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Course Information

Course Title:	Introduction to Problem Solving & Computer Programming
Course Number:	CIS 1111
Credit Hours:	3
Lab Hours:	none
Prerequisite(s):	MAT 1270
Course Description:	Introduction to problem solving techniques used in programming. Students learn to develop C++ programs using expressions, loops, files, functions, and one dimensional arrays.
Required Text:	*Starting Out With C++ From Control Structures Through Objects*, by Tony Gaddis, Haywood Community College, (c) 2015 by Peason Education, ISBN-13: 978-0-13-376939-5 and access to My Programming Lab
Required Materials:	flash drive
Technical Requirements:	For additional information go to the Technical Help Page under **Resources** tab.

Faculty Information

Instructor:	Martha Taylor
Department:	Computer Information Sysytems (CIS)
Course Email:	Please use ANGEL Email.
Emergency Email:	martha.taylor@sinclair.edu
Phone:	937.512.3143
Office Location:	5111B
Office Hours (campus):	See announcements
Office Hours (online):	By appointment

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Course Outcomes

General Education Outcomes:

- Critical Thinking/Problem Solving Competency
  - Articulate ideas or problems
  - Organize observable data into useful formats
  - Use appropriate problem solving methods

Course Outcomes:

- Apply the various controls used in Object Oriented Programming. Use constants, variables and expressions for writing code.
- Identify the steps of input, processing, & output for problem solving. Create documentation for the problem solving process and analyze output.
- Create algorithms, flow charts, and pseudocode that use the basic structures of sequence, selection and iteration. Analyze and debug output.

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Course Requirements

Outline:

WEEK	TOPICS	CHAPTERS
1	Introduction to the Course	Chapter 1 (pages 1-7)
2	Introduction to Programming	Chapter 1 (pages 8-24)
3	Parts of a C++ Program	Chapter 2 (pages 27-60)
4	Programming Math Formulas	Chapter 2 (pages 61-76)
5	Expressions	Chapter 3 (pages 83-124)
6	Interactivity	Chapter 3 (pages 124-135)
7	Making Decisions	Chapter 4 (pages 149-188)
8	Relational Operators	Chapter 4 (pages 189-214)
9	Midterm Project and Midterm Exam	Chapters 1-4
10	Loops	Chapter 5 (pages 227-260)
11	Files	Chapter 5 (pages 261-288)
12	Functions	Chapter 6 (pages 299-323)
13	More Functions	Chapter 6 (pages 324-362)
14	One Dimensional Arrays	Chapter 7 (pages 375-407)
15	Career Exploration, Assign Final Project	Chapters 1-7
16	Final Project due, Final Exam	Chapters 1-7

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Grading Information

Grading Policy:

ASSIGNMENT	POINTS
Discussion Forums (4 @ 10 points each)	40
Assignments (16 @ 20 points each)	320
My Programming Lab Homework (7 @ 10 points each)	70
Quizzes (7 @ 10 points each)	70
Midterm Project	100
Midterm Exam	100
Final Project	100

Final Exam	100
Participation and Attendance	90
Total Points	990

GRADING SCALE	POINTS
A	90% +
B	80%-89%
C	70%-79%
D	60%-69%
F	-59%

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Course Policies

Attendance/Participation Policy:
Online courses are considered to begin on the first day of the semester. In order to show attendance/participation in this course, students are expected to login to the course every week and complete each week's activities by Sunday, 11:59 pm ET. Each week in an online course ends on a Sunday. In order to show attendance/participation in this course, students are expected to login to the course more than once each week and to complete each week's activities by the due dates specified on the **When Assignments Are Due** page.

Late Policy:
There is a late homework penalty of 10% per day, for a maximum of three days. After three days late, an assignment will be given a grade of "0" (zero).

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Testing Information

All tests in this course will be given online, through the ANGEL course website. There is no requirement to come to campus.

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Sinclair Policies

Sinclair Academic Policies:
Click the link below to view policies such as dropping a course, withdrawing from college, late registrations, change of schedule, administrative withdrawal, grades, student behavior guidelines, safety and security, academic and other counseling. Understanding these policies is the responsibility of every student.

Important Sinclair Policies

Sinclair Semester Dates:
Click the link below to view important semester dates such as registration deadlines,

payment deadlines, start and end dates for the semester as well as the last day to withdraw with a refund and the last day that withdrawal is allowed.

Sinclair Semester Dates

Sinclair Honor Code and Academic Integrity Policy:

Sinclair Honor Code and Academic Integrity Policy

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