# College of the Sequoias Computer 008 – Programming Concepts (JAVA) (4.0 units) Spring 2020-Online



INSTRUCTOR: Mr. Arnold

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Onsite Office Hours:12:10 - 1:00pm W, 4:10 – 6:00pm W

Online Office Hours:9:00 - 11:00am M or by appointment

In addition, your class only will have a block of tutoring time on Thursdays from 5:30 – 6:30pm. A link to both this meeting and the regular online office hours will be posted on Canvas. I may host these hours from off campus. The hour that is set aside for this class will be spent demonstrating extra examples of the current week’s lesson and/or reviewing for exams. Students who attend the entire hour of the online tutoring Thursdays from 5:30 – 6:30pm will receive 5 points EXTRA CREDIT each week. If a student attended every week, they have the potential to change their grade by about a whole letter just with the extra credit not to mention the benefit of the extra practice.

Course Description: This is an advanced computer class designed to teach students how to plan and program typical business problems utilizing JAVA, a high-level, object-oriented language.

Online Class: This course is set up as an online section.

Final Exam: This class is entirely online EXCEPT for the final exam, which MUST be proctored to you. When you take it you must present valid ID. The instructor will announce one or two times (in the evening) during finals week that he will be available to proctor the exam. If a student cannot attend, he/she must make prior arrangements to have the test proctored at a library. Typically, this costs a few dollars and must be scheduled far enough in advance for the librarian to be able to contact the instructor for arrangements on obtaining the exam. The instructor will NOT give the exam directly to the student to take to the library but will only give it to the proctor. You must pass the final exam to be eligible to pass the class with the grade otherwise earned.

Communication: The discussion board on Canvas will be available for students to ask each other questions regarding their labs or test preparation. Mr. Arnold is available via email, office hours and online office hours. For email please allow 24 hours for a response weekdays only (Mr. Arnold may not be available on weekends).

Weekly Process: Each week will begin on Monday. There will be an agenda for each week with tasks that students need to complete before the next Sunday night at 11:59pm. The week may contain a variety of tasks: watching lecture videos, reading chapters, completing labs or projects and writing short essays for homework. This course is a lot like using building blocks so it is not wise to skip material. Items that are due on any given week will be considered late if not turned in by the beginning of the following lab.

Course Objectives:The main concepts for this course will ask students to

* Develop programs using object-oriented programming concepts.
* Edit and work with Java code, finding errors and correcting them.
* Develop skills with arrays and lists.
* Develop skills working with data manipulation.
* Understand exception handling in Java.

Student Learning Outcomes:During this semester this course may be evaluated on one or more of the following Students Learning Outcomes:

* Given specifications, students will be able to code repetitive and decision structures using Java.
* Given a Java program students will be able to identify the hierarchy of inheritance.
* Given application specifications, students will be able to code a Java program using objects and inheritance that meet those specifications and will test their program and correct any errors.

Required Textbook:

Fundamentals of Java™: AP\* Computer Science Essentials, 4th Edition

Kenneth A. Lambert

Martin Osborne

ISBN-10: 0538744928

ISBN-13: 9780538744928

### Compiler:

A Java compiler that you can use at home will need to be downloaded during the first week (see the modules section for a link).

Methods of Evaluation:

##### 1. Labs and Assignments:

* Labs and homework assignments will be assigned on most weeks and are to be complete by the beginning of the following lab meeting after they were assigned.
* Grading will be based on completeness and accuracy.
* Labs will be accepted late but will be subject to a 10% reduction each week they are late.
* Homework will NOT be accepted late.

##### 2. Exams:

* There will be 3 exams taken online plus a final taken on campus (see calendar at the bottom of this syllabus). Each exam may have a theory section and lab section.
* EXAMS MAY NOT BE MADE UP FOR ANY REASON.

##### 3. Projects:

* There will be 2 projects, which will be worked on during the semester.
* Project topics will be assigned by the instructor.

Grading Policy:

* As an instructor it is my goal to get your labs/assignments graded quickly. My goal is to have labs/assignments/exams graded and recorded in Canvas in one to two weeks after their due date. If you do not have a grade for something recorded and it has been more than two weeks please contact me. The assignment may have been turned in incorrectly or I may have missed it, etc. Items turned in via email and not in Canvas may not be graded until the end of the semester.

Self Assessment on Grades:

* When you look at your grades you will see comments if you got something wrong or your lab was late. If you got points deducted from anything other than being late you should go over the lab again and see what you did wrong and figure out how to fix the problem(s). The course topics build off one another so you don’t want to get stuck and be unable to progress. For items not yet graded, ask yourself the simple question: Does the program work as intended? If it does, you probably did it right. There are a few labs throughout the semester where you might actually have the output right but have done the lab incorrectly. I will try to get those labs graded ASAP
* Another great resource for reflection is the Student Lounge on the discussion board where you can discuss what you missed on the labs and help each other learn.

Attendance:

* Although it is the responsibility of any student desiring to drop the course to turn in the necessary drop forms the instructor reserves the right to drop students who have missed 2 weeks or do not complete the posting on the Student Lounge by the first Friday night.
* Students should review the last date posted by the college that allows a student to drop with a refund and the last date posted by the college that allows a student to drop with a W.

Grading: (Tentative Schedule)

##### Possible Points:

Exams 3 @ 100 = 200 (Lowest Dropped)

Labs 10 @ 10 = 100

Student Lounge Posting 1 @ 10 = 10

Homework 10 @ 10 = 90 (Lowest Dropped)

Projects 2 @ 50 = 100

Course Evaluation 1 @ 10 = 10

Final Exam 1 @ 200 = 200

Total Points = 710

##### Grading Scale:

**Less than a 69.5% on the final means an F in the class, otherwise the following class percent ranges apply.**

A (89.5%-100%)   
B (79.5-89%)   
C (69.5-79%)   
D (59.5-69%)   
F (0-59.4%)

Note: Canvas doesn’t count missed assignments/labs/tests as part of your points possible. This can make the points possible inaccurate and lead you to make a miscalculation.

Computer Time:  
This class requires outside computer time. You are expected to work more than 12 hours per week on the course and most of your time will be spent on the computer. You will need to display your computer use permit when working outside of class on a Business Division computer. Please see your instructor during office hours if you would like a permit. Computers are available in:

Room 712A (computer lab):

Check door for schedule.

Tutors:

Tutors may be available in the tutoring center. They typically start around week 2. Check the tutoring center for the tutor’s schedule. If you would prefer you can come by my office hours and I will be happy to help you.

Class Rules:

* No food or drink is allowed in the classroom.
* Business Division computers cannot be used to run your own personal software or to access inappropriate Web sites.
* Cheating is a violation of the Code of Student Conduct and will not be tolerated. Cheating on an exam or assignment will result in receiving a zero for the entire exam or assignment and can lead to expulsion from the class or COS.

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| Tentative Schedule | Agenda for the Week |
| Week 1 | Unit 1:  Go Over Syllabus  Read Chapter 1 and watch the Lecture for Chapter 1 (multiple videos under modules)  Homework 1  Install Java on your Home Computer (see info under Modules) |
| Week 2 | Unit 2:  Read Chapter 2 and watch the Lecture for Chapter 2 (multiple videos under modules)  Lab 2  Homework 2 |
| Week 3 | Unit 3:  Read Chapter 3 and watch the Lecture for Chapter 3 (multiple videos under modules)  Lab 3  Homework 3 |
| Week 4 | Unit 4:  Read Chapter 4 and watch the Lecture for Chapter 4 (multiple videos under modules)  Lab 4  Homework 4  Exam 1 Review |
| Week 5 | Exam Chapters 1-4(2 Parts: Theory and Lab) |
| Week 6 | Unit 5:  Read Chapter 5 and watch the Lecture for Chapter 5 (multiple videos under modules)  Lab 5  Homework 5 |
| Week 7 | Unit 6:  Read Chapter 6 and watch the Lecture for Chapter 6 (multiple videos under modules)  Lab 6  Homework 6 |
| Week 8 | Unit 7:  Read Chapter 7 and watch the Lecture for Chapter 7 (multiple videos under modules)  Lab 7  Homework 7 |
| Week 9 | Project #1  Exam 2 Review Chapters 5-7 |
| Week 10 | Exam Chapters 5-7(2 Parts: Theory and Lab) |
| Week 11 | Unit 8:  Read Chapter 8 and watch the Lecture for Chapter 8 (multiple videos under modules)  Lab 8  Homework 8 |
| Week 12 | Unit 9: (Skipping Chapter 9 in Text)  Read Chapter 10 and watch the Lecture for Chapter 10 (multiple videos under modules)  Lab 9 (Chapter 10)  Homework 9 |
| Week 13 | Begin Project #2 |
| Week 14 | Complete Project #2 |
| Week 15 | Unit 10: (Skipping to Chapter 13)  Read Chapter 13’s recursion section and watch the Lecture for Chapter 13 (multiple videos under modules)  Lab 10 (Chapter 13)  Homework 10  Exam 3 Review Chapters 8, 10 and 13 |
| Week 16 | Exam Chapters 8, 10, and 13(2 Parts: Theory and Lab)  Nothing Late Accepted After This Week  Final Exam Review |
| Week 17 | **FINAL EXAM CLASS MEETING TIME:**  **Friday 5/15/20 6:10pm – 8:10pm Kern 717** |

**The instructor reserves the right to modify this syllabus and if such modifications occur will make a new version available for the students.**