Welcome to Com S 227

Using Webex (or Zoom)

- Stay muted unless you are speaking ☺
  - – Video optional, we’ll see how it goes…
- Raise hand feature – in participants list
- Chat
  - – Ask questions (anonymously to class)
  - – (or just quietly)
- Polls

Who are you, and why should we listen to you?

- Steve?

Steve!

- "Steve is a name associated with power and awesomeness"
- "The name given to all those people who seem to dazzle everyone with their expert knowledge on every subject known to man"
- "Many people wear Superman pajamas to bed. Superman wears Steve pajamas”

-urbandictionary.com

Ok, but seriously

- Steve is the instructor for this section
  - 30 years teaching CS and math
  - Came to Ames to work for a startup, 8 years in industry, rejoined ISU in 2008
  - MS in CS, PhD in Math
    - But never finished high school
    - Has only been arrested twice

Should I take this course?

- For most students, 227 is the SECOND programming course
- From the catalog: *Prereq: Placement into MATH 143, 165, or higher;* ***recommended: a previous high school or college course in programming or equivalent experience*****.**

Should I take this course?

- In reality, 227 can be difficult for someone who has had no exposure to programming!
- Be sure you have the math background
    - Placement into Math 143 or calculus
- Consider taking Com S 127 first
    - Programming at a slower pace, without “objects”
- Engineers should take Cpr E 185 first
    - Permanent brain damage may result if you take them at the same time…

I've never done any programming, can I take it anyway?

- Some people with no previous programming experience have done just fine… but not many
  - Excellent study and time management skills?
  - A’s in Calculus, good at logical thinking?
  - National merit scholar?
- …but many people, even with some programming experience, have a lot of trouble!
  - Spring ‘19: 580 students, 430 pass, 378 C- or better

Why do so many people end up taking the course twice?

- *First time*: learn not to procrastinate
- *Second time*: learn about object-oriented programming
- Being self-motivated is exceptionally important
  - There are 330 students in the course this semester
  - No one is going to keep track of you and save you from your slothful habits!
  - Take advantage of the lab period to talk to the TAs and other people

We covered all this stuff at my community college, do I still have to take 227?

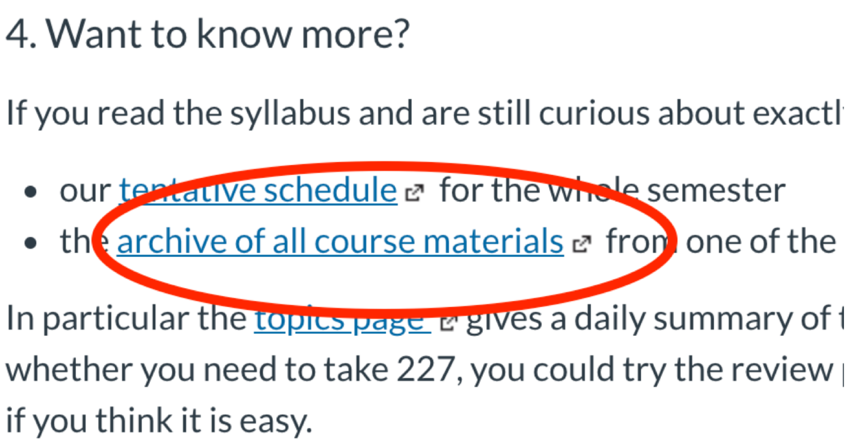
- Be careful what you wish for
- Most high school and community college courses are too superficial to prepare you for Com S 228
- Even if you are familiar with the "topics" of the course, you may benefit from the *experience*

About 227

- Emphasizes a disciplined approach to building software
  - Working from detailed specifications of *objects*
    - *An **object** is a software entity that encapsulates the data and behavior for some component within a system*
  - Documentation
  - Unit testing
  - Using a symbolic debugger
- Larger scale projects (300-400 lines)

About 227

- Check the archive pages for more details
  - From the Canvas front page:



4. Want to know more?

If you read the syllabus and are still curious about exactl

- our tentative schedule for the whole semester
- the archive of all course materials from one of the

In particular the topics page gives a daily summary of t
whether you need to take 227, you could try the review
if you think it is easy.

  - Try the final exam review problems
  - Try assignment 4

Is the course too hard?

- Probably not
- Standards are based on real-world expectations of skills of graduates
- “*Actually, those courses [227 and 228] should have been a lot harder*.”
  - – Nicole Bruck, former student and 227 TA, currently a project manager at Microsoft

Course organization

- There are about 330 students this fall
- Three instructors and 12 teaching assistants
- 4 online sections like this one on MWF
- 12 “external” lab sections
  - Two hours each week in groups of 20 or 40
  - Opportunity to try things out where there are TAs and people around to (virtually) talk to!

zyBooks

- A part of your workload in the course will be in the form of exercises in an interactive ”textbook”
  - Can write and run Java code to try things out
  - Participation activities – short questions or animations
  - Challenge activities – bits of code
  - zyLabs – a general auto-grading tool
    - Some will be counted as part of Challenge activities
    - The miniassignments will also use the zyLabs tool

zyBooks

- Useful for quickly learning the basics
- Beware of toy programs!
- External labs will be based on using “real” development tools (IDE, unit test framework, debugger)
- Programming assignments will be larger in scale

Do I have to come to class?

- Obviously, that's completely up to you!
- Class sessions will be recorded
- Participation will be mostly monitored through the zyBooks activities
- Being here…
  - Provides some structure to your days
  - Ask questions in real time

What's Piazza?

- Collaborative, searchable Q&A forum originally created for programming courses
- Have used in 227 for past 8 years
  - Absolutely indispensible!
- Can open in Canvas, or on its own

Communication

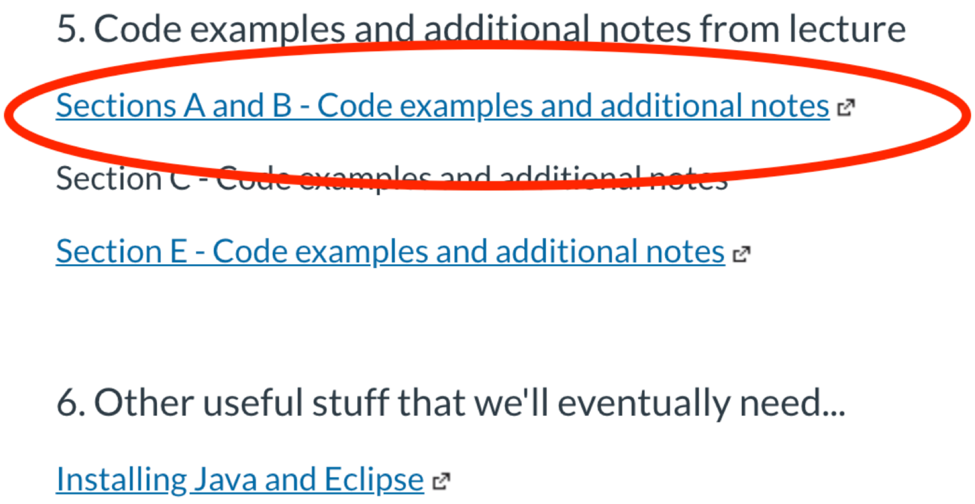
- Use Piazza for all questions about the course, logistics, Java, homework specifications, …
  - can post anonymously, anyone can answer
  - quickest way to get a response
- For questions for the staff only, mark your post *private*
  - e.g. if you post source code for current homework
- To raise private concerns just with me, use email
  - start subject line with “CS 227”

What's a syllabus?

- Spells out course policies for *everything*
  - attendance, grading, homework submission, missing quizzes, exam regrades, cheating, etc., etc.
- Textbook and software info
- See the "quick links" at the top
  - *always refresh your browser, things may be updated*

What’s the “topics page”?

- When we write or review code in class, I’ll post links to it on the topics page, along with a summary and any additional notes
  - From Canvas front page:



5. Code examples and additional notes from lecture

Sections A and B - Code examples and additional notes

Section C - Code examples and additional notes

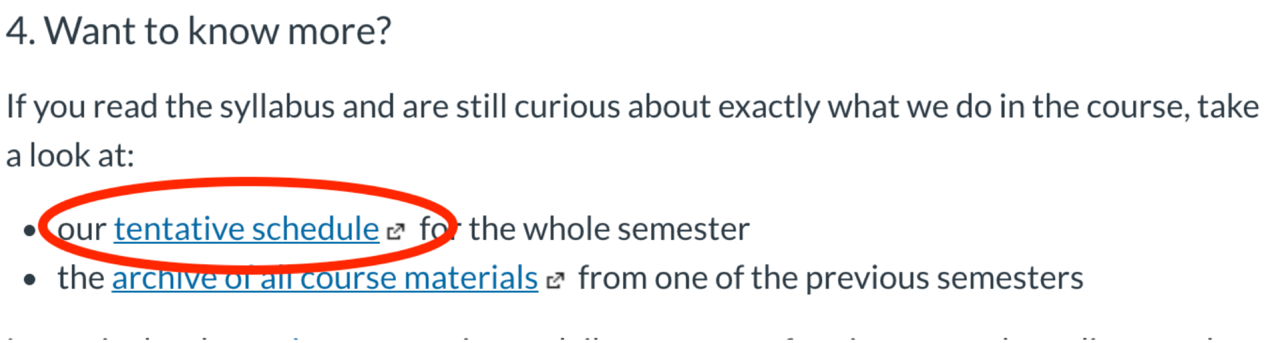
Section E - Code examples and additional notes

6. Other useful stuff that we'll eventually need...

Installing Java and Eclipse

What's the master plan?

- Draft schedule for the whole semester
- *Approximate* homework and exam dates
  - From Canvas front page:



4. Want to know more?

If you read the syllabus and are still curious about exactly what we do in the course, take a look at:

- our tentative schedule for the whole semester
- the archive of all course materials from one of the previous semesters