Introduction to ArcGIS® Pro for GIS Professionals

STUDENT EDITION
Course introduction

Introduction
Course goals
Additional resources
Installing the course data
Icons used in this workbook
Understanding the ArcGIS Platform

1 Getting started with ArcGIS Pro

Lesson introduction
Features of the ArcGIS Pro environment
Exercise 1: Navigate the ArcGIS Pro interface
   - Training Services account credentials
   - Sign in to ArcGIS Pro
   - Create a new blank project
   - Add a map and set project properties
   - Navigate a map
   - Modify layer symbology
   - Perform basic mapping tasks
   - Select features
ArcGIS Pro and the ArcGIS platform
ArcGIS Pro structure
Lesson review

2 Sharing maps, layers, and processes

Lesson introduction
Sharing with ArcGIS Pro
Packaging your work
Sharing on the web
Methods of sharing
Choose the correct sharing method
Exercise 2A: Package GIS layers
   - Create a layer file
   - Create a layer package
   - Create a web layer
Tasks
Sharing processes using tasks
Exercise 2B: Create a task and a project package
   - Create a task item
   - Create a task
   - Add a step to import a map
   - Record steps for your task
   - Test your task
   - Share your task
3 Editing data

Lesson introduction
Designing a schema
Domains and subtypes
Exercise 3A: Edit schemas using ArcGIS Pro
   Create a feature class
   Apply a domain to a new field
   Create subtypes
Editing features and attributes
Editing basics and group feature templates
Exercise 3B: Edit features and attributes
   Edit the Streams layer
   Create a new temporary fence using measurements
   Update attributes for the new fence
   Create a new fence by tracing
   Calculate a field
   Digitize a lake polygon
Lesson review

4 Displaying data

Lesson introduction
Symbolizing vector data
The functionality of vector symbology
Exercise 4A: Use ArcGIS Pro to visualize vector data
   Start a project and add layers
   Work with effects on the block groups layer
   Symbolize block groups using graduated colors
   Modify symbology for earthquakes
   Set scale-based symbol size for earthquakes
   Modify symbology for faults
   Set display scale ranges on layers
   Label features
   Create label classes
Symbolizing raster data
Functions and geoprocessing tools
The functionality of raster symbology
Exercise 4B: Symbolize raster data using ArcGIS Pro
   Modify raster symbology
   Apply raster functions to modify display
   Create a function chain
   Interpolate surfaces to visualize point data
5 Working with 3D data

Lesson introduction
Why use 3D?
Local and global scenes
Creating and displaying 3D data
Three-dimensional analysis
Creating 3D cities
Use rule package to create features
Extruding features
Exercise 5: Visualize data in 3D
  Open a map file
  Convert a map to a scene and set elevation source
  Symbolize the damaged buildings in 3D
  Display earthquakes in 3D

Lesson review

6 Performing analysis

Lesson introduction
Common types of spatial analysis
Performing analysis
Analysis environments
Analysis in ArcGIS Pro
Exercise 6: Analyze storm surge data
  Add a layer package from ArcGIS Online
  Extract features in your area of interest
  Identify schools in storm surge
  Locate potential emergency shelters
  Create a web map
  Build and run a model

Lesson review

7 Creating map layouts

Lesson introduction
Map layouts
Creating layouts
Exercise 7: Create a map layout
  Set up a layout page
  Add a 2D map to a layout
  Add a 3D scene to a layout
  Add map elements to a layout page
  Share the layout
Add new layouts to a project
Lesson review

Appendixes
Appendix A: Esri data license agreement
Appendix B: Answers to lesson review questions
  Lesson 1: Getting started with ArcGIS Pro
  Lesson 2: Sharing maps, layers, and processes
  Lesson 3: Editing data
  Lesson 4: Displaying data
  Lesson 5: Working with 3D data
  Lesson 6: Performing analysis
  Lesson 7: Creating map layouts