Principles of Java Language with Applications

COMPTNG 20A

Spring 2020

Instructor:	David Hyde	**Time:**	M W F 11:00–11:50am
Email:	dabh@math.ucla.edu	**Place:**	my house
Sections:			
	· TR 12:00–12:50pm (Suparno Pal)		
	· TR 11:00–11:50am (Suparno Pal)		

Course Description:

Lecture, three hours; discussion, two hours; laboratory, eight hours. Enforced requisite: course 10A. Not open for credit to students with credit for course 3. Introduction to Java computer language. Class and interface hierarchies; graphics components and graphical user interfaces; streams; multithreading; event and exception handling. Issues in class design and design of interactive Web pages. P/NP or letter grading.

Zoom Links:

- Class and David's office hours: `https://ucla.zoom.us/j/3301758542`
- Suparno's discussion sections and office hours: `hhttps://ucla.zoom.us/j/2057717442`

Course Pages:

- `https://ccle.ucla.edu/course/view/20S-COMPTNG20A-1` ("CCLE" / main course site)
- `https://be.my.ucla.edu/classes.aspx` ("My UCLA" / grades)

Office Hours:

- **David Hyde:** Thursday 5:00-7:00pm (or email me 48hr in advance for appt.)
- **Suparno Pal:** TBA (will send poll)

Textbook: K. Sierra and B. Bates, *Head First Java* (2nd Edition), O'Reilly

NOTE: I will try to make the lectures, assignments, and exams independent of the textbook. The textbook (or any other Java book) is recommended; it may be a useful reference or source of alternative explanations. Note, the UCLA library maintains copies of the textbook *and has free online access to the book.*

Tentative Course Outline:

(Note: some of these units may get moved around; the unit names should remain the same, but the numbers might change.)

- Unit 1: Introduction
- Unit 2: Miscellaneous
- Unit 3: The Basics of Java
- Unit 4: Inheritance
- Unit 5: Eclipse
- Unit 6: Number
- Unit 7: Nested Classes
- Unit 8: Generics

- Unit 9: class Class
- Unit 10: Exceptions
- Unit 11: Streams
- Unit 12: GUI
- Unit 13: Collections
- Unit 14: Lambdas

Grading Policy: Homework (45%), Midterm (20%), Final (35%).

Every student will be graded *independently* of others (i.e., no curve). In particular, students with no prior Java experience will not be impacted by overqualified students with ample prior experience. The course is a level playing field where anyone who puts in sufficient effort (which will vary person to person) can do at least reasonably well.

Numerical grades will be translated to letter grades via the following scale: A $[93, 100]$, A- $[90, 93)$, B+ $[87, 90)$, B $[83, 87)$, B- $[80, 83)$, C+ $[77, 80)$, C $[73, 77)$, C- $[70, 73)$, D+ $[67, 70)$, D $[63, 67)$, D- $[61, 63)$, F $[0, 61)$. A grade of A+ may be assigned in exceptional cases. Other grades such as Incomplete are only assigned in accordance with UCLA and Math Department policies; please consult with Student Services rather than the course staff.

Regrades/Late Days: Regrade requests or late homeworks will **not** be considered. To make up for this, we will **drop your lowest homework grade** in the class.

Important Dates: NOTE: We will probably have to make these take-home exams with a 24hr period to take it (on the dates listed)

Midterm ..... TBA
Final Exam ..... Wednesday, June 10, 2020 11:30–2:30pm

Academic Honesty:

You are encouraged to discuss aspects of the course with other students. You may also discuss the homework assignments in general terms with others. By general terms, I mean discuss ideas and plans of attack for solving the problems, not code. You must write your own independent solution. This will allow you to truly understand what you are doing. If you need more specific help, you may consult a TA or the professor only. You may not copy or cite in your homework solution anything written by someone else, unless it is found in your assigned reading, in my lectures, in my examples, or in a presentation by your TA in discussion section. Homework solutions will be monitored for plagiarism. Cheating of any kind is not tolerated. Please do not endanger your entire academic career by cheating.

CAE:

It is recommended that CAE students contact your professor as soon as possible to discuss and make any special arrangements. Accommodations such as quiet rooms and extended time for examinations are possible; we will happily work to fulfill any accommodations documented with CAE.

PIC Lab:

The PIC Lab will be closed during Spring quarter, but you should be able to install and run all necessary software on your home computer. Please consult with your TA if you aren't able to get up and running on your computer during the first week.

Integrated Development Environment (IDE):

Any IDE or text editor may be used for the assignments in the course. For instance, one may use Notepad++ on Windows, XCode on Mac, or Vim or Emacs on Linux. Some popular Java IDEs (which are free or free to students) include IntelliJ IDEA or Netbeans.

Exam Policy:

There will be one midterm and a final exam as listed above. There will be **no make-up exams** except in extreme and documented circumstances. In particular, note that university policy requires that a student who has an undocumented absence from the final exam be given a failing grade in the course. All the exams (midterms and final) will be given in accordance with the special policies in force for Spring quarter (probably take-home exams with a 24-hour window to complete them).

Acknowledgements:

Material in this offering of the class, including syllabi, lecture slides, and homework assignments, may contain content or draw inspiration from some highly generous fellow PIC instructors, in particular Ernest Ryu, Chris Anderson, and Michael Andrews. Other material may be drawn from the textbook. Any other sources will be cited as used to the best of our ability.