

COURSE INFORMATION SHEET

Note: If a more detailed, instructor/section-specific course information sheet is required, please contact the department.

DEPARTMENT:

Business Administration/Economics

COURSE:

CIS200 Programming for Information Systems

COURSE DESCRIPTION:

This is a first course in object-oriented programming for the computer information systems student. Emphasis will be placed on problem analysis, documentation, and developing a program to meet given specifications. Topics include: classes and objects, properties and methods, variables, user-defined constants, explicit data type conversions, input validation and exception handling, calculations, sequence, selection, and repetition control structures, built-in and user-defined procedures with parameter passing, one-dimensional arrays, collections, sequential file processing, and database processing. Students will complete several coding assignments during class and lab to reinforce and apply concepts. Major programming projects will be assigned to be completed outside of lab and class. Three class hours. Two lab hours. 4 Credits.

COURSE PREREQUISITES:

CIS 100 or CPT 114, either with a grade of C or higher

COURSE LEARNING OUTCOMES:

- 1. Interpret user specifications to develop an algorithm for a working program design.
- Convert an algorithm expressed in pseudo code or flowchart form into a working program.
- 3. Code a modular computer program using an object-oriented programming language.
- 4. Code an event driven program using an object-oriented programming language.
- 5. Trace and test code to determine errors and debug a computer program.
- 6. Code a program applying built-in functions.
- 7. Code a program referencing class methods and properties.
- 8. Develop user-defined sub-procedures and functions.
- 9. Process data stored in a one-dimensional array.
- 10. Process data in a sequential file.
- 11. Write internal comments to thoroughly document a computer program.