CONCORDIA UNIVERSITY

FACULTY OF ENGINEERING AND COMPUTER SCIENCE
DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

COURSE OUTLINE
MECH 211/W - MECHANICAL ENGINEERING DRAWING - WINTER 2017, CREDITS: 3.5

Instructor:	François Tardy, Office: EV3.276
Time:	Mondays & Wednesdays: 8:45 – 10:00, Classroom: H411 SGW
Office Hours:	After class or by appointment
Phone:	514-848-2424 ex. 3462
E-Mail:	francois.tardy@concordia.ca
Web Site:	'My Concordia' portal – **Moodle**

Tutorials and laboratories:

Task	Type	Room	Name	E-mail	Phone
WA M 14:15-16:05	Tutorial	H967	Rohan Chandok	rohanchandok30@gmail.com	
WB M 14:15-16:05	Tutorial	H905	Akash Sharma	akash.sharma_94@yahoo.co.in	
WI-X W 12:00-16:00 4h every 4 weeks	Lab	H1067	Mukul Arya Shambhu Gupta	arya_mukul@ymail.com sha_gupt@encs.concordia.ca	
WJ-X W 12:00-16:00 4h every 4 weeks	Lab	H1067	Shambhu Gupta	sha_gupt@encs.concordia.ca	
WK-X W 12:00-16:00 4h every 4 weeks	Lab	H1067	Shambhu Gupta	sha_gupt@encs.concordia.ca	
WL-X F 09:00-13:00 4h every 4 weeks	Lab	H1067	Mukul Arya Shambhu Gupta	arya_mukul@ymail.com sha_gupt@encs.concordia.ca	

Tutorials: Scheduling is given above. Tutors or lab instructors can may be changed if necessary.

Laboratory: All laboratory sessions are mandatory and are in room H1067. Please make sure that you complete all three lab sessions before the end of the term. Each lab is given once per week. There are three labs each lasting 4 (four) hours each and will be conducted by lab instructors. The schedule of the lab is posted on the Moodle site. Please make sure that you attend your assigned section and do not mix up the sections. If the lab instructor does not record participation in the lab, it will count as missed lab. Attendance to the lab sessions is mandatory for everyone, even for those who repeat the course. The assigned lab instructors are listed above.

If circumstances force a student to be unable to attend a lab session, he/she must have a serious reason since there will be no scheduled make-up for the labs as they run throughout the term. Each student will attend three sessions, each lasting 4 hours, accounting for all three topics. The first lab runs during Weeks 2, 3, 4 and 5, the second #2 runs the Weeks 6, 7, 8 and 9 while the third lab runs Weeks 10, 11, 12 and 13. Should a student miss the lab and possess a good reason; he/she must produce the proof of absence and schedule another session with Mr. Peter Sakaris (peter.sakaris@concordia.ca). Please note that if Mr. Sakaris finds the reason of the absence not reasonable, ***you will need to repeat the course as the completion of the lab sessions is mandatory***.

Late arrival to the lab. "Late" means any time between 15 minutes to 60 minutes from the time of scheduled start of the lab. This delay in starting the lab will be penalized with 33% of the marked grade in that specific lab. The laboratory is a group activity and one person missing increases the work of the other team members. Please give serious consideration to the laboratory.

If someone repeats the course, this means that the lab must also be repeated.

Programmer On Duty (POD): usually carried by the tutor; two hours every week where you may ask questions about the course. Please check the course Moodle site to see the schedule with the POD. You may also contact the tutor during the tutorial and inquire about his/her availability.

Textbook:

Mechanical Engineering Graphics – MECH 211 (This is a custom textbook that will be used for this course).

Course description:

This course is an introduction to graphic language and design which includes methods and techniques. For example,

- Third and first angle projections;
- Orthographic projection of points, lines, planes and solids.
- Principal and auxiliary views; views in a given direction; sectional views.
- Intersection of lines, planes and solids.
- Development of surfaces.
- Drafting practices, dimensioning, fits and tolerance specifications.
- Computer-assisted drawings and solid modelling.
- Working drawings – detail and assembly drawings.
- Design practice, representation of machine elements.

The lectures take three hours per week. The tutorials take two hours per week and includes learning CAD software (AutoCAD). Finally, the laboratory lasts an equivalent of one hour per week and is run in segments of four hours, three times during the term.

Course objectives:

The ability to produce and understand engineering drawings is one of the most basic requirements of any engineering student. It has been often stated that engineering graphics is the language of an engineer on a global scale. Drawings produced in countries whose language we do not understand can nevertheless be used by anyone proficient in "reading" engineering drawings. All engineering textbooks contain a wealth of drawings and illustrations in order to explain subjects, which often cannot be easily put in words. Thus, for an engineering student, the mastery of engineering (technical) drawing is more or less a prerequisite for all other courses in the engineering curriculum. The main objective of this course, MECH 211, Mechanical Engineering Drawing, is thus to prepare mechanical engineering students in engineering graphic topics particular to mechanical engineering. Some of these topics are the basics of descriptive geometry, a more intimate knowledge of limit dimensions and tolerances, the use of standard components such as fasteners and other connecting elements etc. The course content is arranged in a way that students with no previous experience will achieve a level of knowledge sufficient to apply engineering drawings to subsequent course work, in particular to courses in engineering design. The course is complemented with tutorials that will be held in a Computer Aided Design (CAD) room and by a laboratory – anatomy of mechanical engineering in which hands-on CAD skills will be acquired by the students.

Graduate attributes:

The teaching part of the course will enable the following graduate attributes:

Problem Analysis: Students acquire problem analysis skills throughout the course through assignments, tutorials, midterms, exams and importantly through a lab on the Anatomy of Engineering. Students are required to solve the drawing problems manually using pencils and drawing boards, which helps provide the feel of problem analysis and solving to the students.

Communication: The student learns to communicate effectively on complex engineering drawings with the professor, tutors and colleagues through tutorials, lectures, laboratories and through written reports for laboratories. They are also trained to effectively respond to clear instructions provided in the lab guides and equipment instruction manuals.

ATTRIBUTE	INDICATOR	LEVEL OF KNOWLEDGE
Problem Analysis: *An ability to use appropriate knowledge and skills to identify, analyze, and solve complex engineering problems in order to reach substantiated conclusions.*	Problem identification and formulation	Introductory
	Modelling	Introductory
	Problem solving	Introductory
	Analysis (uncertainty and	Introductory

	incomplete knowledge)	
Communication Skills: *An ability to communicate complex engineering concepts within the profession and with society at large. Such abilities include 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.*	Research Methods	Introductory
	Documentation	Introductory

COURSE LEARNING OUTCOMES:

At the end of this course, students will be able to:

- Describe three dimensional shapes following standard engineering drawing practices and notation.
- Understand and evaluate the completeness and accuracy of an engineering drawing.
- Identify the relevant functions and use an engineering software to generate drawings.
- Analyse all geometric dimensions of an object using projections.
- Properly document engineering drawings.

Grading and Evaluation: The evaluation of the graduate attributes ***do not affect at all the performance grade***. The scope of the graduate objectives is to keep track on the quality of the course and of the material as part of the course as well as the vehicle through which this information is delivered.

The ten assignments to be individually solved will be graded with each assignment weighing 1.6% towards the final grade (16% in total). No submission or late submission of an assignment will be given a mark of 0 (zero). The course contains Midterm and Final exams, which contribute 10% and 60% respectively towards the final grade. Laboratory work is worth 14% towards the final grade. ***Please note that to pass the course, a mark of more than 50% in the final exam is needed.***

Graphic instruments:

A basic set of graphic instruments consist of two edges (30º and 45º), two rulers, one set of compasses, a few sharpened pencils or at least two 0.5 mm lead pens, one hard and one soft lead (HB and 2B), an eraser and a shield. You should have the drawing tools with you at any time during a class, tutorial or laboratory. The AutoCAD graphics software can also be used as a tool. Please download the course materials at the beginning of the term, which will be posted for the duration of the course. The solutions to the assignments will be available after the submission due date to the tutor & marker. Students are also allowed to bring portable mini-drafting boards.

Lectures, tutorial and assignments:

Each three-hour lecture period will be followed by a two-hour tutorial which is scheduled within the same day.

During the lectures, students may have to answer short quizzes that will bear no weight in the final grade but will help them self-assess their progress relative to understanding of the course material.

Course plan:

Lecture	Week starting	Textbook Chapter	Description
1	January 9th	Ch. 2, 5 and 10	Introduction to graphic language and design, design visualization, methods and techniques, views of a geometric object, multi-view projections, applications and examples, engineering design process -
2	January 16th	Ch. 8, 9 and 10	Instruments, geometric constructions, CAD tools, demonstration examples, 3D modelling, CAD principles -
3	January 23d	Ch. 9, 10, 13 and 16	Sketching and shape description, shape generation, sectional and auxiliary views, examples and applications -
4	January 30th	9, 14	Three-dimensional modelling, Descriptive Geometry– Points and lines, examples -
5	February 6th	Ch. 14	Descriptive Geometry – Points, lines, planes, intersections, examples -
6	February 13th	Ch. 14	Descriptive Geometry – Parallelism & perpendicularity – examples -
7	February 27th	Ch. 14	Descriptive Geometry – Parallelism & perpendicularity – examples -
8	March 6th	Ch. 15	Descriptive Geometry – Solids in space and Intersections – examples - **(Midterm exam - Lectures 1 to 6, given during the tutorial)**
8	March 13th	Ch. 15	Descriptive Geometry – Intersections and developments, examples.
9	March 20th	Ch. 15, 19	Descriptive Geometry – Developments, examples, Threads and fasteners
10	March 27th	Ch. 17, 18	Dimensioning and tolerancing, geometric tolerancing examples and applications-
11	April 3d	Ch. 20	Working Drawings,
12	April 10th	Ch. 4, 5, 6, 9,10, 12	Design case study, review, discussion -

***** - The midterm exam will be carried out on March 6th, 2017 during the tutorial period.

- PowerPoint presentation, - Material available on course website, Lecture to be done on board/screen

Assignments:

Ten assignments will be handed out during the term. Each assignment generally includes four problems. Students shall complete the assignments by manual drafting using drawing instruments (even if the problem statement requires a solution using CAD tools). All assignments will be submitted to the tutor and only during the designated tutorial period. The schedule for submitting assignments must be judiciously respected. Late assignments and assignments submitted anywhere other than the tutorial shall receive no grade. The submission of the assignments will be hand-drawn on Letter-size standard paper (8½"x11"). **One drawing must be made per page**. The pages will include the information required to determine its author. Late submissions will receive no marks.

Assignment	**Due date (**week of**)**	**Problems**
1	January 16th	PB. 5.16, FIG. 5.56 (A & B), P57.
		PB. 5.23, FIG. 5.64, P66; PB. 5.24, FIG. 5.65, P67.
2	January 23d	PB. 10.4, FIG. 10.92 (5), P316; PB. 10.4, FIG. 10.92 (23), P317.
		PB. 10.4, FIG. 10.92 (30), P318; PB. 10.5, FIG. 10.93 (5), P319.
3	January 30th	PB. 10.6, FIG. 10.94 (21), P322; PB. 10.6, FIG. 10.94 (36), P323.
		PB. 10.7, FIG. 10.98, P324; PB. 10.7, FIG. 10.118, P329.
4	February 13th	PB. 16.5, FIG. 16.58(4), P489; PB. 16.5, FIG. 16.58(19), P490.
		PB. 16.5, FIG. 16.58(33), P491; PB. 16.6, FIG. 16.61, P492.
5	February 27th	PB. 13.1, FIG. 13.19 (5), P365; PB. 13.2, FIG. 13.20 (19), P367.
		PB. 14.8, P404; PB. 14.11, P405.
6	March 6th (please note that the midterm is scheduled for this week)	PB. 14.7, FIG. 14.32, P404; PB. 14.9, FIG. 14.34, P404 & 405.
		PB. 14.10, FIG. 14.35, P405; PB. 14.12, FIG. 14.37, P406.
7	March 13th	PB. 14.13, FIG. 14.38, P406; PB. 14.14, FIG. 14.39, P406.
		PB. 14.15, FIG. 14.40, P406 & 407; PB. 14.16, FIG. 14.41, P407.
8	March 20th	PB. 15.8, FIG. 15.50, P444 & 446; PB. 15.8, FIG. 15.51, P444 & 446.
		PB. 15.8, FIG. 15.56 (C & D), P444 & 446
9	March 27th	PB. 15.7, FIG. 15.47(1), P444; PB. 15.7, FIG. 15.47(2), P444.
		PB. 15.7, FIG. 15.47(9), P444; PB. 15.7, FIG. 15.47(10), P444 & 445.
10	April 3d	PB. 15.3, FIG. 15.43(3), P440 & 441; PB. 15.3, FIG. 15.43(8), P440 & 441.
		PB. 15.4, FIG. 15.45(4), P440 & 443; PB. 15.6, FIG. 15.46(6), P440 & 443.

Tutorials:

During each tutorial period, students will work on assignment problems directly related to the topic of the preceding lecture. To help students in their work, an experienced tutor will be available to assist them, review lecture material and answer questions. During tutorials held in the CAD labs, it is expected that the students will practice their skills on AutoCAD. A CAD manual has been created to learn AutoCAD. The tutor will be available to help on the specific problems encountered by the students. Assignment problems can be attempted during the tutorial period. It is recommended that the material be taken in gradually. If a student encounters problems with AutoCAD or in solving assignments problems, a "programmer on duty – the tutor" will be made available to answer specific problems during the term in accordance with the outlined schedule in the course webpage. Students must learn the software in a manner that by the end of the term they are capable of performing more complex drawings while only using the "help" feature of the software.

Week starting	**Comments**
January 16th	AUTO-CAD instruction and Chapters 5 and 8 examples. – Discuss Assignment 1
January 23d	Chapter 10 examples. Geometric construction – Discuss Assignment 2,
January 30th	Submit Assignment #1. Functions used in AutoCAD for arrays drawing; Multi-view representation – Discuss Assignment 3
February 6th	Submit assignment #2. Layers in CAD – Discuss Assignments 4 and 5
February 13th	Submit assignment #3. Scales, lines, visibility, lining – Discuss Assignments 6 and 7
February 27th	Submit assignment #4. Solve descriptive geometry problems – point and line
March 6th	MIDTERM TEST – another room will be assigned for the class test. The test will be completed by hand drawing using graphics instruments. The tests will consist of solving four questions, which are similar to the ones solved in the assignments.
March 13th	Features in AutoCAD – Discuss Assignment 8
March 20th	Discuss Assignment 9 and 10
March 27th	Review problems on point, line and plane – Descriptive Geometry
April 3d	Review problems of intersections of planes, lines and polyhedrons
April 10th	Review problems – sections, multi-view representation, design

Final Exam:

The Final exam will be written during the examination period as scheduled by the examination office. Experience in past years shows that this exam tends to be written on the first or second day of the exam period as the main requirement is to be able to think evenly. The examination schedule is carried out by the Dean's office to avoid conflicting schedules in students' examinations.

The final usually involves 6 problems to be solved (drawn) in 3 hours. Exam details will be discussed in the class.

Mid-Term and Final exam questions are based on lecture material and problems from assignments and tutorials.

GRADING

The following grading scheme will be used:

Assignments	**16%**
Midterm exam:	**10%**
Anatomy of mechanical engineering laboratory *mandatory to attend and pass	**14%**
Final Examination	**60%**

Note: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change. ***Passing grade requires that performance in the final exam to be satisfactory for a passing grade (minimum 50% of total marks). If this requirement is not satisfied, the final grade will be FNS regardless the total average mark for the course.***

COURSE OUTLINE - MECH 211 Laboratories: Anatomy of Mechanical Engineering

SCOPE

This lab will cover practical skills, analytical skills and drafting skills. These will be acquired through the disassembly, observation, analysis and reassembly of a few mechanical systems.

RELEVANCE

A good engineer should have the practical skills that they will require of their technicians and enough experience with each such that when they demand it of a design, they understand completely what it is they are asking for. A good engineer is able to observe, understand and criticize a design and explain how this design works, how it was made and how it can be made better. A good engineer can reassemble what they have disassembled.

REQUIREMENTS

This lab is relatively non-technical and very non-analytical in nature. It stresses practical skills and soft skills. Teamwork and division of labour are essential. EVERYONE in the team should be at work during this laboratory as something will always need to be done. The teams will be made up of a Manager, a Designer, an Assembler and Consultants. Role assignments will be determined in the lab by the lab instructor. **Attendance is mandatory**.

The following materials MUST be purchased before the first lab (you will need them throughout your career and for MECH 311, MECH 390 and MECH 490)

- **Safety glasses**
- **Clothing appropriate for working on machinery that is oily and greasy (overalls recommended)**
- **Fully closed leather (or equivalent) shoes (steel toe safety shoes recommended)**
- **Vernier calliper (digital, carbide tip kind recommended)**
- **Tape measurer (minimum 6')**

EVALUATION

Marking for the lab will be based on the following criteria:

Attitude including team work	*30*
Participation	*30*
Performance (includes showing up with proper tools)	*15*
Device is disassembled without incident and correctly reassembled	*15*
Promptness	*10*

This laboratory represents 14% of your course grade.

PREPARATION

- Read the General Lab Manual.
- Read the e-Manual that is specific to the lab you will be performing.
- BE SURE YOU ARE FAMILIAR WITH THE USE OF TOOLS. This is the time to learn the names of tools and mechanical parts. There are 3 lab sessions running 4 hours each. Each student will attend three 4-hour long

labs which are scheduled every 4 weeks. Read the e-Manual specific to the lab you will be attending in advance. Make sure that you are familiar with the disassembly procedure. PRINT the required printouts [see the General Lab Manual]. Practice sketching, thinking and tinkering.

DELIVERABLES

- Completed tasks specific to each lab.
- Completed general printouts.
- Completed lab specific printouts as handed out by lab instructor at the end of the lab.
- A properly reassembled device.

Important:

Do not copy, paraphrase or translate anything from anywhere without saying from where you obtained it. Source: http://provost.concordia.ca/academicintegrity/plagiarism. This recommendation stands for every material that you have to produce originally.

Getting the e-Manuals:

Go to *myconcordia.ca*, then *My portal*, enter *netname and password*, enter *MECH211* or MECH211 – Laboratory Anatomy of Engineering, depending on requirements.

ADDENDUM TO THE COURSE OUTLINE

ACADEMIC CONDUCT ISSUES

The basic ten rules that make you a good engineer

The B. Eng. program is set to satisfy most of the requirements for your education and prepares you for a professional engineering career that requires dedication and knowledge to serve the community. What you learn, and how you learn, will be used extensively in your engineering profession for the next 30 to 40 years. Therefore, the four years spent in the engineering program are crucial towards your professional formation. The first step is for you to learn to "think like an engineer" which means:

- accept responsibility for your own learning
- follow up on lecture material and homework
- learn *problem-solving skills,* not just how to solve each specific homework problem
- build a body of knowledge integrated throughout your program
- behave responsibly, ethically and professionally

One of the mainstays of being a professional engineer is a professional code of conduct and as an engineering student this starts with the Academic Code of Conduct (Article 16.3.14 of the undergraduate calendar). However, you may encounter situations that fall outside the norm and in such cases, you use your common sense.

Further, the following issues should be given serious consideration:

1) Attendance at lectures and tutorials are major learning opportunities and should not be missed. The labs represent a unique opportunity for you to acquire practical knowledge that you will need in your career. Class and tutorial attendance is important for you to comprehend the discipline and make the connections between engineering skills. You are strongly encouraged to participate in the class, ask questions and answer the instructor's questions. Tutorials are just extensions of the classes in which application of the concepts presented during the lectures are presented and problems are practically solved.

2) The decision to write tests that are not mandatory is entirely yours. For example, midterm test are often stated in many courses as optional. However, one the objectives of midterms is to check on your comprehension of the material and allow time for whatever action is necessary (from more study time to discontinuing a course). Plan to attend the class tests even if they are not mandatory. If you pay attention in the lectures, it will take you significantly shorter time to comprehend the material. **Note also** that if you are in the unfortunate position of being unable to write a final exam due to medical reasons and seek a deferral, this may not be possible if the instructor has no information indicating that you have been attending the course and assimilating the material (i.e. through midterms, quizzes, assignments etc).

3) Homework is usually mandatory and it has some weight in the final grade (such information is given in the course outline). Homework may also be conceived as training material for the class tests. Under all circumstances, it is highly recommended to carry out the home work on time and submit it on the prescribed date. Late submissions are not granted to individual cases regardless of the reason. This is part of the training for being in the workforce where deadlines have

to be met. Please, plan your work such that you submit all the assignments and lab reports on time and in the correct place (not in the corridor, in the elevator or on the street).

4) Office hours with tutors, lab instructors or class instructors are listed in the course outline/website/office doors. Please respect these office hours and in case you have a serious conflict, contact the instructor asking for a special time arrangement. Meanwhile, respect the time of the other. Approaching someone of your teaching team on the hallways or on the street is not appropriate and unfruitful. You may not get the answer to your question and the approached person my feel embarrassed since he or she may be late for an appointment while being unable to answer your question on the spot.

5) Class tests (midterms, quizzes) are returned to the student. The final exams are not. If you wish to see your exam paper, be aware that most instructors allow only a narrow window of time for that purpose. For the fall term, exams may usually be reviewed in January and May for the spring term.

6) When you see your marked work (assignments, midterms, final exam etc), be aware that you are supposed to review your material and see the type of errors you made and if marks have been added incorrectly. This is not an opportunity to try and "negotiate" a higher grade with the instructor. If you believe that your grade is not right, you may apply for a formal Course Re-evaluation through the Birks Student Centre.

7) Writing tests & exams represents a major component of your course work. These tests & exams have rigorous requirements such as:

   - **No cell phone or other communication enabling tool is allowed on the student** during the examination period.
   - Only **specified faculty calculators** are allowed during tests and exams unless otherwise indicated by the instructor.
   - Usually, **no materials** are allowed in the exam unless otherwise announced.

   Get used to signing in and out of your exam. Make sure that you leave your exam papers with the invigilator. There are rules concerning general exam issues in the UG Calendar. These requirements are there to eliminate any possible misunderstanding and you are asked to **respect the rules**. Disciplinary measures are taken when the rules are not followed.

8) Respect your colleagues and those that you meet during the class: tutors, instructors, lab instructors, technical personnel, assistants, etc. Use appropriate communication means and language. Be considerate for all human beings. This includes small things such as turning off cell-phones before a class begins. Concordia University is a very diverse group of people and a very large multicultural community.

9) Communication is part of your future profession. Learn how to communicate effectively and efficiently in the shortest time possible. Write short but meaningful e-mails, make effective phone calls, etc. If your instructor accepts emails make sure that your request is clear with the course number and your name in the *Subject* line. Do not ask for special treatment as instructors have to treat all students equitably.

10) Respect all the above and you will get closer to your future profession.

Please, note that the final exam will be marked and grades submitted according to the academic requirements of the University. It is reasonable for students who think that they performed better than their grade, the final exam. However, retrieving exams is a time consuming activity. This is why the final exams will be seen on a scheduled date – this is sometimes around January 15. After the beginning of the winter term, the instructor will post on his office door the scheduled day for exam review. If one is interested, he/she must pass by and book a time slot of 20 minutes. The objectives of this review are to provide the opportunity for the student to assess his mistakes. Meanwhile, the review might help the student to evaluate if he/she will apply for the exam re-evaluation. The review period will be not used, under any circumstance to negotiate or comment on the grade. As the review day will have 20 such slots, the exam review will be based on first-come first-served basis.

NB1: The instructors and the tutors will try their best to accommodate the CEGEP students affected by the students' strike. Students in such situation should meet the instructor after the first class to evaluate the optimal avenue that would lead them to a success in the course.

NB2: The faculty has required each student at the beginning of the term to commit into performing his homework as individual or group work, to use references that are cited and make sure that he/she is not committing plagiarism. So far, such a document was required at the submission of each and every assignment. Starting this year, a statement of expectations of originality on the submitted work is required to every student at the beginning of the term. Please read carefully the document on the next page fill in and sign it. You need to submit it along with your first assignment. This document is required to receive a grade at the completion of the course.

PLEASE FOLLOW THE INSTRUCTIONS BELOW

The last page of the course outline is an individual statement in which every individual will commit that his work during the term will be original and not copied from various sources or from other colleagues.
You need to remove this page and fill it in. You will submit this form along

Faculty of Engineering and Computer Science
Expectations of Originality

This form sets out the requirements for originality for work submitted by students in the Faculty of Engineering and Computer Science. Submissions such as assignments, lab reports, project reports, computer programs and take-home exams must conform to the requirements stated on this form and to the Academic Code of Conduct. The course outline may stipulate additional requirements for the course.

1. Your submissions must be your own original work. Group submissions must be the original work of the students in the group.
2. Direct quotations must not exceed 5% of the content of a report, must be enclosed in quotation marks, and must be attributed to the source by a numerical reference citation[1]. Note that engineering reports rarely contain direct quotations.
3. Material paraphrased or taken from a source must be attributed to the source by a numerical reference citation.
4. Text that is inserted from a web site must be enclosed in quotation marks and attributed to the web site by numerical reference citation.
5. Drawings, diagrams, photos, maps or other visual material taken from a source must be attributed to that source by a numerical reference citation.
6. No part of any assignment, lab report or project report submitted for this course can be submitted for any other course.
7. In preparing your submissions, the work of other past or present students cannot be consulted, used, copied, paraphrased or relied upon in any manner whatsoever.
8. Your submissions must consist entirely of your own or your group's ideas, observations, calculations, information and conclusions, except for statements attributed to sources by numerical citation.
9. Your submissions cannot be edited or revised by any other student.
10. For lab reports, the data must be obtained from your own or your lab group's experimental work.
11. For software, the code must be composed by you or by the group submitting the work, except for code that is attributed to its sources by numerical reference.

You must write one of the following statements on each piece of work that you submit:
For individual work: **"I certify that this submission is my original work and meets the Faculty's Expectations of Originality",** with your signature, I.D. #, and the date.
For group work: **"We certify that this submission is the original work of members of the group and meets the Faculty's Expectations of Originality",** with the signatures and I.D. #s of all the team members and the date.

A signed copy of this form must be submitted to the instructor at the beginning of the semester in each course.

I certify that I have read the requirements set out on this form, and that I am aware of these requirements. I certify that all the work I will submit for this course will comply with these requirements and with additional requirements stated in the course outline.

Course Number: _____ Instructor: _____
Name: _____ I.D. # _____
Signature: _____ Date: _____

[1] Rules for reference citation can be found in "Form and Style" by Patrich MacDonagh and Jack Bordan, fourth edition, May, 2000, available at http://www.encs.concordia.ca/scs/Forms/Form&Style.pdf.
Approved by the ENCS Faculty Council February 10, 2012

As this is your first year at university, you will need to keep pace with some of the information, although all of this info in already in the calendar. Concordia University offers a set of services beyond academic services. If you wish to know more about these services, please contact the Undergraduate Program Director (UGPD). You may also consider contacting Dr. Gerard Gouw, a former UGPD who is well aware of all the services offered at the University. If you know which service you wish to contact, you may consult the Concordia Counselling and Development Service (career, psychological and student learning services): http://www.concordia.ca/offices/cdev.html/

Additional about the library is found at:

- Concordia Library Citation and Style Guides: http://library.concordia.ca/help/howto/citations.html
- Advocacy and Support Services (Access Centre for Students with Disabilities, Aboriginal Student Resource Centre, Student Parents Centre, Student Advocate Program): http://www.concordia.ca/offices/advocacy.html

Other resources that may be of interest:

- Student Success Centre (math-related support, pure, applied and social science support, become a better wordsmith, student success mentors, awards and scholarships, learning support, jobs and careers): http://www.concordia.ca/students/success.html
- Academic Integrity: http://www.concordia.ca/students/academic-integrity.html
- Financial Aid and Awards: http://www.concordia.ca/offices/faao.html
- Health Services: http://www.concordia.ca/students/health.html