Study Tips for COP 4530

Ashok Srinivasan

Computer Science, Florida State University

Aim: To suggest learning techniques that will help you do well in this course

Solution:

- Take responsibility for your learning
- Work hard
- Work smart
- Get help

Additional sources of information

- Study skills workshop at FSU's Adult Learning Evaluation Center
    - http://www.epls.fsu.edu/alec/studySkills.htm

What to do in class

- Arrive a few minutes early
  - Review previous lecture notes for a couple of minutes
  - Talk to your classmates and let them know what a smart and nice person you are
    - They may help you get a job later in life!
- Sit in the front
- Take notes
  - Make only a brief note of things from the book
  - Take detailed notes when I ask you to
  - Underline points I mention as important
  - Write down any question I say I might ask in the exam
  - Leave space for adding additional information
- Ask questions on things you don't understand

What to do after class

- Review the lecture material for a few minutes immediately after class
  - It can even be while you are waiting for your next class to start
- Later, the same day
  - Read the learning objectives for the lecture
  - Check if you meet those objectives
  - Read your lecture notes thoroughly
  - Answer as many review questions as you can
  - Read from the textbook
  - Answer more review questions
  - Make a summary of the lecture material
  - Write down some potential questions you think that I can ask

What to do after class

- Later
  - Discuss your answers with your study group
  - Seek clarifications on the discussion board or from me
  - Post solutions on the discussion board, when appropriate
  - Practice programming some of the algorithms or data structures that you learned
  - Help others, if you can
    - Example: Answer others' questions on the discussion board
  - Think of real-life situations where your learning can be applied
  - Use google to find additional information

Class participation grades
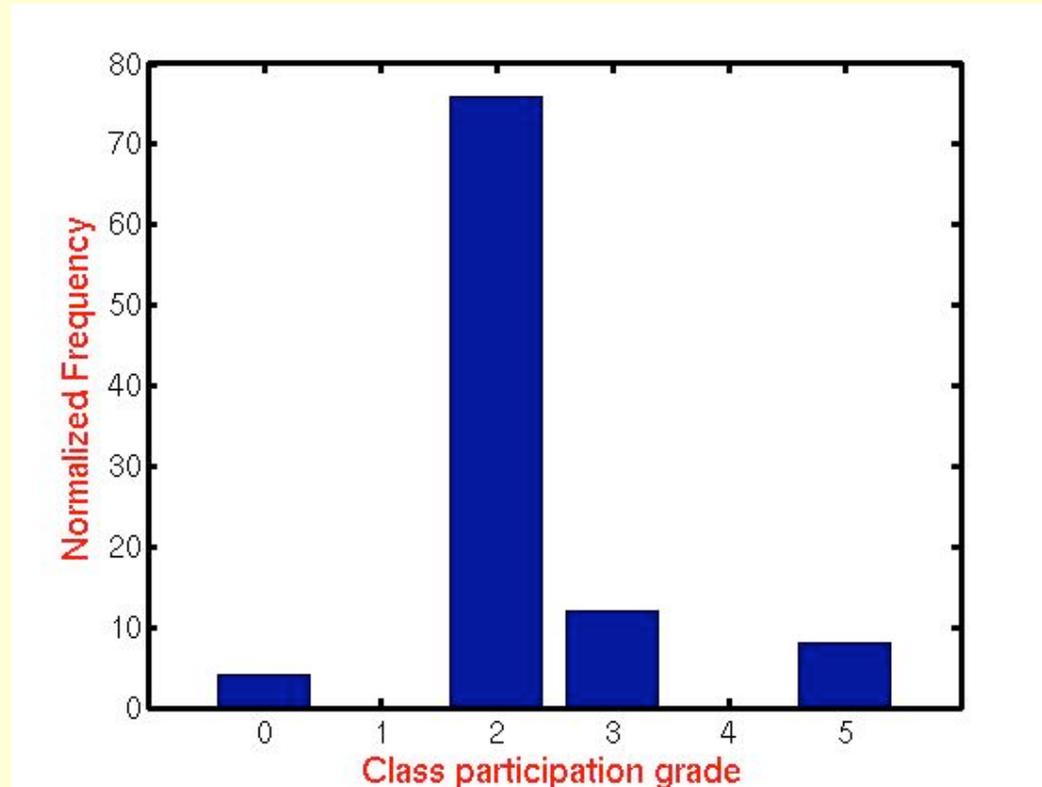
Class participation grade distribution from Spring 2009

Preparing for exams

- ## Schedule you preparation
  - Complete intensive reading of all the material more than a day in advance
    - After preparing for each topic, see if you can answer the review questions, questions I said I might ask, additional questions in the text, and home work questions
      - **Practice writing your answers**
    - Review the code for the programming assignments
    - Check the discussion board, and see if you can answer questions that others ask
  - Read your summaries the day of the exam
    - Answer some review questions you think might be important
  - Come to the exam early
    - Avoid learning things at the last moment -- you might just get more confused
    - Don't let your friends confuse or scare you just before the exam

Managing your time

- Allocate time for studies and other activities
    - Keep the schedule flexible
    - Give different priorities for different activities
    - If you find that you do not have enough time at the beginning of the semester, expect things to only get worse later!
    - Programming assignments can require much time
    - Allocate good "quality" time for studies
        - Study when you are not tired or hungry
        - Do not allow others to disturb you then
        - Use blocks of at least one hour
            - Context switches can lower the quality
    - Give yourself an earlier deadline on assignments than what I mention
        - You will then have extra time available for unexpected problems

Programming assignments

- Understand the problem
- Create test cases that you will use to test the correctness of your program
- Design your program
    - Consider the objects that will be needed and their behavior
    - Think of how you would handle the input, to solve the problem
    - Write the program so that you communicate your solution strategy to the computer
    - Implement the interfaces as header files
- Build a skeleton code that builds as an executable
    - It will not do anything useful at this stage
- Implement features, and provide functionality to test them
    - Build and test after adding each feature
        - Enter information in your LOG.txt file
        - Document errors that you fixed, to help you later
        - Use a debugger to trace execution of your code
    - Save old copies of code, in case you need to go to an earlier version
    - Submit early
- Expect to spend considerable time debugging your code