FACULTY OF SCIENCE AND ENGINEERING
York University

UNDERGRADUATE COURSE SYLLABUS

Course: CSE 1710 3.0   *v.1*

Term: Fall 2011

Calendar Description

CSE 1710 3.0 Programming for Digital Media
The course lays the conceptual foundation for the development and implementation of Digital Media artefacts and introduces some of the core concepts of Digital Media, including the computing and cultural layers of media, and the notion of cultural logic (Media Theory). Topics include programming constructs, data types and control structures; the object oriented concepts of modularity and encapsulation; integration of sound, video, and other media; networking constructs (HTTP connections); and the interrelationships among languages such as Processing, Java, and other Digital Media tools (such as Macromedia Director and Python). Three lecture hours and weekly laboratory sessions. The laboratory sessions form an integral part of the lectures and may cover examinable material that is not covered in class.

This course is an introduction to the interdisciplinary area of practice of New Media; it is not a survey course. As such, the emphasis is on the development of a theoretical conceptual foundation and the acquisition of the intellectual and practical skills required for further courses in the Digital Media program, and thus is intended for prospective majors in this program. It is not intended for those who seek a quick exposure to Digital Media, or Digital Media applications or programming.

Topics include:
- Digital Media: Introduction and Core Concepts
- Examples of Digital Media artefacts, the notion of evaluation (e.g., the evaluation of software), projects and questions positioned at the intersection of Science and Art
- Why do we use the programming language and environment? (and not Macromedia Director or other tools)
- The use of APIs and other sources of documentation
- Variables and Control Structures
- Iteration
- Modularity (functions, procedures)
- Object-Oriented Constructs (what is a class vs. what is an instance, instantiation, attribute access and method invocation, constructors, encapsulation)
- Integration of Sound, Video (the use of cameras, microphones, other peripherals)
- Application invocation within a networked context (HTTP connections, URLs, sharing information, server file access (read/write))
- The connection between programming languages such as Processing and Java, and other tools for implementation Macromedia Director, Max/MSP, and other Digital Media tools

Prerequisites: None. *Course Credit Exclusions:* CSE1530 3.0, ITEC1620 3.0
NCR Note: No credit will be retained if this course is taken after the successful completion of, or simultaneously with CSE1020
            3.0

Course Director
Prof. Melanie Baljko
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Course consultation hours: Monday, 10-12 am or by appointment (please send email)

Teaching Assistants
Foad Hamidi
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Bart Bajer
Rob Teather
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Course consultation hours and TA contact information shall be posted on the course website.

Course Website
www.cse.yorku.ca/course/1710
please note this site is mounted for the duration of the F11 academic term after which it will be archived at:
http://www.cse.yorku.ca/course_archive/2011-12/F/

Course Management and Organization
1. In addition to two weekly lectures, this course also has three different laboratory sessions. There are three different lab session: LAB01 (Thursdays, 11:30am), LAB02 (Fridays, 10am) and LAB03 (Mondays, 4:30pm) to accommodate all students in the class. All students must be enrolled in one laboratory session. All lab sessions take place in the Digital Media lab, CSE1002.
2. Each student is expected to attend all lectures **and** the particular weekly lab session to which he or she is enrolled.
3. The lectures will be conducted by the instructor and occasionally by a senior TA.
4. The weekly lab sessions will be conducted by the TAs.
5. Each student is expect to come to lecture and lab **prepared**. The required preparation (e.g., lab exercises and/or readings) will be posted to the course website at least one week in advance.
6. Each lab session can accommodate a maximum of 33 students.
    a. LAB01 and LAB02 are fully enrolled. There is space remaining in LAB03.
    b. A student's enrolment in a particular lab session guarantees a spot for that student in that specific lab. However, if a student is more than 5 minutes late, then his or her spot shall be considered "available" under item (c) below.
    c. Students are permitted to attend a weekly lab session other than the one to which they are officially enrolled **only as space permits**. Students who attempt to attend a lab session other than the one to which they are enrolled **do so at their own risk**, since space may not be available. No accommodations shall be made for labs missed due to this reason.
7. Missed written tests and/or labtests shall receive a grade of 0. Opportunities for make-up tests will not be provided. In the case of sickness of misfortune, a student may submit a request to the instructor that the weight assigned to a missed test be shifted to other course components. Such requests must be sent by email and must be accompanied by documentation (a physician's note in the case of sickness).
8. Labtests will be conducted every in the lab sessions on alternating weeks, starting in week 3 of the course. The lab sessions on weeks with no labtests will be spent providing feedback for each student's labtest submission from the previous week and other course material.

Time and Location

Lectures	TR 10-11:30am	R S203 (Ross, South Building, Room S203)
LAB01	R11:30am-1pm	CSEB1002
LAB02	F10:00am-11:30am	CSEB1002
LAB03	M4:00pm-5:30pm	CSEB1002

Purpose and Objectives of the Course

See "Expected Learning Outcomes" (Course website)

Evaluation

The final grade for the course will be based on the following items weighted as indicated:

Labtest I (to take place during labs R Sept 29, F Sept 30, M Oct 3):	5%
Labtest II (to take place during labs R Oct 20, F Oct 21, M Oct 24):	10%
Labtest III (to take place during labs R Nov 3, F Nov 4, M Nov 7):	10%
Labtest IV (to take place during labs R Nov 17, F Nov 18, M Nov 21):	10%
Labtest V (to take place during labs R Dec 1, F Dec 3, M Dec 6):	10%
In-class quizzes	5%
Midterm Written Test (T, Oct 18)	20%
Final Exam Labtest (to take place during exam week):	15%
Final Exam Written Test (to take place during exam week):	15%

- *The last date to drop courses without receiving a grade (aka the "drop date") is Nov 11, 2011. See http://www.registrar.yorku.ca/enrol/dates/fw11.htm*
- *According to FSE regulations (see http://www.registrar.yorku.ca/calendars/2011-2012/faculty_rules/SC/academic_standards.htm)*
  - *some graded feedback worth at least 15% of the final grade must be provided to students prior to the drop date.*
  - *No examinations or tests collectively worth more than 20% of the final grade in a course will be given during the final 14 calendar days of classes in a term.*

Labtests I-IV In this course, the term *labtests* is used to refer to hands-on programming tests (as opposed to written tests). A labtest consists of one or more programming tasks that are given to students at the start of the lab session; students complete the programming task to the best of their ability within the allotted time and submit their code for evaluation. **Labtests are always conducted in the Digital Media lab (CSEB1002)**. Labtests are conducted in a special test environment within which the lab computers are modified so that email and other network services are suspended. The labtest is provided via a webpage that is made available during the labtest time. Different versions of the labtest are provided to each of the three lab sections. Labtests are marked and contribute toward the final grade as described above.
Labtests are "open book" in a limited sense; hardcopy materials are allowed, but no electronic materials.

Midterm Written Test will take place on the specified date during the lecture timeslot. It will consist of a series of comprehension questions, such as short answer questions (e.g., a few words to a few sentences), multiple choice questions, and software code analysis questions. The test will last 90 minutes.
The written test is closed book.

In-Class Quizzes A number of small quizzes will be given throughout the term. The quizzes will be 5-15 minutes long and will require the students to answer a question that concern the materials that were assigned as that lecture's preparation. The quizzes will be held at the very start of lecture. Each quiz will be worth 1%.

The Final Exam Labtest and Written Test will take place during the regularly scheduled examination period following the end of the term. The examination will last 180 minutes, 90 minutes of which will be spent on the written test and 90 minutes of which will be spent on the labtest component. The labtest component will take place in CSEB1002. The written component will take place in a nearby lecture hall (location to be announced when determined by the Registrar's Office). The invigilators will supervise the transition between the two venues. The class will be divided such that some of the students will follow the sequence of written test and then labtest, whereas other students will follow the sequence of labtest and the written test. Students will be randomly assigned to these two groups.
The written test is closed book.
The labtest will be "open book" in a limited sense; hardcopy materials will be allowed, but no electronic materials.

Required Materials
The following book is required for the course:

Roumani, H. (2011)). *Java By Abstraction: A Client-View Approach.* Third Edition. Pearson.

Please purchase the correct edition. The first and second editions should not be used.

Supplementary Reading
Additional materials will be placed on the course website in digital form.

Schedule of Topics and Readings
The schedule of topics will be placed on the course website.

Grading Scheme, Assignment Submissions, and Lateness Penalties
The grading scheme for this course conforms to the "**Common Grading Scheme for Undergraduate Faculties"** which is a 9-point system based on letter grades. Tests will marked and awarded a letter grade designation (e.g., A, B, C+, etc.), each of which has a numeric equivalent. (See detailed description in corresponding Senate policy: http://www.yorku.ca/secretariat/policies/document.php?document=87)
The final grade for the course will be calculated using the weightings listed above under "Evaluation" and the numeric equivalents of each of the components.

Religious Observance Days
York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class.. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination period (December), students must petition for Deferred Standing at the Registrar's Office (please see http://www.registrar.yorku.ca/exams/deferred/index.htm).

Academic Honesty

York students are subject to policies regarding academic honesty as set out by the Senate of York University and by the Faculty of Science and Engineering. All students must read the Faculty's Policies at http://science.yorku.ca/Students/Current-Students/academic-honesty-policies-and-procedures.html. Please also refer to the *Senate Policy on Academic Honesty* (http://www.yorku.ca/secretariat/policies/document.php?document=69).

Student Conduct

Students and instructors are expected to maintain a professional relationship characterised by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class.

About Emailing Professors: Etiquette

- Use a proper salutation (eg "Dear Professor", not "Hey!")
- Use the "traditional" style of writing. No SMS style messages. No cutesy abbreviations (C U l8r) or other shorthand.
- Ensure all spelling is correct.
- Proof-read your email. Does it make sense? Is it coherent? Has the purpose of your communication been clearly conveyed? If not, revise until you can say yes.
- Be sure to include "CSE1710" in the subject line or else your email may be eaten by a spam filter.
- Sign your email with your name (first and last). Include your student number if appropriate.
- Once all of the above are satisfied, then hit send.

Access/Disability

Students who feel that there are extenuating circumstances which may affect their ability to successfully complete the course requirements are encouraged to discuss the matter with the Course Director as soon as possible.

Students with physical, learning or psychiatric disabilities who require reasonable accommodations in teaching style or evaluation methods should discuss this with the Course Director early in the term so that appropriate arrangements can be made.