BROWARD COMMUNITY COLLEGE
COURSE OUTLINE

LAST REVIEW: 2008-2009 *(i.e. 2003-2004)* **NEXT REVIEW:** 2013-2014 *(i.e. 2008-2009)* **STATUS:** A *(A, I, D)*

COURSE TITLE: Aircraft Drawings

COMMON COURSE NUMBER: AMT 0010

CREDIT HOURS: 1

CLOCK HOURS: 21 *(Voc. Course ONLY)*

CONTACT HOUR BREAKDOWN *(per 16 week term)*

Lecture: 12 Lab: 9

Clinic: Other:

PREREQISITE(S): None

COREQUISITE(S): None

PRE/COREQUISITE(S): None

COURSE DESCRIPTION *(750 characters, maximum)*: This course covers aircraft drawings, care and use of blueprints, isometrics, orthographic and auxiliary projection lines and sections, dimensions, limits, tolerances and allowances, geometric construction, practical layout work and identification of standard parts and materials, use of instruments, drawing and interpretation of free hand sketches of repairs and alterations, and use of various types of charts and graphs. Student fee charged.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): Area
General Education Requirements – Associate in Science Degree (AS), meets Area(s): Area
General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

1. Drawings, Symbols, and Schematic Diagrams
2. Sketches of Repairs and Alterations
3. Blueprint Information
4. Graphs and Charts

ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

1. **Quizzes, Test, and/or Final Exam (cumulative/comprehensive);**
2. **Selected faculty may assess homework, projects, class participation/attendance, and/or extra credit projects.**

Upon successful completion of this course, the students should be able to draw and interpret free hand sketches of repairs and alterations and use various types of charts and graphs.

****** Complete the following only if course is seeking general education status ******

GENERAL EDUCATION Competencies and Skills *:

Please highlight in green font all Competencies/Skills from the list below that apply to this course. In the box to the right of the Competency/Skill, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 5.12) that apply.

1. Read with critical comprehension	
2. Speak and listen effectively	
3. Write clearly and coherently	
4. Think creatively, logically, critically, and reflectively (analyze, synthesize, apply, and evaluate)	
5. **Demonstrate and apply literacy in its various forms:** *(highlight in green ALL that apply)* (1. technological, 2. informational, 3. mathematical, 4. scientific, 5. cultural, 6. historical, 7. aesthetic and/or 8. environmental)	
6. Apply problem solving techniques to real-world experiences	
7. Apply methods of scientific inquiry	
8. Demonstrate an understanding of the physical and biological environment and how it is impacted by human beings	
9. Demonstrate an understanding of and appreciation for human diversities and commonalities	
10. Collaborate with others to achieve common goals.	
11. Research, synthesize and produce original work	
12. Practice ethical behavior	
13. Demonstrate self-direction and self motivation	
14. Assume responsibility for and understand the impact of personal behaviors on self and society	
15. Contribute to the welfare of the community	

* *General Education Competencies and Skills endorsed by '05-'06 General Education Task Force*

Common Course Number: AMT 0010

UNITS

Unit 1 Drawings, Symbols, and Schematic Diagrams

General Outcome:

1.0 The student shall: The students should be able to use drawings, symbols and schematic diagrams.

Specific Measurable Learning Outcomes:
Upon successful completion of this unit, the student shall be able to:

1.1 Interpret the various types of lines employed in blueprints and schematics.

1.2 Use schematic diagrams to analyze system malfunctions.

1.3 Extract a specific electrical circuit from a system drawing.

1.4 Know why dimensions are used and how they are shown on aircraft drawings.

1.5 Use installation diagrams to locate and identify components.

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Unit 2 Sketches of Repairs and Alterations

General Outcome:

2.0 The student shall: The students should be able to draw sketches of repairs and alterations.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

2.1 Illustrate a major repair or alteration.

2.2 Use dividers, compass, ruler, T-square, etc., in the development of sketches of repairs and alterations.

2.3 Use standard drafting procedures.

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Unit 3 Blueprint Information

General Outcome:

3.0 The student shall: The students should be able to use blueprint information.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

3.1 Explain the information presented in blueprint title blocks.

3.2 Define the common symbols used on aircraft blueprints.

3.3 Install and modify component parts by reference to blueprints.

3.4 Identify the changes made to a blueprint.

Common Course Number: AMT 0010

Unit 4 Graphs and Charts

General Outcome:

4.0 The student shall: The students should be able to use graphs and charts.

Specific Measurable Learning Outcomes:
Upon successful completion of this unit, the student shall be able to:

4.1 Determine electric cable size and current-carrying capacity.

4.2 Determine engine power requirements.