CIS 110 Homework Guidelines

Homework exercises are an important component of CIS 110. Regular homework helps students develop competency in skills that are critical to the course outcomes:

- Demonstrate use of modular and structured flowchart and pseudocode techniques in the design of computer program solutions.
- Understand the elements of a computer program including input and output, sequence, selection, and repetition.
- Be able to formulate a design for programs involving sequential file processing, array processing or event-driven programming.
- Demonstrate an understanding of the logic of programming by using programming design tools to specify the logic for moderately complex programs.

Homework should be assessed and included as part of the course grade. Five or more weekly homework exercises should be assigned and count a minimum of 30% of the course grade.

Require that students **show all work** for all homework solutions. One of the primary learning outcomes for the course is programming logic; students need to learn how to document their logical thought processes.

If there are any other standards you want to establish for how homework is completed, explicitly state them on the class syllabus. Some homework guidelines you might want to establish include:

- Late papers: what makes a paper late and what the penalty is
- Using a flowcharting template: required or optional
- Using software for design: software recommendations

Most students like to go over all the answers to the homework during class. One suggestion is to have students volunteer as part of their class participation grade to put answers on the board, and then get the whole class involved in class discussion about right/wrong answers or perhaps what makes one answer better than another. As the problems get progressively more difficult, I like to change this format somewhat by using teams of 3 people to review the solution for one problem as a group and then put the best answer on the board. Different "teams" are assigned to different problems. If a problem is particularly difficult, I may have more than one team working on it and show all answers they come up with. This also works well for problems with "lengthy" answers; the group can work together to present the whole solution and save class time. I keep track of all class/team participation on the class attendance sheet for that day.

Here are some suggested homework problems to assign. Feel free to choose your own from the text. I often change them from quarter to quarter.

All solutions can be found on the Instructor Resource CD that comes with the text. NOTE: you may have trouble **printing** some of the solutions from the Instructor Resource CD. I have experienced "not enough memory" errors when printing Print Chart

and/or Hierarchy Chart solutions. If anyone knows how to resolve this, contact mailto:Linda.Denney@sinclair.edu

Homework	Exercises
Chapter 1	page 14:8; page 29:2; page 30: 3d thru 3j, 4a, 5b Note: there is an assignment on flowcharting in the Instructor Manual for Chapter 1 that you might want to use.
Chapter 2	page 46:1; page 47:2; page 58: 1a and 1b; page 59: 1c
Chapter 3	page 75: 1; page 76: 2 & 3; page 89: 3a & 3b; page 90: 4b & 4e
Chapter 4	page 101: 2; page 111: 2a
Chapter 5	page 130: 1C thru 1H; pages 145-146: 1C, 1D, 1E; page 146: 2a
Chapter 6	page 160: 1 & 2; page 173: 1a
Chapter 8	page 222: 3; page 237: 2
Chapter 9	page 259: 2
Chapter 13	page 386: 1 Note: there is an assignment on Event-driven/GUI design in the Instructor Manual for Chapter 13 that you might want to use.