SAN JUAN COLLEGE
Success Matters

COSC 270-WINDOWS GUI PROGRAMMING 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Designing application programs for the Windows Graphical User Interface (GUI). A modern object-oriented language with good GUI capabilities is used. Students will work in teams on a large GUI application program.

Prerequisites: COSC 262

Semester Offered: Spring

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in…

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to…

1. Understanding the advantages of object-oriented design techniques.
2. Appreciating and using encapsulation.
3. Mastering and using abstraction.
4. Confirming and using inheritance.

5. Appreciating the concept of code reusability and putting it to work through classes.
6. Analyzing the system requirements and define the important objects.
7. Classifying the system objects into a hierarchy.
8. Selecting the attributes of the objects at each level of the hierarchy.
9. Determining the method designs for each object at each level.
10. Implementing the design in a given object-oriented language.
11. Understanding and implementing MFC Windows programs.
12. Appreciating and understanding the concepts of event driven programming.
13. Recognizing and using message handlers and message maps.
14. Understanding and implementing drawing in a window.
15. Understanding and implementing the mouse and the keyboard
16. Utilizing and implementing menus.
17. Identifying and implementing dialog boxes.
18. Interpreting and implementing timers and idle procedures.
19. Implementing and understanding controls.
20. Describing and understanding documents and views.
21. Understanding and implementing multiple documents/multiple views programs.
22. Identifying database connectivity and MFC.
23. Participating in programming teams in software development.
24. Understanding the organization of programming teams.
25. Explaining the management of programming teams.
26. Being aware of the role of individual participants on programming teams.
27. Understanding module development and testing in a team environment.
28. Developing potentially saleable Windows software.
29. Identifying the social responsibilities of the computing professional and the impact computing has on society.