

# Module Learning Guide

## Data Structures

This is a general learning guide for all the modules except the ones with programming assignments. They have a separate learning guide below. The Learning guides are intended to help you stay on top of the course in an organized manner, and to serve as a checklist each week.

- Begin the module by viewing the Introduction video, if there is one.
- Review the Discussion Prompt Questions for the Module.
- Continue by skimming the assigned chapters of the textbook.
- Jot down responses to the Discussion Prompt Questions as you go through the text.
- Review the Homework assignment, if any, to see if you need to ask clarification questions.
- Attend the first Office Hour for clarification on Homework, labs, or content, Thursday 9 pm. This Office Hour will include a walkthrough the assigned Homework.
- Use the posted solution, available after midnight of Day 2 of the module, to figure out what you did wrong on the homework of the last module and try to correct it.
- View the various content videos in the Lectures folder
- Start posting to the discussion forum.
- Jot down responses to the Discussion Prompt Questions as you go through the video.
- Go back to read the relevant chapters in depth.
- Work on the next programming assignment, as time is available
- Please post any questions to the appropriate thread in the Content Questions forum in the Discussions section of the course website.
- Review the Vocabulary list for the module and make sure you know the terms and meanings.
- Take notes throughout the week for questions you may need to ask during Office hours.
- Continue to post to the discussion question for this module.
- Attend Office Hours at Sunday 8 pm.
- Continue to post to the discussion question for this module. Goal: post on 3+ different days.
- Attend Office Hours at Monday 9 pm.
- Continue to post to the discussion question for this module.
- Complete the quiz or quizzes, if you have not yet done so.
- Post four times or more total to the discussion question for this module by Tuesday midnight.
- Complete this module by submitting the homework, prompts, zyBook, quizzes, or programming assignment by Tuesday midnight.

This is a general learning guide for the modules with programming assignments.

- Work out your program design on paper fully.
- Debug your logic fully on paper before using your IDE.
- Adopt either a top-down or bottom-up style of implementation and stick to it.
- Plan your input cases to fully exercise the required aspects of the program and your additional features. Be sure to test boundary cases. Attend the first Office Hour for clarification on the current lab, Thursday 9 pm.
- Use the posted solution, available in the last module after midnight of Day 2 of the new module, to figure out what you did wrong on the homework of the last module and try to correct it. Look under the Homework and Labs Link in the left menu



- Work on the next programming assignment, as time is available
- Please post any questions to the appropriate thread in the Content Questions forum in the Discussions section of the course website.
- Take notes throughout the week for questions you may need to ask during Office hours.
- Attend Office Hours at Sunday 8 pm.
- Attend Office Hours at Monday 9 pm.
- Write your analysis.
- Make sure you have documented your code with a functional description at the start of each module and also for each class or method. Add in line comments that describe functionality or explain the why of line of code. There is no value in simply writing the English equivalent of the code as a comment.
- Review the Programming Assignment handout to make sure you have not missed anything.
- Review the Programming Assignment guidelines to make sure you have met all requirements.
- Complete this module by submitting the programming assignment by Tuesday midnight.

