance: The Surprising State of Practice, <i>Communications of the</i> <i>AIS</i> , 24(22). (Access online or through Brightspace) Krull, J. and Rich, (2012) 10 Questions Audit Committees should Ask, <i>CPA</i> <i>Journal</i> , 68-71.	Julie Short, <u>Why IT Governance should fall to the</u> <u>board</u> Silicon.com 16 June 2010 IBM – Redesigning the IT Organization – 2014- <u>http://public.dhe.ibm.com/common/ssi/ecm/en/gbe03</u> <u>551usen/GBE03551USEN.PDF</u>
April 08 Session 5	Building and managing the digital platform Grant, G. and Collins, R. (2016) Chapter 7: Enterprise	IVK-13: Emerging technology IVK-16: Standardization	Andriole, Stephen J. (2018) "What executives should know about technology trends, <i>IT Professional</i> , March/April, 80-82.	How NFTs are building the Internet of the Future – Kayvon Tehranian <u>https://www.ted.com/talks/kayvon_tehranian_how_nf</u> <u>ts_are_building_the_internet_of_the_future</u>

Dates	Topic/Textbook Readings	Cases	Additional Readings (CU Library Online Resources)	Practitioner's Perspective **
	Architecture, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan. Grant, G. and Collins, R. (2016) Chapter 9: Sourcing IT services, in The Value Imperative:	IVK-14: Vendor partnering IVK-15: Managing talent	Available at: <u>https://ieeexplore.ieee.org/stamp/stamp.jsp?t</u> <u>p=&amp;arnumber=8338012</u> Sako, M. (2010) Outsourcing vs Shared Services. <i>Communications of the ACM</i> , 53(7), 27-29.	Top Strategic Technology Trends – 2021 <u>https://www.gartner.com/document/3991906?ref=gfe</u> <u>ed</u> (access through Carleton Library) Enterprise Architecture (MIT) <u>https://www.youtube.com/watch?v=9IGQm4-HheA</u>
	Harvesting Value from IT Initiatives, New York, Palgrave MacMillan		Lacity, M. and Reynolds, P. (2014) Cloud Services Practices for Small and Medium- Sized Enterprises, <i>MIS Quarterly Executive</i> , 13 (1), 31-44.	Amazon.com "What is cloud computing https://aws.amazon.com/what-is-cloud-computing/ Skills Framework for the Information Age http://www.sfia-online.org/
April 08 Session 6	Managing IT Service Performance and Risk Grant, G. and Collins, R. (2016) Chapter 10: Measuring IT value delivery, in The Value Imperative: Harvesting Value from IT Initiatives, New York, Palgrave MacMillan	IVK-18: Managing risk IVK-19: Looking forward	Smith H. and McKeen, J. (2009) A Wholistic Approach to Managing IT-based Risk <u>http://aisel.aisnet.org/cgi/viewcontent.cgi?art</u> <u>icle=3492&amp;context=cais</u>	
April 25	Final Paper (online with Brightspace)			

# **IMPORTANT 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).

#### **Recommended Calculator for 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. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, followership and other group skills. Group assignments are also an effective way to learn integrative skills for putting together a complex task. Your professor may assign one or more group tasks, assignments, or 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.

#### Letter Grades:

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

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

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

#### • Religious Obligations

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

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

# • Student Activities

Carleton University recognizes the substantial benefits, to both the individual student and the university, that result from participating in activities beyond the classroom experience. Reasonable accommodation will 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: <u>https://students.carleton.ca/course-outline/</u>

#### Academic Integrity:

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—are a serious academic offence, 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: <a href="https://carleton.ca/registrar/academic-integrity/">https://carleton.ca/registrar/academic-integrity/</a>

## 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: <u>https://carleton.ca/csas/</u>

#### **Other 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 can do so by visiting <a href="https://carleton.ca/its/get-started/new-students-2/">https://carleton.ca/its/get-started/new-students-2/</a>