



DEPARTMENT OF SCIENCE

COURSE OUTLINE – FALL 2011

CS1000/EG1050 – COMPUTER PROGRAMMING FOR ENGINEERS – 3.8(3-0-2)UT

INSTRUCTOR: Dr. Tanvir Sadiq, P.Eng. **PHONE:** 780.539.2865
OFFICE: J 209 **E-MAIL:** tsadiq@gprc.ab.ca

OFFICE HOURS: Tuesdays 12:30 – 2:00 or By Appointment

PREREQUISITE(S)/COREQUISITE: None

RECOMMENDED TEXT/RESOURCE MATERIALS: *MATLAB: A Practical Introduction to Programming and Problem Solving* by Stormy Attaway, 2nd Edition ISBN-13 978-0-12-385082-9. (Elsevier). For eText go to: http://www.coursesmart.com/9780123850812?_professorview=false&_instructor=1794570

CALENDAR DESCRIPTION: This is computer programming for solving engineering problems. Structured programming in MATLAB is included.

CREDIT/CONTACT HOURS: 3.8(3-0-2) UT

DELIVERY MODE(S): Lectures, Labs

OBJECTIVES (OPTIONAL): This course is designed to teach engineering students basic computer concepts and terminologies as well as to develop proficiency in MATLAB programming to solve engineering problems. Each student is expected to design and develop several well-structured programs as solution to given assignments.

TRANSFERABILITY: UA, UC, UL, AU, Augustana, CUC, KUC

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

GRADING CRITERIA:

| GRADING CONVERSION CHART – This is a general guideline only. | | | |
|---|---------------------------|--|-------------------------------------|
| Alpha Grade | 4-point Equivalent | Percentage Guidelines (General) | Designation |
| A ⁺ | 4.0 | 90 – 100 | EXCELLENT |
| A | 4.0 | 85 – 89 | |
| A ⁻ | 3.7 | 80 – 84 | FIRST CLASS STANDING |
| B ⁺ | 3.3 | 77 – 79 | |
| B | 3.0 | 73 – 76 | GOOD |
| B ⁻ | 2.7 | 70 – 72 | |
| C ⁺ | 2.3 | 67 – 69 | SATISFACTORY |
| C | 2.0 | 63 – 66 | |
| C ⁻ | 1.7 | 60 – 62 | |
| D ⁺ | 1.3 | 55 – 59 | MINIMAL PASS |
| D | 1.0 | 50 – 54 | |
| F | 0.0 | 0 – 49 | FAIL |
| WF | 0.0 | 0 | FAIL, withdrawal after the deadline |

EVALUATIONS:

| | | |
|--------------|-----|---|
| Assignments* | 10% | |
| Quiz | 10% | (Unannounced or announced) |
| Labs | 20% | |
| Project | 10% | |
| Midterm | 20% | (October 28, 2011, possibly evening exam) |
| Final Exam | 30% | (Time & Location TBA by Registrar's office) |

* There is 10% penalty for each day an assignment is late. Late assignment will not be accepted after the assignments submitted on due date have been graded and returned to the class.

STUDENT RESPONSIBILITIES: Students are expected to attend all classes. If you miss a class, make arrangements to copy the notes from your class fellows. If you are using older edition of the textbook, you are responsible for matching page numbers, topics, figures, and problems with the editions being used in the class. You are encouraged to ask questions, but do not monopolize the class time.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at

<http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

**Note: all Academic and Administrative policies are available on the same page.

COURSE SCHEDULE:

Following sections from the textbook will be covered in the class:

1.1 – 1.5, 2.1 – 2.6, 3.1 – 3.5, Ch. 4, 5.1 – 5.5, Ch. 6, Ch. 7, Ch. 10

(The order of these sections may be changes)

Note: This list is general. Not all topics listed above will be covered with the same degree of detail. Additional/alternate topics may be covered depending on time constraints and student interest.

NOTE:

MID-TERM EXAMINATIONS MISSED FOR ANY REASON WILL NOT BE RESCHEDULED. Students not writing the midterm exam, with a valid excuse (as defined by College policy) will have the midterm weight added to the final exam. This is not automatic, and if you miss the mid-term, you should follow all College guidelines and contact your instructor as soon as possible.