COURSE OUTLINE

Course: 71311 ARCHITECTURAL DRAFTING **Total Course Hours:** 360.00

CBEDS Title: TECHNICAL DRAFTING **CBEDS #:** 5703

Job Title(s):
Architectural Drafter, Estimator, Architect

Prerequisites:

Course Description:
Architectural Drafting prepares students for a variety of careers related to the field of architecture. The student will be involved in creating the drawings required for the design and construction of residential or commercial buildings. Students will utilize both manual and CAD drafting techniques. Available software includes: AutoCad LT 2000i, 3D Home Architect Deluxe, ArcView GIS, Microsoft Word, Microsoft Power Point. Integrated throughout the course are academic and CTE standards, which include safety, communication, technology, ethics, career planning and other employability skills.

Hours	
Class	OJT

Occupational Competencies

1-7 on the Course Outline are generic to all BVROP courses and include the BVROP Student Outcomes

3.00		**1 ORIENTATION**

A Identifies and discusses course objectives and competencies.
B Discusses ROP Student Outcomes.
C Explains class attendance and behavior objectives.

3.00		**2 HEALTH, SAFETY AND ENVIRONMENTAL MANAGEMENT**

A Describes accident procedure.
B Demonstrates appropriate safety practices (e.g. bending, lifting, etc.).
C Demonstrates knowledge of classroom procedures and drills (e.g. earthquake, fire and emergency).

3.00		**3 ETHICS AND LEGAL RESPONSIBILITIES**

A Defines sexual harassment and discusses tactics for handling harassment situations.
B Applies appropriate workplace behavior and standards.

3.00		**4 LEADERSHIP AND TEAMWORK**

A Describes the characteristics and benefits of teamwork and leadership.
B Demonstrates ability to make appropriate decisions.
C Works well with others and gives/takes constructive criticism.

15.00		**5 CAREER PLANNING**

A Prepares a finished, professional portfolio showing the best work that has been completed during the class.
B Locates job opportunities through the use of want-ads and placement agencies.
C Visits at least one facility related to area of training and observes jobs performed.
D Completes a job application correctly.
E Prepares for and critiques a simulated employment interview.
F Discusses employee benefits and rights as related to the specific occupational job area including gender equity and equal opportunity.
G Identifies acceptable procedures to leave a job.
H Applies for a scholarship.
I Completes a professional resume.
J Demonstrates appropriate personal grooming and dress.

Hours	
Class	OJT

Class	OJT		
3.00		6	**COMMUNICATION**

A Uses effective workplace conversation.
B Reads and interprets written information and directions.
C Practices various forms of written communication appropriate to the occupation.

Class	OJT		
5.00		7	**STUDENT OUTCOMES**

A Demonstrates Occupational Specific, Communication and Critical Thinking Skills
B Demonstrates Responsible Work Ethics
C Demonstrates Career/Employment Literacy
D Demonstrates Effective Use of Technology

Class	OJT		
40.00		8	**INTRODUCTION**

A Demonstrates knowledge and use of supplies and equipment
B Demonstrates CAD lettering
C Demonstrates CAD line conventions
D Demonstrates CAD scale factors
E Defines technical math
F Applies knowledge of basic construction techniques and materials
G Demonstrates knowledge of Architectural Graphic Standards.
H Discusses current Building Codes.

Class	OJT		
25.00		9	**MANUAL DRAFTING TOOLS & EQUIPMENT**

A Demonstrates use of a Protractor.
B Demonstrates use of templates.
C Demonstrates use of scales.
D Demonstrates use of a Lettering Guide.
E Demonstrates use of Triangles.
F Demonstrates use of a Parallel Rule.
G Demonstrates use of an Eraser Shield
H Demonstrates use of a French Curve
I Applies appropriate Line Weights.

Class	OJT		
50.00		10	**COMPUTER AIDED DRAFTING (CAD)**

A Discusses computer hardware and peripherals.
B Ability to coordinate systems and software
C Demonstrates display controls.
D Demonstrates basic drawing entities.
E Demonstrates editing skills.
F Demonstrates dimensioning.
G Demonstrates symbols library creation and attributes.
H Demonstrates setting program variables.
I Applies appropriate Line Weights.

Class	OJT		
45.00		11	**WORKING DRAWINGS & CONVENTIONS**

A Demonstrates sketching.
B Demonstrates site plans.
C Demonstrates floor plans.
D Demonstrates electrical plans.
E Demonstrates foundation plans and details.
F Demonstrates roof/framing plans.
G Demonstrates framing sections and details.
H Demonstrates building sections.
I Demonstrates exterior elevations.
J Demonstrates Interior Elevations.
K Demonstrates Schedules.

Hours	
Class	OJT

Class	OJT	
45.00		**12 REPRODUCTION TECHNIQUES**

A Demonstrates procedure and techniques for Diazo.
B Demonstrates procedure and techniques for bond copies.
C Demonstrates procedure for printers/plotters.

Class	OJT	
30.00		**13 DIMENSIONING**

A Demonstrates architectural dimensioning standards.

Class	OJT	
45.00		**14 PRECISION MEASUREMENT**

A Demonstrates use of a protractor.
B Demonstrates use of architectural scale.
C Demonstrates use of engineering scale.

Class	OJT	
45.00		**15 PROBLEMS/ADVANCED PROBLEMS**

A Demonstrates knowledge of single story residence.
B Demonstrates knowledge of multi-story residence.
C Demonstrates and discusses perspectives - one and/or two point.

Additional Course Information

Articulation: This course articulates with Chaffey and Mt. San Antonio Colleges.

TOTAL HOURS

Class	OJT	Course
360.00	**0.00**	**360.00**