

# COMMERCE AND BUSINESS ADMINISTRATION COURSE INFORMATION AND SCHEDULE

CSIS2200 - 007 - Systems Analysis and Design

Semester: Winter 2021 Instructor: Dr. Abhijit SEN

Course time: Thursday 12:30 – 15:20 Rm. Online

E-mail: sena@douglascollege.ca-

Preferred E-mail for communication: Blackboard E-mail

Telephone: 604-527-5771 Office location: Online

Office hours: Thursday 11:45 – 12:15 Online or by appointment (online)

# 1. COURSE MATERIALS REQUIRED:

Text\*: Management Information Systems Latest Edition by Hossein Bidgoli, Cengage Learning

\*if you prefer to use the eText for the same book at a cheaper price, you can do so.

**Software to be used**: Microsoft Office.

**Hardware** Computer with Internet Access

# 2. **COURSE PRE-REQUISITE(S):**

**9 credits** including any 1000-level course from the Faculty of Commerce and Business Administration **OR** currently active in:

PDD Information and Communication Technology

PDD Data Analytics

PDD Accounting Studies

PDD Accounting

**PBD** Computer and Information Systems

**PBD** Accounting

PBD Accounting and Finance

PDD Project Management

PDD Supply Chain Management
PBD International Supply Chain Management
PBD Health Information Management

## 3. CALENDAR COURSE DESCRIPTION

This course provides an introduction to information systems analysis techniques. The student will be provided with the skills that are necessary for the analysis and design of information systems and will apply these skills in a step-by-step manner leading from the recognition of a problem to the implementation of a solution on a case study.

Note: Students who have received credit for CSIS1110 or CSIS1140 cannot receive additional credit for CSIS1190

## 4. COURSE CONTENTS

- 1) Systems Concepts: people, hardware, software, networks, data
- 2) Information representation for decision making: data visualization, dashboards, information quality
- 3) Value of information and IS to organizations (alignment with organizational strategy) data transformation, business process improvement, alignment with organizational strategy and ethical use of information
- 4) Types of systems that organizations need to provide information to meet their objectives: transactional, functional and enterprise systems such as CRM, ERP, etc.
- 5) Quality of information for decision making
- 6) Data and information modelling, DLC, DBMS, Analytics, standards, BI and AI
- 7) Management of IS infrastructure and architecture, planning and management
- 8) Systems development life cycle
- 9) Risks and controls, risk management, internal control, governance, compliance impact of new technologies

#### 5. COURSE OBJECTIVES

Upon successful completion of this course students shall be able to:

- 1) explain what a form is, how to create it, and be able to manipulate the properties of a form;
- 2) explain what menus are and how to add them to a form;
- 3) explain what objects are, and be able to add controls to a form;
- 4) use the properties of a control and explain the events that can occur with a control;
- 5) define information systems terms as used in current practice by information systems practitioners;
- 6) explain system components hardware, software, networks, etc.; explain the relationships between information technology, information systems, organizations and organizational goals;
- 7) explain the functions of systems analysis and design, and the roles and responsibilities of systems analysts and project managers;
- 8) describe and apply current methods and approaches to information systems analysis and design, including the traditional phased approach and a range of agile methods;
- 9) describe the relationship between information and data
- 10) use data structures and databases
- 11) describe the major phases and activities involved in the information system development process, and the corresponding outcomes and deliverables;

- 12) apply the systems development process in exercises and case studies, within an organizational context, using relevant techniques and methods;
- 13) explain security risks inherent to systems explain security controls required for Management Information Systems
- 14) complete a term project based on a case study, to reinforce the concepts, techniques and methods learned in the classroom

# Please note that this course may involve group work.

Since this is a computer-programming course, all students are expected to have attained a minimum level of knowledge in mathematics and logical thinking. This course also requires a fair amount of typing VC# codes both in class and at home. If a student requires special accommodations as deemed necessary by the college's Student Services, he/she must contact the instructor and the Center for Students with Disabilities in the beginning of the semester so that the proper arrangements can be made with Student Services.

# 6. COURSE FORMAT

Classes for the course will consist of series of lectures, tutorials, in class examples, and assignments. The lectures will serve to introduce topics. However, there will be a strong focus on reading, appraisal and assimilation of appropriate materials in the textbook to provide further detail and context. Students are advised to read relevant materials, as they will help in the assignment, and provide additional information.

## 7. TRANSFERABILITY:

Please refer to the following links to see as to how this course and its credits transfer within the BC transfer system:

- See BC Transfer Guide at www.bccat.bc.ca for more details.
- <a href="http://www.douglascollege.ca/programs-courses/catalogue/courses/CSIS/CSIS2200">http://www.douglascollege.ca/programs-courses/catalogue/courses/CSIS/CSIS2200</a>
  Transferability tab

## 8. EVALUATION

A final course grade will be determined based on the following instruments and their corresponding weighted percentages:

Assignments – 3	15%
Oral Presentation – 1	05%
Quizzes – 4*	20%
Mid-Term Exam – 1*	30%
Final Exam – 1*	30%
TOTAL	100%

## **NOTE:**

- \*In order to pass the course, students must, in addition to receiving an overall course grade of 50%, also achieve a grade of at least 50% on the combined weighted examination components (including quizzes, tests, and exams).
- A student <u>MUST</u> complete <u>at least 70%</u> of all the evaluations for this course in order to obtain credits; otherwise, he/she will be assigned an UN as the final grade.
- ATTENDANCE IS REQUIRED FOR THIS COURSE If you miss more than 30% of the class, you will receive UN for your course grade.
- **FINAL EXAM IS MANDATORY**. If you do not attempt final exam, you will receive UN as your final grade.

# 9. DOUGLAS COLLEGE GRADING SYSTEM

Grade	Grade Points	Conversion Scale (%)	Definition		
A+	4.33	95% and above			
A	4.00	90 - 94	Outstanding Achievement		
A-	3.67	85 - 89			
B+	3.33	80 - 84			
В	3.00	75 - 79	Good Achievement		
B-	2.67	70 - 74	Good Achievement		
C+	2.33	65 - 69			
С	2.00	60 - 64	Satisfactory Achievement		
C-	1.67	55 - 59			
P	1.00	50 - 54	Marginal Achievement		
F	0.00	0 - 49	Unsatisfactory Achievement		
UN	0.00		Student completed less than 70% of the total evaluation of the course, or missed more than 30% of the classes where the instructor's Course Outline specifies that attendance is a course requirement		

# 10. TENTATIVE SCHEDULE OF TOPICS

7-Jan  14- Jan  21- Jan  28- Jan	Course Objectives  Part 1 – Information Systems – An Overview  Part 1 – Information Systems – An Overview  Part 1 – Computers: The Machines Behind  Computing  Part 1 – Database Systems, Data  Warehouses, and Data Marts.  Part 2 – Personal, Legal, Ethical, and		Quiz Q1	ASS IGNMENT Due Date
14- Jan 21- Jan	Part 1 – Information Systems – An Overview  Part 1 – Information Systems – An Overview  Part 1 – Computers: The Machines Behind  Computing  Part 1 – Database Systems, Data  Warehouses, and Data Marts.	C1 C2	Q1	
14- Jan 21- Jan	Part 1 – Information Systems – An Overview  Part 1 – Information Systems – An Overview  Part 1 – Computers: The Machines Behind  Computing  Part 1 – Database Systems, Data  Warehouses, and Data Marts.	C2	Q1	
21- Jan	Part 1 – Information Systems – An Overview Part 1 – Computers: The Machines Behind Computing  Part 1 – Database Systems, Data Warehouses, and Data Marts.	C2	Q1	
21- Jan	Part 1 – Computers: The Machines Behind Computing  Part 1 – Database Systems, Data Warehouses, and Data Marts.	C2	Q1	
	Warehouses, and Data Marts.	C3	Q1	
	Warehouses, and Data Marts.	C3	Q1	
28- Jan	Part 2 – Personal, Legal, Ethical, and			1
28- Jan		C4		A1: Project –
	Organizational Issues of Information Systems;	C5		Part 1
	Part 2 – Protecting Information Resources.			
4- Feb	Part 2 – Data Communication: Delivering Information Anywhere and Anytime	C6	Q2	
11- Feb	Part 2 – The Internet, Intranets, and Extranets; Part 2 – E-Commerce	C7 C8		
18- Feb	STUDY BREAK – CLASSES NOT IN SESSION			
25- Feb	Midterm (C1-C6)			
4.26		C9		
4- Mar	Part 2 – Global Information Systems			
11- Mar	Part 3 – Building Successful Information Systems;	C10	Q3	A2 – Project - Part 2
18- Mar	Part 3 –Enterprise Systems	C11 C12		
	11- Feb  18- Feb  25- Feb  4- Mar	Information Anywhere and Anytime  Part 2 – The Internet, Intranets, and Extranets; Part 2 – E-Commerce  18- Feb STUDY BREAK – CLASSES NOT IN SESSION  25- Feb Midterm (C1-C6)  4- Mar Part 2 – Global Information Systems  Part 3 – Building Successful Information Systems;  Part 3 – Enterprise Systems	Information Anywhere and Anytime  Part 2 – The Internet, Intranets, and Extranets; C7 Part 2 – E-Commerce C8  Part 2 – E-Commerce C8  Part 2 – E-Commerce C8  Part 2 – E-Commerce C9  Part 3 – Building Successful Information Systems  Part 3 – Building Successful Information C10  Part 3 – Enterprise Systems C11	Information Anywhere and Anytime  Part 2 – The Internet, Intranets, and Extranets; C7 Part 2 – E-Commerce  18- Feb STUDY BREAK – CLASSES NOT IN SESSION  25- Feb Midterm (C1-C6)  4- Mar Part 2 – Global Information Systems  C9  11- Mar Part 3 – Building Successful Information Systems;  Part 3 – Enterprise Systems  C11

12	25- Mar	Part 3 – Management Support Systems Part 3 – Intelligent Information Systems	C13 C14	Q4	
		3			
13	1-Apr	Oral Presentations			A3 : Final Project Due
14	8- Apr	Oral Presentations, Review			
	0 11p1				
		Final Examination Period ( <b>April 14</b> <sup>th</sup> to <b>April 22</b> <sup>nd</sup> )			Students must confirm with the posted schedule

The course information and schedule is subject to change (consistent with College Policy and with notice to the students).

The Final Examination period is April 14<sup>th</sup> to April 22<sup>nd</sup>. Please check the examination schedule as soon as it becomes available for potential scheduling conflicts.

. \*\*\* Do NOT make any travel arrangement before **April 22**<sup>nd</sup>. We will not change the final exam dates to accommodate your travel plans at all.

# 11. REGULATIONS FOR STUDENTS

#### Classroom Civility and Shared Responsibility

Generally, class time will include interactive lectures, class-participative case analysis and the occasional computer simulation or project workshop. So, class time is valuable to us all. Students are expected to attend, complete all assignments and tests and take part in problem-solving (cases, discussions...as fits the class). Students who miss a class are responsible for material covered in the missed class. Office hours are intended to assist students who have attended class and who wish additional help, not for the transmission of missed class content.

Empirical studies show that students and instructors both object equally to students who speak noisily during a lecture, who arrive late or leave early in an unruly way, or who interrupt the lecture with cell phone calls or comments unrelated to the immediate work at hand. Cell phones are not allowed to be used in the classroom at all. Laptops and tablets may be used with the sole purpose of taking notes or reading the textbook.

# **In-Class and College Policies**

Students are responsible for being familiar with the information contained in the Douglas College Calendar and policies and procedures relating to appeals, petitions and formal complaints, sexual and personal harassment, standards of conduct, violence, academic honesty.

<sup>\*\*</sup>It is the students' responsibility to check the following webpage for Dates and Deadlines: http://www.douglascollege.ca/programs-courses/general-information/dates-and-deadlines

College policies are available at <a href="http://www.douglascollege.ca/about-douglas/governance/policies">http://www.douglascollege.ca/about-douglas/governance/policies</a>

# **ACADEMIC INTEGRITY:**

REFERENCE: Douglas College Educational Policy Academic Integrity

# **Plagiarism and Cheating:**

The College values academic integrity. **Plagiarism** is presenting or submitting as one's own work, research, words, ideas, artistic imagery, arguments, calculations, illustrations or diagrams of another person or persons without explicit or accurate citation or credit; this includes submission of purchased material as well as material in which the student has permitted someone else (a fellow student, tutor, mentor or teaching assistant, friend, etc.) to contribute unacknowledged.

**Self-plagiarism** is submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted.

**Cheating** is the possession or provision of unauthorized aids, assistance or materials in the preparation of assignments, during examinations or in the completion of practical work (in clinical, practicum or lab settings). See the Academic Integrity policy for other definitions of academic dishonesty. Academic dishonesty will be treated as a serious offence. Discipline can range from a zero grade on the exam or assignment in which the offence occurred to suspension or expulsion from the College.

The use and/or reference of any/all websites (e.g. <u>coursehero.com</u> or similar) which host copies of Douglas College course work assessments such as but not limited to quizzes, assignments, midterms, labs, exams, practical work, etc., constitutes plagiarism.

Douglas College in common with other educational institutions, condemns cheating or attempted cheating within its community. Reprimands and appeals will be exercised according to official college policy. Regarding the details of the policy on Academic Dishonesty, please visit

See: http://www.douglascollege.ca/~/media/27C599ABC76048A0A713648565906273.ashx

**Assignment Submission:** Students **MUST** submit their assignments via Blackboard before the Lecture starts on the due date. Late Submissions will NOT be graded. Exceptions may be considered in cases of extraordinary circumstances. The students **MUST** inform the instructor if they cannot submit the assignment/project **PRIOR TO** the due date of the assignment. Failure to do so will receive the penalty of the late submission and **Zero Mark** for that assignment.

Late assignments: Late assignments will NOT be graded and receive an automatic **ZERO MARK** except for extraordinary circumstances or prior arrangements with the instructor. Such requests must be made **PRIOR TO** the due date and time. Any submission beyond this is not graded and the student will receive **ZERO MARK** for that assignment. Submissions made after the due date with prior arrangements will be graded for **50% mark** of the assignment.

**Extra Copies of Assignment:** Students are required to keep extra copies (i.e. photocopies or file backups) of their assignments in case of any possible misplacement or digital data loss of the same by

the instructor. If such incident does occur, the student will be allowed to submit the extra copy for grading without any penalty.

**Missed tests or final examination:** Tests and final examination will be offered only during the scheduled date and time of sitting. Exceptions may be considered in cases of extraordinary circumstances. It is the responsibility of the student to inform the College and the instructor at the earliest reasonable opportunity. Notification of a possibility of missing the test or exam must be done prior to the test or exam date/time and must be supported by a letter from a licensed BC medical practitioner. Otherwise, the student will receive a **ZERO** mark for any missed test(s). **Final Exam is mandatory**. Students will receive a **UN** as the final course grade for missing the final examination.

**Student Conduct:** Any student who displays disruptive or dangerous behavior will be asked to leave the classroom/lab by the instructor. Such behavior will be classified as misconduct. Reprimands and appeals will be exercised according to official college policy. To obtain a copy of the policy on Standards of Conduct, contact the Registrar's Office.

**Timeliness:** Students are expected to be in class at the start of class. If a student must be late, contact the instructor with an explanation prior to the late class. Any late student should enter from and sit in the back of the classroom so as to not interrupt the flow of class activity. Arriving on time is a matter of respect for the instructor and fellow students. After due warning, students who are repeatedly late for class can be prohibited from entering the classroom until there is a natural break in that day's class.

**Class Cancellation:** In the event that a class is cancelled due to instructor illness or other unforeseen circumstance, a notification will be made through BLACKBOARD to every student enrolled in the course. It is the responsibility of students to be proactive and to check their announcements and/or e-mail before coming to class. Every effort will be made to ensure that the notification is made as soon as possible.

**Illness and other unavoidable circumstances:** Should you miss an assignment deadline, a quiz, or an examination due to unavoidable circumstances or personal difficulties, please email me at <a href="mailto:sen@douglascollege.ca">sen@douglascollege.ca</a> at your earliest opportunity. On the email include

- Course and section number (e.g. CSIS 2200-001)
- Your name and student number (e.g. Student Number 212121212)
- Late assignment or missed quiz (e.g. Missed Quiz #1)
- have doctor's letter or not (e.g. Have Doctor's letter) Preferred
- Brief comment.

Even without documentation such as a doctor's letter, we can discuss the most appropriate course of action that will lead to fair evaluation of your overall learning in the course. **Emails from College issued email address are only accepted**. Do not use your personal email addresses to communicate with the instructor. Please use English language only.

# Preparation, Attendance and Participation

Attendance will be taken on a regular basis. The method of delivery includes classroom discussion and lab exercises; and students need to be present both in order to participate and to learn. Your final mark

depends in part on your record of attendance and your reasonable preparedness to contribute to the discussion. In the curriculum outline on the next page, reading assignments are included for each day's class: it is your responsibility to have completed the reading and to have absorbed the material sufficiently well for spontaneous discussion. Students are expected to behave appropriately while attending Douglas College. While in class, please turn off (or leave on vibration/silent mode) your cell phone(s). Cell phones going off in the middle of class are disruptive and exhibit a lack or consideration for your fellow-students.

# **Student Effort**

In addition to the regularly scheduled times for classes, students are expected to spend at least 6 hours a week on this course. If you find yourself regularly spending time significantly in excess of this, come and discuss this as soon as possible.

# **RULES** (applied to CB&A)

- 1. If you are repeatedly LATE for the class, you will be warned by the instructor and will NOT be allowed to enter the classroom as you will be interrupting the class in progress. In that case, you may only enter the classroom during the natural break. If such a person still enters the classroom after the class has started, he/she will be considered disturbing the class. This individual will be escorted out by the security guard and will be given a warning for misconduct. A subsequent offense will result in possible suspension from the College.
- 2. Unless otherwise stated, all the assignments MUST be submitted via Blackboard at the specified dates and time. NO Assignment will be accepted via E-mail or Campus mail. Any assignment submitted after the deadline will be considered LATE and will be given a ZERO mark except prior arrangements have been made with the instructor. Printer / computer problem in the computer lab is NOT a valid reason for handing in an assignment late.
- 3. If you DO NOT write the midterm or final examination, you will be given a final grade of UN <u>regardless</u> of your achieved percentage up to that point. A UN grade will be assigned a 0.00 GPA.
- 4. If you DO NOT submit assignments or write quiz(zes) with a combined weight of 30% or more, you will be given a final grade of UN <u>regardless</u> of your achieved percentage up to that point. A UN grade will be assigned a 0.00 GPA.
- 5. If you are caught cheating, you will receive a ZERO mark for that evaluation and a written warning for the first offense. However, if you are caught for a subsequent offense, you will be expelled from the College.
- 6. You will receive handouts (if any given out by your instructor) ONLY if you show up in class. If you cannot attend the class, make sure that you inform your instructor so that he can save you a set of the handouts; otherwise, you will NOT receive anything from your instructor. Also, you may NOT take any extra handouts for your friends who do not attend the class.
- 7. If you talk loudly during the class, you will be given a warning for disturbing your classmates. Any subsequent offense will result in possible suspension from the College.
- 8. All cellular phones and pagers MUST be turned OFF <u>BEFORE</u> you enter the classroom.
- 9. You are NOT allowed to use any calculators, language translators or dictionaries during any quiz or examination in this course.

#### **COVID-19 SAFTEY STATEMENT**

#### **KEEPING OUR CAMPUSES HEALTHY**

This Winter semester, Douglas will welcome a small number of faculty and students on our campuses for in-person instruction. Other students may also attend campus to seek advice or assistance from a number of our service areas. To help ensure the safety of our campus community, please adhere to the following guidelines.

# If you come to campus:

- Complete a daily self-assessment before coming to campus: https://bc.thrive.health/
- Follow all posted signage.
- Maintain physical distance of 2m (6 feet) from others. Do not congregate in groups.
- Wear a non-medical face mask in public areas or areas where physical distancing is not possible.

# **DO NOT come to campus if:**

- You are sick.
- You have been in contact with someone with a confirmed case of COVID-19 within the last 14 days.
- You have travelled or been in contact with someone who has travelled outside of Canada in the past 14 days.

If you are unable to attend a class due to illness, contact your instructor immediately.

# Illness on campus

If you become ill while on campus, contact Campus Security immediately for first aid and to report your symptoms.

If you are concerned that you may have COVID-19, use the BC government COVID-19 self-assessment tool to help guide you on what to do. The province of BC has also set up a dedicated COVID-19 hotline at 1-888-COVID19 or text 604-630-0300. The service is available daily from 7:30 a.m. to 8 p.m. with information available in over 110 languages.