# ENGI XXXX: COURSE TITLE

Update course number. You should also change the ENGI to your departmental course label, if appropriate. Remember to update the course and semester information in the header as well.

| | | | |
|---|---|---|---|
| **Instructor:** | **Instructor Name** | **Teaching Assistant:** | **TA Name** |
| **E-mail:** | **instructor@mun.ca** | **E-mail:** | **TA@mun.ca** |
| **Phone:** | **864-xxxx** | **Phone:** | **864-xxxx** |
| **Office Location:** | **EN – xxxx** | **Office Location:** | **EN - xxxx** |
| **Office Hours:** | **2 hours per week** | **Office Hours:** | **optional** |

How to interpret this document: Non-highlighted text is added as sample text. You may use it and/or modify it for your own course outline. Highlighted text is added as instructions or guidance.

**Course Website:** https://online.mun.ca/login.asp

**Communication:** Add any text here that would help students communicate with you during the course. Participation in class, emails, setting up appointments.

**Assignment, Project and Other Submissions:** Provide a statement about how you would like work to be submitted. Ie. Printed (hardcopy), handwritten, electronic.

**SCHEDULE:**

| | | |
|---|---|---|
| **Lecture Classroom and Schedule:** | **EN – xxxx** | **MWF 2:00-2:50** |
| **Tutorial Classroom and Schedule:** | **EN – xxxx** | **W 11:00-11:50** |
| **Lab Classroom and Schedule:** | **EN – xxxx** | **R 2:00-5:00** |

Get course schedule from faculty time table.

**CALENDAR ENTRY:**

*1020 Introduction to Programming is an introduction to algorithmic problem solving techniques and computer programming, including basic program control structures (sequence, call, branch, loop) and data representations, functional decomposition, and design by contract. Exercises and examples are drawn from a variety of engineering disciplines and are implemented using a standard modern programming language.*

***CR:*** *the former ENGI 2420*
***LH:*** *at least four 2-hour sessions per semester*
***PR:*** *eligibility to register for Mathematics 1000*

This section should be appear as it does in the university calendar, verbatim.
Below is a legend from the University Calendar, which describes what you may see in the course Calendar Entry:
AR = Attendance requirement; CH = Credit hours are 3 unless otherwise noted; CO = Corequisite(s); CR = Credit can be retained for only one course from the set(s) consisting of the course being described and the course(s) listed; LC = Lecture hours per week are 3 unless otherwise noted; LH = Laboratory hours per week; OR = Other requirements of the course such as tutorials, practical sessions, or seminars; PR =

Prerequisite(s); UL = Usage limitation(s).

**LAB EXPERIENCE:** **Lab type** Choose one: hands on, simulation, problem, project, demo, or other
**CREDIT HOURS:** **3 Credits** Update to reflect credit value of your course
**COURSE TYPE:** **Compulsory or Elective** Choose one
**ACCREDITATION UNITS:** **3/0/0 (Lecture/Lab/Tutorial)** Contact hours/week on average over 13 weeks. can be found for your course in the university calendar.

**CONTENT CATEGORIES:**

| Math | Natural science | Complementary Studies | Engineering Science | Engineering Design |
|---|---|---|---|---|
| | | | 50% | 50% |

The above fields should be included and are necessary for accreditation purposes. The 50% Engineering Science and 50% Engineering Design values above are just example text. Please ensure that your outline reflects the category content as approved for your course by your Department's curriculum committee and consult with the committee if you feel they are not an accurate reflection of the course content.

**COURSE DESCRIPTION:**

This is an "optional" section but it should be used if you would like to describe the course with different details than are given in the calendar description.

**RESOURCES:**

**Text Books:**

- "Required text book

**References:**

- Optional reference book 1
- Optional reference book 2
- Optional reference book 3

**MAJOR TOPICS:**

- Topic 1
- Topic 2
- Topic 3
- Topic 4
- Topic 5
- Topic 6
- Topic 7
- Topic 8

**LEARNING OUTCOMES:**

*Brief description of expected learning outcomes.*

| | Learning Outcomes | Graduate Attributes level | Assessment Tools |
|---|---|---|---|
| 1 | Learning outcome 1 | KB.7-A, KB.8-A, PA.2-A, Des.1-D | Assignments, Midterm, Project |
| 2 | | | |

| | | | |
|---|---|---|---|
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

Attribute level key: I-Introduced, D-Developed, A-Applied

You need to include the above for your course for accreditation purposes and Graduate Attribute Indicator tracking. Your table should follow this format:
Learning outcomes can be written in sentence form. You can create "orginal" learning outcomes that are appropriate for the course as you intend to offer the course. Learning outcomes should be connected to one or more Graduate Attribute Indicator(s) and method(s) of assessment. Learning outcomes will likely be connected to multiple Graduate Attribute Indicators (column 2) and methods of assessments (column 3).
The Graduate Attribute level column should have the following format:
GraduateAttribute.IndicatorNumber-AttributeLevel
Ie. KB.7-A is Graduate Attribute KB, Indicator Number 7 at the Applied level.
Assessment tools should be comma separated.
You should include all Graduate Attribute indicators that are assigned to your course by your department. If you are not sure which ones are assigned or a particular assigned indicator is not relevant to your course, please contact your department.

**ASSESSMENT:**

| **Method** | **Credit** | **Due Dates** |
|---|---|---|
| *Assignments* | *20% (5% each)* | |
| *Assignment 1* | | *June 4* |
| *Assignment 2* | | *June 25* |
| *Assignment 3* | | *July 9* |
| *Assignment 4* | | *July 23* |
| *Midterm* | *20%* | *July 15* |
| *Final Group Project* | *20%* | |
| *Report* | *(75% of 20 – 15%)* | *August 6* |
| *Presentation* | *(15% of 20 – 5%)* | *August 3 & 5* |
| *Final Exam* | *40%* | *TBD* |

With the exception of final examinations, and in accordance with Scheduling of Parts of the Evaluation (University Calendar Regulation 6.7.3), the probable dates of all in-class parts of the evaluation, and the probable dates on which all take-home parts of the evaluation are due.
Students must receive 20% of course grade by final drop date (University Calendar Regulation 6.7.6.1).
Exemptions due to illness must be in keeping with University Regulations, Exemptions from Parts of the Evaluation (University Calendar Regulation 6.7.5).
Only certain evaluations are permitted in last two weeks of lectures (University Calendar

Regulation 6.7.3.4),
Attendance regulations may not be included without Senate approval (University Calendar Regulation 6.6.1).
The return of graded work and notification of grades must be in keeping with the Access to Information and Protection of Privacy Act (University Calendar Regulation 6.7.2.5).

For the most up-to-date information on the universities policy for course outlines please visit: https://blog.citl.mun.ca/samplecourse/files/2020/12/Memorial-University-Syllabus-Guidelines_Fall-2020.pdf

**ACADEMIC INTEGRITY AND PROFESSIONAL CONDUCT:**

Students are expected to conduct themselves in all aspects of the course at the highest level of academic integrity. Any student found to commit academic misconduct will be dealt with according to the Faculty and University practices. More information is available at http://www.mun.ca/engineering/undergrad/academicintegrity.php

Students are encouraged to consult the Faculty of Engineering and Applied Science Student Code of Conduct at http://www.mun.ca/engineering/undergrad/academicintegrity.php and Memorial University's Code of Student Conduct at http://www.mun.ca/student/conduct/.

Sample text above but you may personalize a similar statement.

**INCLUSION AND EQUITY:**

Students who require accommodations are encouraged to contact the Glenn Roy Blundon Centre, http://www.mun.ca/blundon/about/index.php. The mission of the Blundon Centre is to provide and co-ordinate programs and services that enable students with disabilities to maximize their educational potential and to increase awareness of inclusive values among all members of the university community.
The university experience is enriched by the diversity of viewpoints, values, and backgrounds that each class participant possesses. In order for this course to encourage as much insightful and comprehensive discussion among class participants as possible, there is an expectation that dialogue will be collegial and respectful across disciplinary, cultural, and personal boundaries.

Sample text above but you may personalize a similar statement.

**STUDENT ASSISTANCE:**

Student Affairs and Services offers help and support in a variety of areas, both academic and personal. More information can be found at www.mun.ca/student.

Sample text above but you may personalize a similar statement.

**ADDITIONAL INFORMATION:**

Add any other information that you believe will help students form appropriate expectation for the course and/or enrich their experience.

**The 12 Graduate Attributes*:**

1. **(KB) A knowledge base for engineering:** Demonstrated competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program.

2. **(PA) Problem analysis:** An ability to use appropriate knowledge and skills to identify, formulate, analyze, and solve complex engineering problems in order to reach substantiated conclusions
3. (Inv.) Investigation: An ability to conduct investigations of complex problems by methods that include appropriate experiments, analysis and interpretation of data and synthesis of information in order to reach valid conclusions.

4. **(Des.) Design:** An ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards, and economic, environmental, cultural and societal considerations.

5. **(Tools) Use of engineering tools:** An ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities, from simple to complex, with an understanding of the associated limitations.

6. **(Team) Individual and teamwork:** An ability to work effectively as a member and leader in teams, preferably in a multi-disciplinary setting.

7. **(Comm.) Communication skills:** An ability to communicate complex engineering concepts within the profession and with society at large. Such ability includes reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions.

8. **(Prof.) Professionalism:** An understanding of the roles and responsibilities of the professional engineer in society, especially the primary role of protection of the public and the public interest.

9. **(Impacts) Impact of engineering on society and the environment:** An ability to analyze social and environmental aspects of engineering activities. Such ability includes an understanding of the interactions that engineering has with the economic, social, health, safety, legal, and cultural aspects of society, the uncertainties in the prediction of such interactions; and the concepts of sustainable design and development and environmental stewardship.

10. **(Ethics) Ethics and equity:** An ability to apply professional ethics, accountability, and equity.

11. **(Econ.) Economics and project management:** An ability to appropriately incorporate

economics and business practices including project, risk, and change management into the practice of engineering and to understand their limitations.

12. **(LL) Life-long learning:** An ability to identify and to address their own educational needs in a changing world in ways sufficient to maintain their competence and to allow them to contribute to the advancement of knowledge

**Content Instructional Level**:**

**I = Introductory**

At the introductory level, the students learn the working vocabulary of the area of content, along with some of the major underlying concepts. Many of the terms need defining, and the ideas are often presented in a somewhat simplified way.

**D = Intermediate Development**

At the intermediate development level, the students use their working vocabulary and major fundamental concepts to begin to probe more deeply, to read the literature, and to deepen their exploration into concepts. At this level, students can begin to appreciate that any field of study is a complex mixture of sub-disciplines with many different levels of organization and analysis.

**A = Advanced Application**

At the advanced application-level the students approach mastery in the area of content. They explore deeply into the discipline and experience the controversies, debate, and uncertainties that characterize the leading edges of any field. An advanced student can be expected to be able to relate course material to different courses, to begin to synthesize and integrate and achieve fresh insights. Students at this level are working with the knowledge very differently, perhaps even creating new knowledge through independent investigation.