# CSCI 160 — Introduction to Problem-solving & Programming

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# logistics

- instructor(s)
  - Jeremy Iverson (jiverson002@csbsju.edu)
  - PENGL 213, (320) 363-3083
  - office hours: MW 12:45 13:45 T 11:30 - 12:30
- textbook
  - · Big Java: Early Objects, 6 Edition, Horstmann
- website
  - https://csbsju.instructure.com/courses/7691
- · labs
  - PENGL 218, TR 01A 08:00 09:20

I prefer to be called Jeremy
Encourage questions right away
Emphasize the importance of the Canvas site for finding information about
the class

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## course objectives

- write well-designed Java programs for small-scale problems
- identify appropriate object classes for solving a given problem
- write good documentation for programs

Will not be asked to write full-scale applications

- Emphasizes programming fundamentals, special attention to object-oriented software design (ptyon and visual basic are both examples)
- Problem-solving

#### course content

- · introduction to Java
- using methods
- using objects
- decisions
- iterations
- arrays
- designing and implementing classes
- inheritance
- interfaces and polymorphism
- file i/o
- exceptions
- recursion
- searching
- sorting
- collections
- advanced topics

Ask students to point out some of the topics which are covered in 130/150 Point out that each of these bullets corresponds to one of the "modules" on Canvas

## labs

- attendance
- prelabs

- I will be sure to remind for the first couple labs, after that
- Your responsibility to go on N drive to course folder to see if there is a prelab
- I will try to remind, but it is student's responsibility
- · Amounts to two (roughly 30 min) assignments per week
- $\boldsymbol{\cdot}\,$  Labs are due Tuesday following the lab session that they are assigned

# assignments

- · do your own work
- · use each other as resources only

Should be student's own work, may work together but must individual solutions

Want to encourage using each other as resources, but do not want some students to rely on other students for answers

# quizzes and exams

- six (6) in-class guizzes (closed book / note)
- three (3) lab exams (open book / note)
- two (2) in-class exams (closed book / note)
- one (1) in-class final exam (closed book / open note)
   [cumulative]

Make-up exams are possible under certain circumstances, but no make-up quizzes

### office hours

- stop by anytime
- my calendar

Mention outlook calendar & my home page For those unfamiliar with Outlook meetings, then they should schedule another way and we will go over this in meeting Mention not generally availability in the afternoons

# teaching philosophy

Your job is to empower those you teach; when you do for them what they should be doing for themselves, you create dependency rather than empowerment.

It is easy to give in to the frustration that results from seeing amazing possibilities for the people you are teaching, and you want it more for them than they want it for themselves.

Don't give in to that frustration!

- Based on passage from "Resisting Happiness" by Matthew Kelly

What do you think I mean by dependency?

Dependency — relying on the instructor, TA, or fellow student for original thought or deeper understanding (in context of computer science) instead of oneself

# expectations

- prepare for class (do the reading!)
- participate in class
- · be respectful



#### notecards

- · given name
- preferred name and pronunciation
- · anything you would like me to know about you
- at least one of the following:
  - reason for taking the class
  - what you are hoping to learn from the class

# Java program

- · open Lecture1.java
- follow the instructions

# **ASCII Table**

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4	4	4		36	24	44	\$	68	44	104	D	100	64	144	d
5	5	5		37	25	45	%	69	45	105	E	101	65	145	e
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26	1A	32		58	3A	72		90	5A	132	Z	122	7A	172	Z
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28	1C	34		60	3C	74	<	92	5C	134	1	124	7C	174	1
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30	1E	36		62	3E	76	>	94	5E	136	^	126	7E	176	~
31	1F	37		63	3F	77	?	95	5F	137	_	127	7F	177	



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