



DEPARTMENT OF SCIENCE

COURSE OUTLINE – WINTER 2014

EG 2650 A3 – ENGINEERING GRAPHICS – 3.5(2-1-3) UT

INSTRUCTOR: Tanvir Sadiq, PhD, P.Eng. **PHONE:** 780.539.2865
OFFICE: J209 **E-MAIL:** tsadiq@gprc.ab.ca
OFFICE HOURS: TBA or By Appointment

REQUIRED TEXT/RESOURCE MATERIALS:

Textbook will be announced in the class. Some notes and handouts will be provided.

CALENDAR DESCRIPTION: Sketching, drafting and interpretation of pictorials and multi views of three-dimensional objects, visual design, introduction to scales, sectioning, and dimensioning are included in the course content. Computer aided drawing and design are a requirement in this course.

(Important Note: Chemical, Electrical, Computer Engineering and Engineering Physics at UA will not accept this course. Other Engineering Departments will accept this course as a technical option.)

CREDIT/CONTACT HOURS: EG 2650 is a 3.5 credit University Transfer course which requires active student participation.

DELIVERY MODE(S): Lectures, Seminars and Labs

Course content will be delivered via Lectures, Technic Drawing Labs and Seminars.

OBJECTIVES:

Sketching

Develop 3D visualization abilities and improve freehand sketching skills through sketching exercises based on actual objects and 3D CAD models.

Engineering Drawings

Learn to read and draw standard engineering drawings and understand the theory of projections which is the basis of 2D engineering drawings. Multiview drawings, sectional and auxiliary views, dimensioning & tolerancing, and working drawings will be introduced using freehand sketches and AutoCAD drawings. Please note that as we progress in the class, emphasis will be on drawing using AutoCAD. Since students work at different pace, instead of lectures, individual instructions may become norm during the latter part of the course.

Computer-Aided Design

Develop basic skills in computer solid modeling.

TRANSFERABILITY:

University of Alberta, University of Lethbridge, Athabasca University, Augustana Faculty - University of Alberta, Concordia University College, Canadian University College, King's University College. Other (transfers in combination with other courses or to other institutions)

** 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

EVALUATIONS:

Assignments/Sketches and Participation	15 %
Midterm	30 %
AutoCAD Labs and Quizzes	20 %
Final and/or Project	35 %

STUDENT RESPONSIBILITIES: Students are responsible for all course material, and readings. Students are expected to complete their sketching/drawing/CAD labs and in-class assignments within allotted time.

COURSE SCHEDULE AND INFORMATION:

All course material must be completed in a timely manner. Approximate course timeline will be posted on Moodle.

Materials:

- 0.5 mm mechanical F or HB lead pencil, ruler and a good eraser
- Workbook
- Data storage media

AutoCAD Drawing Assignments

All drawings must be printed and handed in to the instructor at the end of the lab. AutoCAD drawing files must be named as instructed and emailed/uploaded. *Printouts will be marked only if the corresponding drawing files are uploaded. However, only one or two drawing files chosen at random will be checked for accuracy.* Files with incorrect names and in the wrong folders/directories will be deemed not submitted and receive a zero mark.

AutoCAD Project*

AutoCAD projects are group projects. Each group will submit a project proposal before midterm exam week. Further instructions will be provided by the instructor at a later date. Projects may be accompanied by a presentation by students. Presentation will be graded as part of the project. Project and presentation marking template will be provided when the project is assigned.

Note: You will not learn 3D solid models in AutoCAD until near the end of the course. However, you should gather all the relevant information such as dimensions, etc. and sketch out your final drawing as soon as possible so you can quickly jump into the project drawing in the last two weeks of the course. Your report must include sketches, research, design criteria and other information leading to the final design.

** Project may be replaced by a comprehensive exam.*

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.

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART – THIS IS A GENERAL GUIDELINE ONLY			
Alpha Grade	4-point Equivalent	Percentage Guidelines	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

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