CS112: Course Overview

George Mason University
Today’s topics

• Go over the syllabus
• Go over resources
  – Marmoset
  – Blackboard
  – Piazza
  – Textbook
• Highlight important information
Introduction to programming

• This class is about programming, not a particular language
  – stress on algorithm design and testing
  – we happen to be using Python, which we must learn in order to run code
  – focus is on critical thinking, not mastery of python or efficiency concerns

• Programming is like solving small puzzles
  – in that sense, this class is like a math class
This class is **hard** and **time consuming**

- Recommend *at least* 15 hours outside of lecture, per week
  - you may consider choosing other classes this semester to negotiate your time constraints
- You need to start assignments immediately, after lecture
  - seek help immediately through Piazza
  - do not wait for office hours
- We grade based on performance, not effort
  - sadly, effort will not always produce the desired grade
Readings and homework

• Lecture will primarily be used for going over homework examples from the textbook
  – because talking at you is boring for everyone. Read the book. Come to lecture prepped, with questions, otherwise lecture is a waste of your time and money
  – not all homework exercises have solutions in the book: take notes during lecture

• Homework will help you with the projects
Programming Projects

• are in addition to homework questions
• will only be graded on Marmoset
  – must run and pass test cases for [partial] credit
• need to be started immediately
• seek help through Piazza if you are stuck for longer than 30 minutes
• are individual assignments – see the honor code policies
• cannot use Internet resources (unless specified):
  – you **learn** more by trying to solve the problems within the constraints we set, like jogging with weights
  – this class is about **learning programming fundamentals**, i.e. algorithm design, not knowing some esoteric feature or function of Python
  – (feel free to explore on your own as much as you like, as long as it’s not used for a project in this class)
Quizzes

• Will be on the material from the previous lecture(s)
• Will generally ask you to implement, in Python, a programming problem, or,
• Will have a multiple choice Python component, based on lecture material
• You must come to your lab section to take the quiz
  – turned in on Marmoset in lab
  – need to be present in lab
Course Pace

- Project 1 is not a coding project; pace picks up after
- Five programming projects
  - build upon each other
- Class gets progressively harder through Chapter 5, then plateaus
Piazza

• Piazza is **required daily reading**
  – I can see who reads posts and who doesn’t
• Please search for your question before asking:
  – use search bar, and look through **ALL** existing posts
  – will take off points for excessive violations (I give out lots of warning though, don’t be scared to post!)
  – we need to keep Piazza readable for all
• Please post to “All Instructors”, not just the professor
  – you’ll get a quicker response that way
• Never post code or solutions publicly
  – when in doubt, make it a private post
On a lighter note...

• Hopefully you will find this class challenging, but fun
Let’s get started

• Click on the link to Chapter 0: use the default username of guest to access the material there:
  – link to textbook
  – link to slides
  – link to videos
  – link to exercises