## COLLEGE OF THE DESERT

Course Code ARCH-011

### **Course Outline of Record**

- 1. Course Code: ARCH-011
- 2. a. Long Course Title: Architectural Blueprint Reading
  - b. Short Course Title: ARCH BLUEPRNT READNG
- 3. a. Catalog Course Description:

This course is a study of basic information for reading blueprints and construction drawings. It is designed for those who must assimilate information found in working drawings and specifications.

b. Class Schedule Course Description:

This course is a study of basic information for reading blueprints and construction drawings.

- c. Semester Cycle (if applicable): Fall
- d. Name of Approved Program(s):
  - ARCHITECTURAL TECHNOLOGY
- 4. Total Units: 3.00 Total Semester Hrs: 54.00 Lecture Units: 3 Semester Lecture Hrs: 54.00

Lab Units: 0 Semester Lab Hrs: 0

Class Size Maximum: 28 Allow Audit: Yes

Repeatability No Repeats Allowed

Justification 0

5. Prerequisite or Corequisite Courses or Advisories:

Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)

Advisory: DRA 001
Advisory: ENG 070

- 6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
  - a. Huth, Mark W. (2014). *Understanding Construction Drawing* (6th /e). Clifton Park, New York Delmar Cengage Learning. ISBN: 9781285061023

College Level: Yes

Flesch-Kincaid reading level: 12

- 7. Entrance Skills: *Before entering the course students must be able:* 
  - a. Employ basic vocabulary and style.
    - ENG 070 Develop and expand vocabulary.
    - ENG 070 Demonstrate the ability to generate, develop and organize ideas into a cohesive essay using multiple paragraphs.
    - ENG 070 Demonstrate through the writing process the ability to apply standard rules of grammar, punctuation and spelling in academic writing.
    - ENG 070 Introduce basic business writing [letter, resume, email etiquette].
  - b. Demonstrate the ability to participate in class discussions and assigned projects.
    - ENG 070 Improve editing and revision strategies both individually and in peer review.

C.

Read texts and respond in writing at the literate level.

- ENG 070 Comprehend and summarize readings.
- ENG 070 Read and identify main ideas and supporting details.
- ENG 070 Recognize and explain patterns of idea development in readings.

d.

Use specific drafting tools

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# ARCH 011-Architectural Blueprint Reading

- DRA 001 Apply basic mechanical and or architectural drafting skills and techniques.
- DRA 001 Demonstrate the ability to letter and draft in a clear and concise manner.

e.

Apply basic mechanical and or architectural drafting skills and techniques.

- DRA 001 Use specific drafting tools
- DRA 001 Identify terms and concepts used such as Plan, Section and Detail.
- DRA 001 Demonstrate the ability to letter and draft in a clear and concise manner.
- DRA 001 Define the meaning of basic symbols used in construction documents.

## 8. Course Content and Scope:

#### Lecture:

- a. General
- i. Abbreviation
- ii. Symbols
- iii. Definitions
- b. Basic Drawing
- i. Drafting techniques and methods
- ii. Site analysis and space adjacency
- iii. The process of conceptual design and graphic representation
- iv. Preliminary drawings
- v. Design development
- c. Codes and Agencies
- d. Construction Principles
- i. Foundation systems
- ii. Wall systems
- iii. Roof systems
- iv. Details
- e. Construction documents
- i. Site plan
- ii. Floor plans
- iii. Reflected Ceiling plan
- iv. Roof plan
- v. Elevations
- vi. Sections
- vii. Interior Elevations
- viii. Finish, door and window schedules
- ix. Structural drawings (foundation and framing plans)
- x. Electrical plan
- xi. Plumbing plan
- xii. Heating and ventilating plan

Lab: (if the "Lab Hours" is greater than zero this is required)

## 9. Course Student Learning Outcomes:

- 1. Recognize standards for the organization, coordination, and cross-referencing of a complete set of working drawings.
- 10. Course Objectives: *Upon completion of this course, students will be able to:* 
  - a. Demonstrate the ability to recognize the appropriate use of standard conventions and symbols used in the design professions.
  - b. Demonstrate the ability to draw appropriate solutions of assigned construction details.
  - c. Demonstrate the ability to use the in-class library resources to evaluate the appropriate response to construction details.
  - d. Demonstrate an understanding of a complete set of working drawings.
  - e. Understand and apply the process and sequence which is used to systematically represent 3-D structures in a 2-D format.

f. Demonstrate the ability to graphically represent construction details and sections by freehand sketching.

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# ARCH 011-Architectural Blueprint Reading

a. Discussion

11. Methods of Instruction: (Integration: Elements should validate parallel course outline elements)

b. Lecture
c. Participation
d. Technology-based instruction
12. Assignments: (List samples of specific activities/assignments students are expected to complete both in and outside of class.)
In Class Hours: 54.00
Outside Class Hours: 108.00
a. In-class Assignments
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b. Out-of-class Assignments
a. Workbook assignments: Through use of isometric sketching, the student is made aware of 3-D
visualization that is necessary to properly interpret construction drawings. Terminology and language
used in construction documents are stressed by using illustrations of construction types to cause the
student to associate correct terminology. b. Comprehension of reading assignments c. Successful
achievement in examinations as given in the course
13. Methods of Evaluating Student Progress: <i>The student will demonstrate proficiency by:</i>
• Written homework
<ul> <li>True/false/multiple choice examinations</li> <li>Mid-term and final evaluations</li> </ul>
• Student participation/contribution
Student participation/contribution
14. Methods of Evaluating: Additional Assesment Information:
15. Need/Purpose/Rationale All courses must meet one or more CCC missions.
PO - Career and Technical Education
Apply critical thinking skills to execute daily duties in their area of employment.
Apply critical thinking skills to research, evaluate, analyze, and synthesize information.
Exhibit effective written, oral communication and interpersonal skills.
IO - Personal and Professional Development
Value the feedback of others.
16 Commonable Transfer Course
16. Comparable Transfer Course
University System Campus Course Number Course Title Catalog Year
17. Special Materials and/or Equipment Required of Students:
Architectural Scale
18. Materials Fees: Required Material?
Material or Item Cost Per Unit Total Cost
19. Provide Reasons for the Substantial Modifications or New Course:
Periodic review (2-year)
a. Cross-Listed Course (Enter Course Code): N/A
b. Replacement Course (Enter original Course Code): N/A
21. Grading Method (choose one): Letter Grade Only

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# ARCH 011-Architectural Blueprint Reading

#### 22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000259545
- b. T.O.P. Code [CB03]: 20100.00 Architecture and Architec
- c. Credit Status [CB04]: D Credit Degree Applicable
- d. Course Transfer Status [CB05]: B = Transfer CSU
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Possibly Occupational
- g. Course Classification [CB11]: Y Credit Course
- h. Special Class Status [CB13]: N Not Special
- i. Course CAN Code [CB14]: N/A
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y Not Applicable
- 1. Funding Agency Category [CB23]: Y = Not Applicable
- m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (if program-applicable): ARCHITECTURAL TECHNOLOGY

Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)

23. Enrollment - Estimate Enrollment

First Year: 20 Third Year: 28

- 24. Resources Faculty Discipline and Other Qualifications:
  - a. Sufficient Faculty Resources: Yes
  - b. If No, list number of FTE needed to offer this course: N/A
- 25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (Explain:)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

28. Originator Donbert M. Bitanga Origination Date 02/13/15

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