



EFFECTIVE: SEPTEMBER 2005
CURRICULUM GUIDELINES

A: Division: **Instructional**
B: Department/
 Program Area: **Science and Technology**

Effective Date: **September 2005**
 New Course Revision
 If Revision, Section(s) Revised: **G,K,N,O,P,Q**
 Date of Previous Revision: **September 2004**
 Date of Current Revision: **October 2004**

C: APSC 1110 D: Computer-Aided Engineering Graphics E: 3

Subject & Course No.	Descriptive Title	Semester Credits
<p>F: Calendar Description: This course is intended for students proceeding to studies in Applied Science/Engineering. It is divided into two parts. The first half is an introduction to the study of orthographic projections, technical sketching, engineering drawing, the language of graphics. The second half provides an introduction to AutoCAD. This course will help the student to develop the ability to visualize in three dimensions.</p>		
<p>G: Allocation of Contact Hours to Types of Instruction/Learning Settings</p> <p>Primary Methods of Instructional Delivery and/or Learning Settings:</p> <p>Lecture/Laboratory</p> <p>Number of Contact Hours: (per week / semester for each descriptor)</p> <p>2/2</p> <p>Number of Weeks per Semester:</p> <p>15</p>	<p>H: Course Prerequisites: B.C. Principles of Math 12 (C or higher)</p> <p>I: Course Corequisites:</p> <p>J: Course for which this Course is a Prerequisite:</p> <p>K: Maximum Class Size:</p> <p style="text-align: right;">34</p>	
<p>L: PLEASE INDICATE:</p> <p><input type="checkbox"/> Non-Credit</p> <p><input type="checkbox"/> College Credit Non-Transfer</p> <p><input checked="" type="checkbox"/> College Credit Transfer: Requested <input type="checkbox"/> Granted <input checked="" type="checkbox"/></p> <p>SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)</p>		

M: Course Objectives/Learning Outcomes

The student will be able to:

1. Demonstrate an ability to translate from one to another of
 - the solid
 - pictorial representation
 - orthographic representation
 - verbal description
 - mental picture
2. Demonstrate an ability to prepare pictorial and orthographic sketches and drawings.
3. Analyse and solve 3-dimensional problems by graphical means.
4. Read drawings
5. Plan and produce proper 2-D engineering drawings with AutoCAD.

N: Course Content

1. Introduction to Projection
2. Geometric Construction
3. Orthographic Sketching from Pictorial
4. Orthographic Sketching from Object
5. Missing Views (isometric and orthographic)
6. Dimensioning
7. Sectioning
8. Auxiliary Drawings
9. Engineering Geometry
10. Developments Drawings
11. Introduction to AutoCAD
12. AutoCAD Drawing Functions
13. AutoCAD Object Selection & Editing
14. AutoCAD Text and Dimensions
15. AutoCAD Layers & Blocks
12. Working with Attributes
17. Creating & Printing Basic Engineering Drawing in AutoCAD

O: Methods of Instruction

The course consists of a two hour lecture per week and a two hour laboratory session per week. Assignments are to be handed in at the end of each lab session. Late assignments will not be marked. Reading assignments will be given in advance and it is assumed that the student will do the required reading before entering class.

P: Textbooks and Materials to be Purchased by Students

Earle, J.H. Engineering Design Graphics, 11th ed., Prentice Hall, 2004

Randy H Shih & Jack Zecher, AutoCAD LT 2004 Multimedia Tutorial, Schroff Development Corporation (SDC)

Set of Drawing Equipment.

Q: Means of Assessment

The final grade assigned for the course will be based upon the following components:

- a) assignments - minimum 20% and maximum of 30%
- b) two tests administered during the semester - minimum 40% and maximum of 50%
- c) final examination - minimum 30% and maximum of 40%

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Not open for PLAR

Course Designer(s)

Education Council/Curriculum Committee Representative

Dean/Director

Registrar