

Principles of Architecture and Construction, Semester B

Course Overview

The Principles of Architecture and Construction Semester B course explains the use of computers, design concepts, and project management, as well as the safety, legal, and communication requirements in architecture and construction work. Principles of Architecture and Construction Semester B begins by describing basic computer hardware and software. In this course, you will create enhanced documents by using word processing software and explain the options for creating and managing spreadsheets. This course also covers the key concepts of urban design and its relationship with city government. Finally, you will learn about construction documents and standards.

Course Goals

This course will help you meet the following goals:

- Identify basic hardware configurations and software used in computers.
- Explain various methods to search for and exchange information over the Internet.
- Explain the fundamental concepts of word processing software, spreadsheets, and databases.
- Identify careers and concepts in urban design and sustainable green design.
- Describe the stages in creating a built environment.
- Explain the importance of time, task, and resource management skills at the workplace.
- Explain the importance of diversity awareness and conflict-resolution skills to avoid interpersonal and workplace issues.
- Identify safety requirements and regulations in architecture and construction.

- Explain the importance of communication and public relations in the architecture and construction industry.

General Skills

To participate in this course, you should be able to do the following:

- Complete basic operations with word-processing software such as Microsoft Word or Google Docs.
- Perform online research using various search engines and library databases.
- Communicate through email and participate in discussion boards.

For a complete list of the general skills required for participation in online courses, refer to the Prerequisites section of the Plato Student Orientation document, found at the beginning of this course.

Credit Value

PLATO Course Principles of Architecture and Construction, Semester B is a 0.5-credit course.

Course Materials

- notebook
- computer with an Internet connection and speakers or headphones
- Microsoft Word or equivalent
- Microsoft Excel or equivalent

Course Pacing Guide

This course description and pacing guide is intended to help you stay on schedule with your work. Note that your course instructor may modify the schedule to meet the specific needs of your class.

Unit 1: Use of Computers

Summary

In this unit, you will explain basic hardware and software used in computers. You will also describe the ways to communicate over the Internet. In addition, you will explain how to work with documents, spreadsheets, and databases.

Day	Activity/Objective	Type
1 day: 1	Syllabus and Plato Student Orientation <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
4 days: 2–5	Computer Hardware and Software <i>Describe basic hardware and software requirements in business organizations.</i>	Lesson
5 days: 6–10	Searching and Exchanging Information Using the Internet <i>Explain various methods of searching for and exchanging information over the Internet.</i>	Lesson
4 days: 11–14	Working with Documents <i>Create documents using word processing software.</i>	Lesson
4 days: 15–18	Working with Spreadsheets <i>Explain the options for creating and managing spreadsheets.</i>	Lesson
4 days: 19–22	Working with Databases <i>Explain the fundamental concepts of a database.</i>	Lesson
1 day: 23	Thwack-A-Mole	Game
4 days: 24–27	Unit Activity/ Threaded Discussion —Unit 1	Unit Activity

Day	Activity/ <i>Objective</i>	Type
1 day: 28	Posttest—Unit 1	Assessment

Unit 2: Design Concepts

Summary

In this unit, you will identify the careers and concepts related to urban, sustainable, and green design. You will also explain the stages involved in creating a built environment.

Day	Activity/Objective	Type
5 days: 29–33	Urban Design and City Government <i>Explain the key concepts of urban design and its relationship with city government.</i>	Lesson
4 days: 34–37	Sustainability and Green Design <i>Describe sustainable and environment-friendly techniques in construction.</i>	Lesson
5 days: 38–42	Creating a Build Environment <i>Describe the stages in creating a built environment.</i>	Lesson
1 day: 43	Space Jumble	Game
4 days: 44–47	Unit Activity/Threaded Discussion—Unit 2	Unit Activity
1 day: 48	Posttest—Unit 2	Assessment

Unit 3: Managing a Construction Project

Summary

In this unit, you will describe the common documents in architecture and construction. You will also explain time, task, and resource management skills required in architecture and construction work. In addition, you will explain the importance of diversity awareness and conflict resolution techniques to avoid interpersonal and workplace issues.

Day	Activity/Objective	Type
4 days: 49–52	Contract Documents <i>Explain construction documents and standards.</i>	Lesson
4 days: 53–56	Time, Task, and Resource Management <i>Explain the time, task, and resource management skills needed to be productive at the workplace.</i>	Lesson
4 days: 57–60	Diversity Awareness <i>Explain methods to reduce challenges when interacting with people from diverse backgrounds in a workplace.</i>	Lesson
4 days: 61–64	Conflict Resolution <i>Explain how to use conflict-resolution skills to avoid interpersonal and workplace issues.</i>	Lesson
1 day: 65	Para Jumble	Game
4 days: 66–69	Unit Activity/Threaded Discussion—Unit 3	Unit Activity
1 day: 70	Posttest—Unit 3	Assessment

Unit 4: Safety and Legal Requirements and Communication

Summary

In this unit, you will identify the safety and legal requirements practiced in architecture and construction. You will also explain the communication and public relations skills required in the architecture and construction industry.

Day	Activity/Objective	Type
4 days: 71–74	Safety Requirements and Regulations <i>Explain safety requirements and regulations in architecture and construction.</i>	Lesson
4 days: 75–78	Legal Requirements <i>Explain legal requirements associated with architecture and construction projects.</i>	Lesson
4 days: 79–82	Communication Skills <i>Explain the importance of communication and public relations in the architecture and construction industry.</i>	Lesson
1 day: 83	Space Jumble	Game
4 days: 84–87	Unit Activity/Threaded Discussion—Unit 4	Unit Activity
1 day: 88	Posttest—Unit 4	Assessment
1 day: 89	Semester Review	
1 day: 90	End-of-Semester Test	Assessment