
AutoCAD I

Architecture, Civil and Building Science

Course Number: CAD8400	Co-Requisites: N/A	Pre-Requisites: N/A
Applicable Program(s): Multiple Programs	AAL: Multiple Levels	Core/Elective: Multiple Core/Elective
Prepared by: Eric Marois, Chair, ACEBS		
Approved by: Friday, August 14, 2015		
Approval Date: 2015-2016		
Approved for Academic Year: 45.00		
Normative Hours:		

Course Description

Students are introduced to computer-aided drafting using AutoCAD. Focus is placed on the drawing and editing commands required to produce two-dimensional drawings.

Relationship to Vocational Learning Outcomes

This course contributes to your program by helping you achieve the following Vocational Learning Outcomes:

0190W01FWO - Construction Engineering Technician

- VLO 4 Communicate construction project-related information effectively and accurately by interpreting and producing data in graphic, oral, and written formats. (T,A)
- VLO 14 Use electronic technology to support construction projects. (T,A)

0190W03FWO - Construction Engineering Technician

- VLO 4 Communicate construction project-related information effectively and accurately by interpreting and producing data in graphic, oral, and written formats. (T,A)
- VLO 14 Use electronic technology to support construction projects. (T,A)

0190X01FWO - Construction Engineering Technician

- VLO 4 Communicate construction project-related information effectively and accurately by interpreting and producing data in graphic, oral, and written formats. (T,A)
- VLO 14 Use electronic technology to support construction projects. (T,A)

0190X03FWO - Construction Engineering Technician

- VLO 4 Communicate construction project-related information effectively and accurately by interpreting and producing data in graphic, oral, and written formats. (T,A)
- VLO 14 Use electronic technology to support construction projects. (T,A)

0190Y03FWO - Construction Engineering Technician

- VLO 4 Communicate construction project-related information effectively and accurately by interpreting and producing data in graphic, oral, and written formats. (T,A)
- VLO 14 Use electronic technology to support construction projects. (T,A)

0192X01FWO - Civil Engineering Technology

- VLO 3 Communicate information effectively and accurately by analyzing, translating, and producing civil engineering documents. (T,A)
- VLO 8 Use electronic technology to support civil engineering projects. (T,A)

0192X03FWO - Civil Engineering Technology

- VLO 3 Communicate information effectively and accurately by analyzing, translating, and producing civil engineering documents. (T,A)
- VLO 8 Use electronic technology to support civil engineering projects. (T,A)

0192Y03FWO - Civil Engineering Technology

- VLO 3 Communicate information effectively and accurately by analyzing, translating, and producing civil engineering documents. (T,A)
- VLO 8 Use electronic technology to support civil engineering projects. (T,A)

6408X02PWO - AutoCAD

- VLO 1 Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship. (T)

Relationship to Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

- EES 3 Execute mathematical operations accurately. (T,A)
- EES 4 Apply a systematic approach to solve problems. (T,A)
- EES 5 Use a variety of thinking skills to anticipate and solve problems. (T,A)
- EES 10 Manage the use of time and other resources to complete projects. (T,A)
- EES 11 Take responsibility for one's own actions, decisions and consequences. (T,A)

Course Learning Requirements/Embedded Knowledge and Skills

When you have earned credit for this course, you will have demonstrated the ability to:

1.) Set up the drawing environment for imperial and metric drawings

- Use the Startup dialog box
- Choose correct settings for drawing units and precision
- Set up drawing limits

2.) Draw and edit simple drawings

- Choose and apply appropriate commands to create drawings
- Choose and apply appropriate commands to edit drawings

3.) Apply annotation to drawings

- Create annotative text styles and dimension styles
- Add annotation to drawings using personalized annotative styles, correct annotation scale(s) and basic text and dimension commands

4.) Assign and manage object properties

Create, assign and manage layer, color and linetype properties for objects

5.) Plot a drawing from Layout Space

Access Layout Space

Create and correctly scale viewport(s) in Layout Space

Apply correct annotation scale settings to viewport

Choose correct settings from the Plot Settings dialog box and apply the Plot command

6.) Create and use a personalized Template

Design and save a personalized metric Template as a .dwt file format

Employ a personalized metric Template to begin a new drawing

7.) Generate and manage Wblocks

Define, save and edit Wblocks

Insert and re-define Wblocks

Learning Resources

Required text: (none)

Students must obtain a student version of the Autocad software for practice outside of scheduled lab time. Instructions for accessing and downloading the free software will be given during the first week of classes.

Other resources:

- Professor's notes on Blackboard site (<http://blackboard.algonquincollege.com>)
- Help menu as incorporated in the Autocad software

Learning Activities

- Classroom instructions to demonstrate new concepts and commands followed by student practice time
- assignments to be completed outside of scheduled class time

Students will respect the environment by limiting the amount of paper used during this course. This can be achieved with the efficient layout of drawings on the sheet, making smaller test plots before submitting the final sheet and by identifying small corrections (in pencil) on the final plot instead of re-plotting multiple times.

Evaluation/Earning Credit

The following list provides evidence of this course's learning achievements and the outcomes they validate:

Midterm Exam(s) (20%)

Validates Outcomes: CLR 1, CLR 2, CLR 4, EES 3, EES 4, EES 5, EES 10

Assignment(s) (10%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, CLR 5, EES 3, EES 4, EES 5, EES 10

Midterm Exam(s) (30%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, CLR 5, EES 3, EES 4, EES 5, EES 10

Participation (10%)

Validates Outcomes: EES 11

Final Exam (30%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, CLR 5, CLR 6, CLR 7, EES 3, EES 4, EES 5, EES 10

Prior Learning Assessment and Recognition

Students who wish to apply for prior learning assessment and recognition (PLAR) need to demonstrate competency at a post-secondary level in all of the course learning requirements outlined above. Evidence of learning achievement for PLAR candidates includes:

- Portfolio
- Performance Test

Grade Scheme

Final Grade	Mark Equivalent	Numeric Value	Final Grade	Mark Equivalent	Numeric Value
A+	90% - 100%	4.0	A	85% - 89%	3.8
A-	80% - 84%	3.6	B+	77% - 79%	3.3
B	73% - 76%	3.0	B-	70% - 72%	2.7
C+	67% - 69%	2.3	C	63% - 66%	2.0
C-	60% - 62%	1.7	D+	57% - 59%	1.4
D	53% - 56%	1.2	D-	50% - 52%	1.0
F	0% - 49%	0	FSP	0	0

Course Related Information

See Blackboard site for course-specific information

Department Related Information

Plagiarism and Academic Dishonesty

Your teachers are evaluating your work on the basis that it is yours and that it demonstrates your learning of the concepts. Any time a professor suspects plagiarism or academic dishonesty, she/he will discuss the situation with the Chair of the department. If the professor has enough evidence to convince the Chair, all the students involved will be contacted and invited to comment. If you are accused of plagiarism or academic dishonesty, be prepared to defend yourself as if you were a victim in this situation. Your comments to this alleged situation are very important since any omission to respond within two school days will be considered as an agreement with the situation reported.

If you are in doubt of what is considered plagiarism or academic dishonesty, you can always validate it in advance with your professors. They will explain what they consider acceptable and not acceptable. Please note that each student is responsible to protect their own work and to make sure it is not used by other students as their own.

Resolution process

Each time there is a situation that requires an action or a clarification, the first step is to communicate with the professor involved or to reach an academic advisor and ask her/him about it. If there is no resolution, you should be discussing this with the coordinator. If the situation persists, you need to bring this up with the Department Chair. The sooner a situation is identified the better the chance to get a resolution. Not reporting an issue during the term is not an acceptable reason for requesting a grade review at the end of the term.

College Related Information

Email

Algonquin College provides all full-time students with an e-mail account. This is the address that will be used when the College, your professors, or your fellow students communicate important information about your program or course events. It is your responsibility to ensure that you know how to send and receive e-mail using your Algonquin account and to check it regularly.

Students with Disabilities

If you are a student with a disability, it is strongly recommended that you identify your needs to your professor and the Centre for Students with Disabilities (CSD) or Student Services, by the end of the first month of the semester in order that necessary accommodations or support services can be arranged for you.

Academic Integrity & Plagiarism

Adherence to acceptable standards of academic honesty is an important aspect of the learning process at Algonquin College. Academic work submitted by a student is evaluated on the assumption that the work presented by the student is his or her own, unless designated otherwise. For further details consult Algonquin College Policies AA18: Academic Dishonesty and Discipline and AA20: Plagiarism

Student Course Feedback

It is Algonquin College's policy to give students the opportunity share their course experience by completing a student course feedback survey for each course they take. For further details consult Algonquin College Policy AA25: Student Course Feedback

Use of Electronic Devices in Class

With the proliferation of small, personal electronic devices used for communications and data storage, Algonquin College believes there is a need to address their use during classes and examinations. During classes, the use of such devices is disruptive and disrespectful to others. During examinations, the use of such devices may facilitate cheating. For further details consult Algonquin College Policy AA32: Use of Electronic Devices in Class

Transfer of Credit

It is the student's responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.

Note: It is the student's responsibility to refer to the Algonquin College Policies website for the most current information at <http://www.algonquincollege.com/directives/>

Legend

Terms

- ALO: Aboriginal Learning Outcome
- Apprenticeship LO: Apprenticeship Learning Outcome
- CLR: Course Learning Requirement
- DPLO: Degree Program Learning Outcome
- EES: Essential Employability Skill

- EOP: Element of Performance
- GELO: General Education Learning Outcome
- LO: Learning Outcome
- PC: Program Competency
- PLA: Prior Learning Assessment
- PLAR: Prior Learning Assessment and Recognition
- VLO: Vocational Learning Outcome

Assessment Levels

- T: Taught
- A: Assessed
- CP: Culminating Performance