

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: CAD 153 – Computer-Aided Drafting, 3 credits

INSTRUCTOR: **SEMESTER/YEAR:** Spring 2018

COURSE DESCRIPTION:

A hands-on competency based course, Computer-Aided Design II, builds on skills and knowledge gained in CAD 152. Students receive advanced instruction in dimensioning and plotting. Students are introduced to working in three dimensions and will create three-dimensional drawings and models, use script files and produce a portfolio of their work.

TEXTBOOK:

AutoCAD and its Applications: COMPREHENSIVE. Publisher Goodheart-Wilcox. Author: Shumaker and Madsen. ISBN# 978-1-63563-063-3 (25TH Ed)

STUDENT LEARNING OUTCOMES:

Upon completion of this class the student will be able to:

- Accurately and completely dimension multi-view drawings according to ASME and NCS standards
- Create and apply different dimensioning styles according to drawing needs
- Apply tolerances to a drawing
- Draw a section view and apply a hatch pattern to the view
- Draw and dimension a variety of 3D dimensional problems
- Create an electronic portfolio of their best works

Total Hours of Coursework:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit. For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

Credit Hour to Clock Hour Calculation:

Direct Faculty Instruction: 1 hour/week/credit for 15 weeks; 50 min = 1 classroom hour (50 min x 3 credits x 15 weeks) = 2250 minutes = 37.5 hours

Student Work Outside the Classroom: 2 hours/week/credit for 15 weeks (2 hrs x 3 credits x 15 weeks) = 90 hours

| | Direct Faculty Instruction (In Class) 37.5 Hrs. Required | Student Work (Out of Class) 90 Hrs. Required |
|----------------------------------|---|---|
| Lecture | 52.5 Hours | |
| 2 Exams | | (2 Exams) x(5 Hrs. Prep)= 10 Hrs. |
| Homework Assignments | | (5 HW's) x (8 Hrs)= 40 Hrs. |
| Project | | 20 Hrs. |
| Other Instructor Material | | 20 Hrs. |

Services for Students with Disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530