Basic Course Information

A. Instructor: Tom Barrett
B. Semester, Year: Winter 2012
C. Instructors Room: H 220
D. Instructor’s phone number: 443-840-4298
   email: tbarrett@ccbcmd.edu
E. School of Applied and Information Technology 410-455-4444
F. Class Times – 5:00 Pm – 10:45 PM
G. Instructor’s office hours: Tuesday, Wednesday 4:00 pm – 5:00 pm
H. Pre-requisites and co-requisites: None

Course Goals

A. Overall Course Objectives as listed on the official common course outline

Upon successful completion of this course, you should be able to:

1. Recognize and apply standard drafting principles in a CADD environment.
2. Develop working knowledge and skills to effectively and efficiently create drawings using AutoCAD.
3. Identify and explain the function and purpose of CADD system components.
4. Apply basic dimensioning procedures.
5. Plot CADD drawings at designated scales.
6. Utilize CADD as a precision drafting tool.
7. Explain industry CADD practices.
8. Describe the design process and responsibilities of design team members.
9. Proceed to advanced CADD course work.
10. Understand career opportunities in CADD

B. Major topics as listed on the official common course outline

1. Introduction to drafting and CADD
2. Basic draw commands such as: LINE, CIRCLE, ARC
3. Menus, coordinates, grid, snap
4. Basic editing commands: COPY, MOVE, ERASE, TRIM
5. Drawing organization: LAYERS, borders
6. File maintenance and storage
7. Text
8. Intermediate editing: ARRAY, MIRROR, STRETCH, FILLET, CHAMFER
9. Plotting
10. Dimensioning
C. Rationale

This course will prepare you to use AutoCAD effectively in the workplace. The knowledge gained through the exposure to the general principles and standards involved with creating engineering drawings will help you learn other CAD software packages. CADD 101 is also a pre-requisite for advanced CADD courses. After completing this course, you will be able to take intermediate AutoCAD (CADD 102), CAD Engineering Drawing (CAD 103), CAD Applications (CADD 111), Customizing AutoCAD (CADD 121), CAD Management (CADD 131) and AutoCAD 3D (CADD 141).

Evaluation

A. Requirements

You will be required to take tests, a midterm examination, a final examination, submit a portfolio and participate in class discussions. There will be required labs that must be printed each class.

B. Instructor’s grading policy

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>20</td>
</tr>
<tr>
<td>Midterm</td>
<td>15</td>
</tr>
<tr>
<td>Final</td>
<td>15</td>
</tr>
<tr>
<td>Labs</td>
<td>50</td>
</tr>
<tr>
<td>Portfolio</td>
<td>Your portfolio will be graded as a packaged product.</td>
</tr>
<tr>
<td></td>
<td>3 plots must be dimensioned.</td>
</tr>
<tr>
<td></td>
<td>1 must be a map</td>
</tr>
<tr>
<td></td>
<td>1 may be of your own design</td>
</tr>
<tr>
<td></td>
<td>A <strong>minimum</strong> of 10 plots must be included in your portfolio</td>
</tr>
</tbody>
</table>

C. Instructor’s attendance policy

Students are expected to attend all class sessions. If an absence is unavoidable, the instructor should be contacted as soon as possible. Any assignments or tests missed during an unexcused absence will be assigned a grade of 0. Three or more unexcused absence may be the basis for academic failure.

Course Procedures

A. Materials

**AutoCAD and its Applications – 2010**

Flash Drive

3 Ring Binder

Portfolio Binder

AutoCAD software (optional)  
http://usa.autodesk.com/

SketchUp software (optional)  
http://sketchup.google.com/
B. Special procedures

Your portfolio is due before the end of the last day of class. There will be a total of 10-12 written tests. There will be a required lab exercise that must be printed each class.

C. Tentative lists of dates
   First Day – Tuesday, January 5, 2012
   Midterm – Thursday, January 12, 2012
   Portfolio Due – Thursday, January 26, 2012
   Final Examination – Thursday, January 26, 2012

D. Academic Dishonesty:

Academic honesty is expected of all students. Work submitted by students as their own must be their own, and materials take from any other source must be clearly identified as such. Falsification of data, plagiarism, copying from others in class, obtaining advance information about exams, and other violations of academic honesty are not acceptable. Records of cheating and plagiarism are on file in the Office of the Chief Academic Officer. The usual penalty for academic dishonesty is failure of the paper or exam or failure in the course, as determined by the instructor. The instructor may recommend a more severe penalty, such as dismissal from a program or from the College. A student may appeal any action taken under this policy.

Academic integrity is a core institutional value at CCBC. Students, faculty, administrators and staff have the right to expect a learning environment where academic integrity is valued and respected. To protect that right, it is essential that faculty address academic integrity issues when an incident is first identified. If academic dishonesty is established, the standard penalty for a first offense is an F in the course. Lesser penalties may be imposed if significant mitigating factors are present. A student remains subject to suspension or expulsion even for a first offense deemed egregious or harmful to CCBC's educational mission.

   Classroom Behavior:

No audible beepers, headphones, or any other device that may interfere with the classroom instruction. Inappropriate or disruptive classroom or laboratory behavior is not tolerated by the college. Other than in exceptional circumstances, cell phones are to be turned off (or set to vibrate) during lab and lecture.
DAY 1  January 3, 2012  
*Reading Assignment: p 1-46, 79*  
I. Preview Course and Syllabus  
II. Introduction to CAD  
III. AutoCAD’s Interface  
IV. Cartesian Input  
V. Direct Distance Entry  

DAY 2  January 4, 2012  
*Reading Assignment: p 77-92*  
I. Windows Introduction  
II. Explorer  
III. Osnaps  
IV. Title Block  
V. Commands  

DAY 3  January 5, 2012  
*Reading Assignment: p 105-125*  
I. Review Windows  
II. Software  
III. Advantages of CAD  
IV. Disadvantages  
V. Commands  

DAY 4  January 10, 2012  
*Reading Assignment: p 139-166*  
I. Review Cartesian Coordinates  
II. Layer  
III. Color  
IV. Linetype  
V. Change  
VI. Move, Copy  
VII Array  

DAY 5  January 11, 2012  
*Reading Assignment: p 221-232*  
I. Review Editing Commands  
II. Array  
III. Limits  
IV. Text  

DAY 6  January 12, 2012  
*Reading Assignment: p 667-687*  
I. Review  
II. Blocks  
III. Attributes  
IV. Midterm Examination
DAY 7  January 17, 2012
Reading Assignment: p 245-256
I. Blocks  
II. Sketch  
III. Inquiry Commands  
IV. Printing  

DAY 8  January 18, 2012
Reading Assignment: p 419, 431  
I. GRID  
II. SNAP  
III. Introduction to Xrefs  
IV. Inquiry Commands  

DAY 9  January 19, 2012
Reading Assignment: p 445-572  
I. Template Drawings  
II. Dimensioning  
III. Divide  
IV. Measure  
V. View  

DAY 10  January 24, 2012
Reading Assignment: Handouts, On-line Resources  
I. SketchUp  
II. Compatibility  
III. Functionality  

DAY 11  January 25, 2012
Reading Assignment: p 195-208  
I. Hyperlinks  
II. Portfolio Generation  
III. Productivity Tips  

DAY 12  January 26, 2012
Reading Assignment: p 1-46  
I. Review  
II. Summary  
III. Final Exam  

FINAL EXAMINATION    Thursday, January 26, 2012, 5:30 PM, Room H 220 -D
COMMUNITY COLLEGE OF BALTIMORE COUNTY
CATONSVILLE CAMPUS

COURSE DESCRIPTION

CADD 101 C45
CRN # 10106
WINTER 2012

CADD 101 -- 3 Credits - Introduction to basic two-dimensional drafting principles and practices utilizing Computer Aided Drafting/Design (CADD) techniques. Covers: CADD software structure and features, creation of CADD drawings using standard techniques, file maintenance, output and plotting. Uses AutoCAD software on microcomputers. Prerequisites: None

This course has no prerequisites and is taught on a Windows XP platform with AutoCAD 2008 software. The student will gain an understanding of the computer graphics workstation as a drafting tool. An introduction to Windows, computer hardware, engineering drawing and the historical background and applications of Computer Aided Design will also be covered. It is not unusual for some students to struggle at the beginning of this course. Be patient with yourself, work at a comfortable pace, ask questions and, most of all, relax. This should be a fun course.

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

1. Recognize and apply standard drafting principles in a CADD environment.
2. Develop working knowledge and skills to effectively and efficiently create drawings using AutoCAD.
3. Identify and explain the function and purpose of CADD system components.
4. Apply basic dimensioning procedures.
5. Plot CADD drawings at designated scales.
6. Utilize CADD as a precision drafting tool.
7. Explain industry CADD practices.
8. Describe the design process and responsibilities of design team members.
9. Proceed to advanced CADD course work.
10. Understand career opportunities in CADD.

Instructor: Tom Barrett
Phone: 443-840-4298 - W
410-788-3005 - H
E Mail tbarrett@ccbcmd.edu

DAYS Tuesday, Wednesday, Thursday
05:00 PM - 07:15 PM - Lecture H 220D
07:25 PM - 10:45 PM - Lab H 220D
Textbook: AutoCAD and its Applications – 2010 by Shumaker, Madsen

The Goodheart-Wilcox Company

Supplies: Flash Drive
3 Ring Binder (1”)
Portfolio Binder (1/2”)
AutoCAD software (optional)
   http://usa.autodesk.com/
SketchUp software (optional)
   http://sketchup.google.com/

Attendance: Students are expected to attend all class sessions. If you must miss a class, please contact me either through email or telephone. If I am not contacted before or immediately after missing a class, the absence will be considered unexcused and you will be responsible for obtaining any material distributed during that class. If a test is given during an excused absence, the grade will be pro-rated, if the absence is unexcused a “0%” will be assigned.

Academic Dishonesty: Students are expected to uphold the highest standards of integrity, honesty and ethical behavior. Conscious acts of deception in order to obtain and undeserved grade or the abetting of deception will not be tolerated.

Classroom Behavior: No audible beepers, headphones, or any other device that may interfere with the classroom instruction. Inappropriate or disruptive classroom or laboratory behavior is not tolerated by the college. Other than in exceptional circumstances, cell phones are to be turned off (or set to vibrate) during lab and lecture.

Cell Phones: Unless prior arrangements are made, cell phones must be turned off or set to vibrate. All calls must be taken outside the lab area. If an incoming call disrupts a lecture or lab, the student will be given a warning. On the next disruption, other sanctions will be enforced.

Snow Days: Call 410-455-4567 for inclement weather information or listen to the radio. Snow days will be made up on the following Friday.

Final Exam: January 26, 2012

GRADING CRITERIA

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>20</td>
</tr>
<tr>
<td>Participation</td>
<td>10</td>
</tr>
<tr>
<td>Final</td>
<td>20</td>
</tr>
<tr>
<td>Portfolio</td>
<td>50</td>
</tr>
</tbody>
</table>

Your portfolio will be graded as a packaged product. The instructor will grade the portfolio based on consistency, presentation and accuracy. A minimum of 10 plots is required. Of these, three must be properly dimensioned. All portfolios are January 26, 2011 by 10:45 PM. Corrections and improvements will be made on January 28, 2011.