Computer Science 1032a – Information Systems and Design
Course Outline – Fall Term 2017

Course Description

Computer Science 1032 is an introduction to information systems and the roles played by these systems in business.

This course satisfies the Information Technology requirement for a Certified Accountant, a Certified General Accountant or a Certified Management Accountant accreditation. The content of the course has been approved by The Institute of Chartered Accountants of Ontario, The Certified General Accountants of Ontario and The Society of Management Accountants of Ontario. The materials used in this course for the introduction to Microsoft applications software have been approved by Microsoft for use in the preparation for the Microsoft Office Specialist Certification exams.

Prerequisites
No prerequisites are required for this course.

Instructor: **L. Magguilli**
Office: Middlesex College 386
Office Hours: Thursday 12:30pm – 1:30 pm
E-Mail: lmagguil@uwo.ca

Course Schedule

CS1032a Section 001   **CS1032a Section 002**
Lecture Times: **Lecture Time:**
    Tuesday   11:30 am – 12:30 pm   Tuesday   7 – 10 pm
    Thursday   10:30 am – 12:30 pm
Location: Natural Sciences Centre, Rm 1   **Location:** North Western Science Centre, Rm 55

Textbook
   INFORMATION SYSTEMS What Every Business Student Needs to Know
   Mallach, Efrem G.   (CRC Press – Taylor & Francis Group)   ©2016

Online Resources:
   MyMISlab (www.pearsoned.ca/mymislab), includes MyITlab resources.
   Note: Course ID will be posted on course website.
              Individual Student Access Codes found in each textbook.

Course Web Page

The course website is located within OWL (powered by Sakai). To access the website, navigate to http://owl.uwo.ca and login with your university personal computer account (user id and password). Lecture notes, assignments and class information will be posted at this site. You are responsible for checking the course site regularly.

Course Topics

- Communications and Network Technology
    - Internet, WWW
    - Markup Languages: HTML, XML
    - Networks: LAN, WAN, VPN
- Database Systems
    - Relational database concepts
    - Database design: Entity Relationship Diagrams
    - Query languages: SQL
    - Creating and using databases: Access
- Information Systems
    - Enterprise Resource Planning systems
    - Reliability, availability, maintainability and integrity
    - Security
    - Systems Development Life Cycle
- Spreadsheet applications
    - Designing and using spreadsheets: Excel

Scheduled Lectures

The scheduled lectures for the course use presentation software and appropriate applications software to present the course content. The required course materials supply portions of the course content. Readings and practice exercises will be assigned. Students are expected to come to class prepared, by completing the readings and exercises before class.

Lecture materials will be available on the course website. These materials are intended to aid in note-taking and provide review of course content. They are not complete course notes and are not a substitute for attending lectures.

Curriculum Schedule:

- The following represents the order the course topics will be presented.

- The **lecture schedule** will be based on 12 topic areas that will be covered in the following consecutive order. These topics do not indicate a weekly schedule. Some topics will overlap during class time. Students are to be prepared for subsequent topics.

UNIT	Lecture Topic (associated textbook readings)
1	Introduction to Business (no readings)
2	Database Structures / Big Data (Chapter 5)
3	Data Integration and Information (Chapter 1)
4	Competitive Strategies / Business Processes (Chapter 2)
5	Supply Chain Management / Contact Management (Chapter 8 pg 253 – 284)
6	Infrastructure and Integration (ERP EAI) (Chapter 7)
7	E-Business / E-Commerce / Web 2.0 (Chapter 8)
8	Decision Processes / Business Practices (Chapter 9)
9	Computer Hardware / Software (Chapter 3 / Chapter 4)
10	Networks / Networking (Chapter 6)
11	Business Planning (Chapter 10)
12	Business Organization / Security (Chapter 11 / Chapter 12)

- The **tutorial schedule** will be adhered to during the entire duration of the course. Each Tutorial Topic will be covered in the week noted. Except for extraordinary circumstance, there will be no carryover of Tutorial Topics into subsequent weeks.

WEEK	Tutorial Topic
1	Programs used in CS1032
2	E-R Diagrams (crow's foot)
3	E-R Diagrams (crow's foot)
4	MS Access
5	MS Access
6	XML
7	XML
8	SQL
9	SQL
10	MS Excel
11	MS Excel
12	Review

Classroom Conduct

Students are expected to arrive promptly and remain in class until the end of the lecture, so as to not disturb others in the class. The use of a laptop is permitted during class, but it is expected that its use will be to assist in the learning of course materials and not for any other activities. Any behaviour or activity that may impede the ability of you or other students to learn will not be tolerated and if the behaviour persists the individual(s) involved will be asked to leave the classroom.

Teaching Assistant Consulting

Consulting will take place in one of the computer labs located in Middlesex College and the schedule will be posted on the course website once it has been established. Questions regarding assignments or lecture materials should be directed to the course Teaching Assistants (TAs) during their consulting hours. Questions requiring further information can be dealt with by contacting the course instructor.

Email Contact

Occasionally email messages may be sent to the entire class or to students individually. Email will be sent to your UWO email address as assigned to you by Information Technology Services (ITS). It is your responsibility to read this email on a frequent and regular basis. You may wish to have this email forwarded to an alternative email address; see the ITS website for instructions on forwarding email.

You should note that email at the university and thru other providers have quotas or limits on the amount of space that is dedicated to each account. Unchecked email may accumulate beyond those limits and you may be unable to retrieve important messages from the university. Losing email is not an acceptable excuse for not knowing about the information that was sent.

Email contact with the course instructor is encouraged, by sending brief and appropriate message regarding lecture material or assignments. However, please first check the Forums section in OWL to see if the information has already been posted. If you contact the instructor via email or post a question in OWL, you can expect a response in a timely fashion, but not necessarily an instantaneous response. Please use proper, appropriate and respectful English when sending an email message or posting on the course web site.

NOTE: Email messages **must** be sent from your <u>university account</u> and <u>MUST</u> include:
   "**CS 1032 F17**" in the subject line. (spaces/case do not matter: ex: cs1032f17 works)
   Email messages without **CS 1032 F17**" in the subject line will automatically be trapped
   by the instructor's SPAM filter and **will NOT be available, read or responded to**.

   emails are generally responded to within 24 hours.
   IF YOU HAVE NOT RECEIVED A RESPONSE – please check the subject line.
   It is the student's responsibility to ensure to include CS 1032 and F17 in the subject line.

NOTE: Please also include a <u>title</u> or <u>topic description</u> of the contents of the email in the subject line.

Computing Facilities

** IMPORTANT ** MS Access does NOT run on an Apple computer !

Students may complete their assignments on their own computer if it is equipped with the proper software or use the computers in the first-year Computer Science labs in Middlesex College or use the university's General Student Computing Labs.

The General Student Computing Labs at the university are currently located in:

- HSB13, HSB14 & HSB16 - Health Sciences Building, rooms 13, 14, and 16
- NCB 105 - North Campus Building, room 105
- NSC 110 - Natural Sciences Centre, room 110
- SH 1310 - Somerville House, room 1310 (lower level)
- SSC1000, SSC1012 & SSC1032 - Social Science Centre, rooms 1000, 1012 and 1032

Student Evaluation

- 6 Assignments (worth a total of 60%)
- Final Exam: 3 hours (worth 40%)

To be eligible to obtain a passing mark in the course, the final exam grade must be 45% or higher.

Academic Accommodation for Medical Illness

If you are unable to meet the course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's office as soon as possible and contact the instructor immediately. It is the student's responsibility to make alternative arrangements with the instructor once the accommodation has been approved and the instructor has been informed. For further information please see:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found at:
https://studentservices.uwo.ca/secure/medical_document.pdf.

Students who are in emotional/mental distress should refer to Mental Health@Western
http://www.health.uwo.ca/mental_health/ for a complete list of options about how to obtain help.

Exam Schedule

No electronic devices are allowed during exams (no calculators, iPods, cell phones, laptops, etc)

Note: Computer-marked multiple-choice exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Final Exam

- The date, time and location of final exam will be announced by the Registrar's Office. The final exam will be held during the university final examination period.
- Students requesting a deferred final exam prior to the final exam must supply their Dean's Office with written documentation at least 2 weeks prior to the Final Exam.
- In the event of serious medical or compassionate grounds, a student must follow the procedure for Academic Accommodation for Medical Illness as given above.
- A "Recommendation of Special Examination" form must be obtained from the Dean's office, to be eligible to write the deferred final exam.

Assignment Schedule

Students are expected to view demonstrations during lectures and to do the exercises to prepare for the assignments. Once the assignment is completed, all of the parts of the assignment must be submitted on the course web site. When submitting an assignment in OWL, students will be required to affirm that they have neither given nor received aid on the assignment.

NOTE:
- Assignments emailed to the instructor **will not be** accepted, unless there are extenuating circumstances.
- It is the **student's responsibility** to ensure that all parts of each assignment are correctly uploaded and the assignment is properly submitted in OWL prior to the assignment due date.
- Students will not be permitted to resubmit assignment files once the due date of the assignment has passed without an appropriate penalty being applied.

The tentative assignment schedule is given below.

Assignment	Weight	Due Date (by 6:00 pm)
1	2%	Monday, September 18, 2017
2	10%	Wednesday, October 04, 2017
3	12%	Wednesday, October 25, 2017
4	12%	Wednesday, November 08, 2017
5	12%	Wednesday, November 22, 2017
6	12%	Friday, December 06, 2017

Note: The instructions for each assignment will be posted on the course website at least 2 weeks in advance of the due date.

If for any reason the assignment schedule given above cannot be adhered to, the assignment marks will be pro-rated. The 6 assignments are worth 60% of the overall mark for the course. If an assignment has to be cancelled for any reason, the remaining assignment weights will be prorated to add up to a combined total of 60%.

Assignment Marking:

- Assignments will be marked by a TA within 7 days of the assignment due date.

- Individual marks and a detailed marking scheme will be posted on the course website.

- Questions regarding the marking of assignments should first be directed to the teaching assistant that graded your assignment and then the course instructor for further action.

- Requests for mark adjustments will only be considered if they are made within **1 week** of receiving the assignment mark. Assignment marks will be final after that date.

- Requests for mark adjustments will only be considered when they are for adjustments of **5 marks or greater**.

Late Policy for Assignments:

- Assignment will be accepted up to one (1) day late.
- Assignments submitted after 6:00 PM on the due date but before 6:00 AM on the day after the posted due date will be deducted 10% of the total grade.
- Assignments submitted after 6:00 AM on the day after the due date but before 6:00 PM on the day after the due date will be deducted 25% of the total grade.
- Assignments submission will be closed at 6:00 PM on the day after the posted assignment due date.
- No assignments can be submitted to OWL after 6:00 PM on the day after the posted assignment due date.

- An assignment that is more than one (1) day late will not be accepted.

- No extensions will be given for assignments. However, in the event of serious medical or compassionate grounds, a student must follow the procedure for Academic Accommodation for Medical Illness as given above. If an academic accommodation is approved by the Dean's office, the weight of the assignment will be moved to one of the two exams.

- Late assignments will have a penalty of 10% or 25% of the maximum mark for the assignment deducted based on time of submission as listed in OWL. Thus, if a student would have received 90% on an assignment, if it was submitted three hours late the student would receive 80%, if it was submitted twenty hours late the student would receive 65%

Accessibility

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Online Exercises

There are twelve suggested online exercises. These exercises are optional but recommended. These exercises demonstrate the usage of MS Excel and MS Access and compliment the material presented in lectures.

The online exercises are suggested weekly throughout the course to provide ample time to complete the exercises. In some cases, the skills covered in the exercise that is suggested will not yet have been covered in the lecture materials. For some of the online exercises it would be beneficial to complete the online exercise in advance of the due date to assist in the learning of the material required to complete an assignment. Multiple attempts are available for each of the online exercises.

The online exercises are all assigned with appropriate suggested dates in myMISlab. The exercises can be found in the course content in the myITlab folder. Your individual student Access Code can be purchased for myMISlab and the CS1032 course ID will be posted on the course site.

Online Exercise	Suggested Date
Access, Chapter 2, Exercise 1: Table Design	Wednesday, Oct. 04
Access, Chapter 2, Exercise 2: Imports and Relationships	Wednesday, Oct. 04
Access, Chapter 4, Exercise 1: Introduction to Access Forms	Wednesday, Nov. 01
Access, Chapter 4, Exercise 2: Introduction to Access Reports	Wednesday, Nov. 01
Access, Chapter 2, Exercise 4: Multiple Table Query	Wednesday, Nov. 08
Access, Chapter 3, Exercise 1: Calculated Query Fields	Wednesday, Nov. 08
Excel, Chapter 1, Exercise 2: Cell References	Wednesday, Nov. 15
Excel, Chapter 1, Exercise 3: Worksheets	Wednesday, Nov. 15
Excel, Chapter 2, Exercise 1: Relative/Absolute Cell Addressing	Wednesday, Nov. 15
Excel, Chapter 2, Exercise 3: VLookup, PMT, IF	Friday, Nov. 17
Excel, Chapter 2, Exercise 2: Excel Functions	Friday, Nov. 17
Excel, Chapter 4, Exercise 2: Excel Tables	Friday, Nov. 17

NOTE: It is highly recommended that when taking CS1032 that the above online exercises be used as an excellent resource for learning both Excel and Access. But due to the fact that these online exercises can only be accessed with the a personal student access code purchased separately from Pearson Education, students are not required to complete these online exercises.

Ethical Conduct

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Plagiarism: Students must complete their assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). The University of Western Ontario uses software for plagiarism checking. Students will be required to submit their programs in electronic form for plagiarism checking.

All assignments are individual assignments. You may discuss approaches to problems among yourselves; however, the actual details of the work must be an individual effort.

The role of tutoring is to help students understand course material. Tutors should not write part or all of an assignment for the students who hire them. Having employed the same tutor as another student is not a legitimate defense against an accusation of collusion, should two students hand in assignments judged similar beyond the possibility of coincidence.

Academic dishonesty in assignments includes (but is not limited to):

- unacceptable collaboration
    - What is unacceptable? There is a difference between discussing assignments and solutions with fellow students, and working together on the solutions to the point where the work submitted is clearly not individual work. If in doubt, ask your instructor.

- **copying** of another student's assignment

- **allowing** another student to copy your work ← this is also an **Academic Offense**

- using code from an external source (text, instructor, course website) where a student's own code is expected (if in doubt, ask your instructor)

Assignments that are judged to be the result of **academic dishonesty** will, for the student's first offence, be:
- **given a mark of <u>zero</u> for the assignment**,
      with an
- **<u>additional</u> penalty equal to the weight of the assignment also being applied**.

You are responsible for reading and respecting the Computer Science Department's policy on:
Scholastic Offences
   (http://www.csd.uwo.ca/current_students/undergraduate_students/scholastic_offences.html)
   and
Rules of Ethical Conduct
   (http://www.csd.uwo.ca/UnderGrad/ethical.shtml).