

ITCO-620 Object-Oriented Applications
Unit 3 Paper Assignment Option

This document details the option to write a paper for the Unit 3 “Individual Project” assignment instead of the posted course assignment. The grading rubric for this assignment is on the last page of this document.

Preparation

To complete this assignment, refer back to the Unit’s assigned readings and conduct additional research via the AIU Library and other sources as needed.

As evident in the grading rubric, you will be required to demonstrate critical thinking in your paper.

Deliverable

Create a 4–6-page MS Word document following APA guidelines (first person should not be used). Write this document for a technical audience.

Research the four primary concepts of object-oriented programming. For each concept, provide a description, benefits, disadvantages, examples where it would be used, and security-related issue(s).

1. **Abstraction**
2. **Encapsulation**
3. **Inheritance**
4. **Polymorphism**

Format your MS Word document as follows:

1. Cover Page (does not count towards the page length requirement)
2. Abstraction
 - a. Description
 - b. Benefits
 - c. Disadvantages
 - d. Example Uses
 - e. Security
3. Encapsulation
 - a. Description
 - b. Benefits
 - c. Disadvantages
 - d. Example Uses
 - e. Security
4. Inheritance

- a. Description
 - b. Benefits
 - c. Disadvantages
 - d. Example Uses
 - e. Security
5. Polymorphism
- a. Description
 - b. Benefits
 - c. Disadvantages
 - d. Example Uses
 - e. Security
6. Reference Page (does not count towards the page length requirement)

Save your document with the course, assignment, and your name (e.g., ITCO-620-
_Unit3_IP_Neo_Anderson.docx). Submit your document for grading. Refer to the grading rubric
for criteria your instructor will use to grade your submission.

Grading Rubric – Unit 3 IP (Paper)

Criteria	Meets Standard	Possible Points
Abstraction	Includes an extensive description and analysis.	15
Encapsulation	Includes an extensive description and analysis.	15
Inheritance	Includes an extensive description and analysis.	15
Polymorphism	Includes an extensive description and analysis.	15
Critical Thinking	Assignment demonstrates critical thinking in one or more of the following ways: <ul style="list-style-type: none">• Demonstrate justified positions• Generating original thought• Conclusions based on analysis• Evaluation of key concepts• Synthesis of ideas• Or other higher order thinking skills	35
APA	Title and reference pages are included. Paper, citations, reference pages, and sources are formatted in current APA style (0-1 errors). Body of paper is 4-6 pages.	15
Grammar, Spelling, and Mechanics	Correct grammar, spelling, and mechanics are used throughout the assignment. There are 0-1 errors in grammar or spelling that distract the reader from the content.	15
Total		125