

## Syllabus

# Introduction to Android Mobile App Development

## Course Overview

This one-semester course is intended to familiarize you with the knowledge and skills required for a career in Android mobile app development. This course has 12 lessons and 5 Course Activities. Each lesson contains one or more Lesson Activities.

In Introduction to Android Mobile App Development, you will learn about the history of and upcoming trends in mobile app development. You will explore career options in mobile app development, and describe the skills and training required for mobile app development. You will also describe various platforms to develop Android mobile apps. Further, you will learn about the Android development environment. Finally, you will create the user interface of an app and make it interactive in Android Studio.

Your teacher will grade your work on the Course Activities, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Course Activities (submitted to the teacher) and the Lesson Activities (self-checked) are major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson and an end-of-semester test. All these tests are a combination of simple multiple-choice questions and technology-enhanced (TE) questions.

## Course Goals

By the end of this course, you will be able to do the following:

- Describe the history of and upcoming trends in mobile app development.
- Describe career options in mobile app development, and the skills and training required for this field.
- Describe the types of apps available in the mobile app market.
- Describe how to start a mobile app development company.
- Describe various platforms for developing Android mobile apps.
- Describe the steps to develop a successful mobile app.
- Design an Android app using design principles.
- Explain the Android development environment.

- Create a new project in Android Studio.
- Create a user interface that supports multiple screens.
- Create an interactive app.

## **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
- complete basic operations with presentation software, such as Microsoft PowerPoint or Google Docs presentation
- perform online research using various search engines and library databases
- communicate through email and participate in discussion boards

*For a complete list of general skills that are 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**

Introduction to Android Mobile App Development is a 0.5-credit course.

## **Course Materials**

- computer with Internet connection and speakers or headphones
- printer
- Microsoft Word or equivalent
- Windows, Mac, or Linux operating systems with Android Studio IDE v2.1

## Course Pacing Guide

This course description and pacing guide is intended to help you keep on schedule with your work. Note that your course instructor may modify the schedule to meet the specific needs of your class. For Course Activities, you can research online.

### Introduction to Android Mobile App Development

#### Summary

In this course, you will describe the history of and upcoming trends in mobile app development. You will explore career options in mobile app development, and describe the skills and training required for mobile app development. You will also describe how to start a mobile app development company. Further, you will describe various platforms to develop Android mobile apps. Finally, you will create the user interface of an app and make it interactive in Android Studio.

Day	Activity/Objective	Type
1 day: 1	<b>Syllabus and Plato Student Orientation</b> <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
4 days: 2–5	<b>Mobile App Development–History and Trends</b> <i>Describe the history of and upcoming trends in mobile app development.</i>	Lesson
4 days: 6–9	<b>Careers and Skills</b> <i>Explore career options in mobile app development, and describe the skills required for mobile app development.</i>	Lesson
4 days: 10–13	<b>Training</b> <i>Describe the training required for mobile app development.</i>	Lesson
4 days: 14–17	<b>Course Activity 1</b>	Course Activity
1 day: 18	<b>Course Discussion 1</b>	Course Discussion

<b>Day</b>	<b>Activity/Objective</b>	<b>Type</b>
1 day: 19	<b>Para Jumble</b>	Game
4 days: 20–23	<b>Types of Apps</b> <i>Describe the types of apps available in the market.</i>	Lesson
4 days: 24–27	<b>Course Activity 2</b>	Course Activity
4 days: 28–31	<b>Entrepreneurship</b> <i>Describe how to start a mobile app development company.</i>	Lesson
4 days: 32–35	<b>Course Activity 3</b>	Course Activity
1 day: 36	<b>Space Jumble</b>	Game
1 day: 37	<b>Course Discussion 2</b>	Course Discussion
5 days: 38–42	<b>Platforms for Developing Apps</b> <i>Explore various platforms for developing Android mobile apps.</i>	Lesson
5 days: 43–47	<b>Mobile App Development Steps</b> <i>Describe the steps to develop a successful mobile app.</i>	Lesson
1 day: 48	<b>Para Jumble</b>	Game
1 day: 49	<b>Course Discussion 3</b>	Course Discussion
5 days: 50–54	<b>Design Guidelines</b> <i>Design an Android app using design principles.</i>	Lesson

Day	Activity/Objective	Type
5 days: 55–59	<b>Course Activity 4</b>	Course Activity
5 days: 60–64	<b>Introduction to Android</b> <i>Explore the Android development environment.</i>	Lesson
1 day: 65	<b>Thwack-A-Mole</b>	Game
1 day: 65	<b>Course Discussion 4</b>	Course Discussion
5 days: 67–71	<b>Creating a New Project</b> <i>Create a new project in Android Studio.</i>	Lesson
5 days: 72–76	<b>Creating a User Interface (UI)</b> <i>Create a user interface that supports multiple screens.</i>	Lesson
5 days: 77–81	<b>Making an App Interactive</b> <i>Create an interactive app.</i>	Lesson
5 days: 82–86	<b>Course Activity 5</b>	Course Activity
1 day: 87	<b>Course Discussion 5</b>	Course Discussion
1 day: 88	<b>Thwack-A-Mole</b>	Game
1 day: 89	<b>Course Review</b>	
1 day: 90	<b>End-of-Semester Exam</b>	Assessment