McMaster University ENGINEERING | Mohawk COLLEGE

Course Outline

1. COURSE INFORMATION

Session Offered	Winter 2017
Course Name	Internet Technologies & Databases
Course Code	PROC TECH 4IT3
Date(s) and Time(s) of lectures	Lecture – Wed 11:30 – 1:20 (Jan 4,2016 – Apr 5,2016) No lecture on Feb 15,2016 (break week)
Program Name	Bachelor of Applied Technology (Process Automation)
Calendar Description	This course covers the following topics: internet technologies and standards, database concepts, structured query language elements, web database processing and client and server side scripts.
Instructor(s)	E-Mail: yendtcm@mcmaster.ca Office Hours & Location: Fri 12:30 pm to 1:30 pm Wed 2:00 pm to 3:30 pm

2. COURSE SPECIFICS

Course Description			

	Code	Type	Hours per term
Instruction Type	C	Classroom instruction	24
	L	Laboratory, workshop or fieldwork	24
	T	Tutorial	
	DE	Distance education	
		Total Hours	48

Resources	**ISBN**	**Textbook Title & Edition**	**Author & Publisher**
	ISBN: 0672317842	**PHP and MySQL Web Development, 3rd Edition (suggested text; no requirement to purchase)**	**Thomson, Laura and Welling, Luke; SAMS Publishing**
	Other Supplies	**Source**	

Prerequisite(s)	ENG TECH 1CP3 "C++ PROGRAMMING", ENG TECH 1PR3 "OBJECT-ORIENTED PROGRAMMING"
Corequisite(s)	
Antirequisite(s)	
Course Specific Policies	
Departmental Policies	Students must maintain a GPA of 3.5/12 to continue in the program. In order to achieve the required learning objectives, on average, B.Tech. students can expect to do at least 3 hours of "out-of-class" work for every scheduled hour in class. "Out-of-class" work includes reading, research, assignments and preparation for tests and examinations. Where group work is indicated in the course outline, such collaborative work is mandatory.

	The use of cell phones, iPods, laptops and other personal electronic devices are prohibited from the classroom during the class time, unless the instructor makes an explicit exception.
	Announcements made in class or placed on Avenue are considered to have been communicated to all students including those individuals that are not in class.
	Instructor has the right to submit work to software to identify plagiarism.

3. SUB TOPIC(S)		
Week 1	HTML basic tags	
Week 2	More tags	
Week 3	CSS	
Week 4	Introduction to MySQL and how to interact with it using the SQL query language	
Week 5	SELECTS, multi-table joins etc.	
Week 6	Data base Design through Normalization,	
Mid-term recess (Monday, February 20 to Saturday, February 26,2017)		
Week 7	Introduction to PHP scripting language: the basic programming constructs, variables, types, functions, and techniques.	
Week 8	Intermediate level features of PHP: how to work with arrays, strings, and times and dates.	
Week 9	Introduction to connecting to MySQL with PHP.	
Week 10	Writing data to web databases. Covers INSERT, UPDATE and DELETE statements.	
Week 11	Introduction to Javascript, timers	
Week 12	The Document Object Model	
Week 13	N/A	
Classes end – Thursday April 6, 2017 Final examination period: Friday, April 11, 2017 to Thursday, April 27, 2016 All examinations MUST BE written during the scheduled examination period.		
List of experiments		
Lab 1	Introduction to HTML	
Lab 2	HTML Tables and CSS	
Lab 3	HTML Forms and CSS	
	In Lab Test # 1	
Lab 4	Introduction to SQL	
Lab 5	SQL Queries	
Mid-term recess (Monday, February 15 to Saturday, February 20		
	In Lab Test # 2	
Lab 6	Introduction to PHP	
Lab 7	PHP Files and Tables	
Lab 8	PHP Forms and Database connection	
	In Lab Test # 3	
Lab 9	Javascript and the Document Object Model	

Note that this structure represents a plan and is subject to adjustment term by term.

The instructor and the University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either

type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes.

4. ASSESSMENT OF LEARNING *including dates*	Weight
Labs	10%
Mid-term test(s) – 3 tests (20% each)	60%
Hands-on Final Exam (cumulative Comprehensive exam)	30%
TOTAL	**100%**

Percentage grades will be converted to letter grades and grade points per the University calendar.

5.   LEARNING OUTCOMES

1.   Build a state of the art Web site using HTML and CSS
2.   Create a real world, multi-table relational database
3.   Extract data from the database using JOINS
4.   Write a server-side script using PHP to support an application.
5.   Build a Dynamic Web Application incorporating a Relational Database
6.   Use the Normalization technique to design an Entity-Relationship diagram for a Business Case Study
7.   Write a client side script to perform immediate validation

6.   POLICIES

Anti-Discrimination

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Officer or the Human Rights Consultant, as soon as possible.
http://www.mcmaster.ca/policy/General/HR/Discrimination_Harassment_Sexual_Harassment-Prevention&Response.pdf

Academic Integrity

You are required to exhibit honestly and use ethical behaviour in all aspects if the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act of fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, located at: http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf .

The following illustrates only three forms of academic dishonesty:
1. Plagiarism. E.g. the submission of work that is not own or for which other credit has been obtained
2. Improper collaboration in group work
3. Copying or using unauthorized aids in tests and examinations.

Requests for Relief for Missed Academic Term Work (Assignments, Mid-Terms, etc.)

The McMaster Student Absence Form is an on-line self-reporting tool for **Undergraduate Students** to report absences for:

1) Relief for missed academic work worth less than 25% of the final grade resulting from medical or personal situations lasting up to three calendar days:

- Students may submit a maximum of one academic work missed request per term. It is the responsibility of the student to follow up with instructors immediately (within the 3 day period that is specified in the MSAF) regarding the nature of the accommodation. All work due in that time period however can be covered by one MSAF.

- MSAF cannot be used to meet religious obligation or celebration of an important religious holiday, for that has already been completed or attempted or to apply for relief for any final examination or its equivalent.

2) For medical or personal situations lasting more than three calendar days, and/or for missed academic work worth 25% or more of the final grade, and/or for any request for relief in a term where the MSAF has not been used previously in that term:

Students must visit their Associate Dean's Office (Faculty Office) and provide supporting documentation.

E-Learning Policy

Consistent with the Bachelor of Technology's policy to utilize e-learning as a complement to traditional classroom instruction, students are expected to obtain appropriate passwords and accounts to access Avenue To Learn for this course. Materials will be posted by class for student download. It is expected that students will avail themselves of these materials prior to class. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail account, and program affiliation may become apparent to all other students in the course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about this disclosure please discuss this with the course instructor. Avenue can be accessed via
http://avenue.mcmaster.ca.

Communications

It is the student's responsibility to:
- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.
- Use the University provided e-mail address or maintain a valid forwarding e-mail address.
- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student's designated primary e-mail account via their @mcmaster.ca alias.
- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student's @mcmaster.ca alias.
- Check the McMaster/Avenue email and course websites on a regular basis during the term.

Turnitin (Optional)

This course will be using a web-based service (Turnitin.com) to reveal plagiarism. Students submit their assignment/work electronically to Turnitin.com where it is checked against the internet, published works and Turnitin's database for similar or identical work. If Turnitin finds similar or identical work that has not been properly cited, a report is sent to the instructor showing the student's work and the original source. The instructor reviews what Turnitin has found and then determines if he/she thinks there is a problem with the work. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to
http://www.mcmaster.ca/academicintegrity/turnitin/students/

Protection of Privacy Act (FIPPA)

The Freedom of Information and Protection of Privacy Act (FIPPA) applies to universities. Instructors should take care to protect student names, student numbers, grades and all other personal information at all times. For example, the submission and return of assignments and posting of grades must be done in a manner that ensures confidentiality.
http://www.mcmaster.ca/univsec/fippa/fippa.cfm

Academic Accommodation of Students with Disabilities Policy

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information consult McMaster's policy for Academic Accommodation of Students with Disabilities

http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf

Students must forward a copy of the SAS accommodation to the instructor of each course and to the Program Administrator of the B.Tech. Program immediately upon receipt. If a student with a disability chooses NOT to take advantage of a SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. http://sas.mcmaster.ca

Student Code of Conduct

The Student Code of Conduct (SCC) exists to promote the safety and security of all the students in the McMaster community and to encourage respect for others, their property and the laws of the land. McMaster University is a community which values mutual respect for the rights, responsibilities, dignity and well-being of others. The purpose of the Student Code of Conduct is to outline accepted standards of behavior that are harmonious with the goals and the well-being of the University community, and to define the procedures to be followed when students fail to meet the accepted standards of behavior. All students have the responsibility to familiarize themselves with the University regulations and the conduct expected of them while studying at McMaster University.

http://studentconduct.mcmaster.ca/student_code_of_conduct.html