



Curriculum Description for St. Francis Baccalaureate

Programming I (CPTR212) Syllabus

Course Description: Fundamental stages of software design and development; problem specifications; algorithm theory; program design standards; implementation techniques and documentation forms are demonstrated and practiced. The actual programming language may vary with the environmental expectations. Credit: 3 hours.

Course Objective: This course is designed to provide the student with an introduction to computer programming and how it relates to Computer Science as a field of study. The vehicle for these goals will be the C++ programming language and the object oriented paradigm. Students will develop a fairly comprehensive understanding of the C++ programming language, as well as experience an introduction to the application of programming to the task of solving problems. A hands-on approach is taken, and the student is expected to complete all assignments in a timely fashion. Most assignments consist of writing code fragments and complete programs; there will be a fair amount of work to be done at the keyboard.

Learning to program computers in a new language is like learning to play a musical instrument – if you practice, you get better. The programs and hands-on assignments are designed to give you “practice time.” Any extra work you decide to put in will benefit you proportionately and extra credit work will be considered on a case-by-case basis.

Materials: C++: *An Introduction to Computing (Adams et al)*
Thinking in C++, Eckel

Course Format: This course will be delivered in a hybrid format. We will have once a week meetings from 1-3 hours. There will also be an online component for discussion questions, forums, code sharing, and various other activities. Depending on how successful the online component is we will be able to have shorter or less face-to-face meetings. More details will follow.

Academic Integrity: The instructor reserves the right to withhold an assignment if he/she has reasonable doubt as to its originality or authorship.

Absences: Assignments and tests missed due to unexcused absences may not be made up, and will be recorded as a zero grade.

Arriving late to class or leaving early from class constitutes an absence. The nature of this class is such that over 1/2 of your grade is based on in-class work (see “Grading” components.) Your attendance is important primarily for your own success, but remember there is a secondary benefit to your input during class, as it may be instrumental to someone else’s comprehension of the material.

Timelines: Late work is assessed a 10% penalty for each calendar day the assignment is overdue. Special considerations such as school-related activities, medical necessities, etc should be discussed with the instructor as far in advance as possible.

Assignment and Grading: You will be assigned several tasks to be completed on a computer during this semester. Occasionally you will be asked to turn in via website by the time of class on the day the assignment is due.

Grades will be determined using the following percentages:

Individual Programming Projects	50%
Group Projects	15%
Tests and Quizzes	15%
Participation	20%

<u>Grading</u>	
≥ 90	A
80 - 89	B
70 - 79	C
60 - 69	D
Below 60	F

The instructor reserves the right to change this syllabus as the semester progresses.