**CS 150 – Introduction to Computing II – Spring 2019**

**Contact:** Steve Klein | EB 3076 | 650.2387 | [steklei@siue.edu](mailto:steklei@siue.edu) | classes.cs.siue.edu

**Office Hours:** MWF 10:00-11:00 TTh 1:00-2:00

**Objective:** Algorithmic problem solving with a modern programming language. Language syntax; basic design methods; algorithms; abstraction; basic data structures. Prerequisite: CS 140 with C or better.

**Textbook: zyBook**:subscribe at [*learn.zybooks.com***,**](http://learn.zybooks.com/)code: SIUECS150KleinSpring2019

**IDE:** You can write your programs in any environment you choose, but **Netbeans is what will be used to grade programming assignments. A free copy of the IDE and JDK bundle can be downloaded from** [***https://netbeans.org/downloads/index.html***](https://netbeans.org/downloads/index.html)**. The Java SE version 8.2 is sufficient for our course.**

**Grading:**

Programs 4 40%

Activities weekly 15%

Tests 2 25%

Final Exam 1 20%

**Programs** will be downloaded/uploaded using Moodle (classes.cs.siue.edu). Late assignments that are submitted within 24 hours of the deadline will receive a 30% penalty. Programs submitted later than 24 hours will not be graded.

**Activities:** During the semester you will complete activities either in the zyBook, in class, or as homework. The zyBook assignments are posted on that website and must be completed before their deadlines. Once we complete the zyBook chapters, we will do in-class or homework activities. These Activities will be combined into 15% of your overall grade.

**Tests:** will happen on the last day of the weeks where scheduled. Don’t miss these.

**Final Exam:** Comprehensive. 150 points.

**If you need special accommodations:** Students needing accommodations because of medical diagnosis or major life impairment will need to register with **Accessible Campus Community & Equitable Student Support (ACCESS)** before accommodations will be given. Website: [www.siue.edu/access](http://www.siue.edu/access). Office: Student Success Center room 1270, Phone: 618-650-3726

**Exception clause:** No make-ups will be allowed for missed work unless you have a verifiable written notice, i.e. medical reason, traumatic family emergency or hardship. You must notify your instructor (beforehand and immediately upon return) to arrange for any possibly acceptable make-up.

**Class Conduct:** Students are expected to attend each class and participation is highly encouraged. Use of laptops is not allowed while in class and all personal, handheld electronic devices should be disabled or muted and out of view. Food and drink, of any kind, in the classroom is strictly prohibited by University policy.

**Academic misconduct:** Academic honesty is a serious issue at SIUE, in the School of Engineering, in the Department of Computer Science, and with this instructor. Penalties for dishonest behavior will be severe. Even a single occurrence of plagiarism of English text, or program code, within a graded activity (e.g., homework, project, or exam) is grounds for academic discipline and a letter grade of F for the course.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| wk# | Topic (zyBook Chapter.Sections) | M | T | W | Th | F |  |
| 1 | Program Structure (in code and in memory) Methods (1.1-11) | 14-Jan | 15-Jan | 16-Jan | 17-Jan | 18-Jan |  |
| 2 | Classes (2.1-13) | 21-Jan | 22-Jan | 23-Jan | 24-Jan | 25-Jan |  |
| 3 | Classes (2.1-13) | 28-Jan | 29-Jan | 30-Jan | 31-Jan | 1-Feb | P1 |
| 4 | Exceptions (3.1-5) | 4-Feb | 5-Feb | 6-Feb | 7-Feb | 8-Feb |  |
| 5 | Inheritance (4.1-4) | 11-Feb | 12-Feb | 13-Feb | 14-Feb | 15-Feb |  |
| 6 | Polymorphism (5.1-4) | 18-Feb | 19-Feb | 20-Feb | 21-Feb | 22-Feb | T1 |
| 7 | Abstract classes (6.1-4) | 25-Feb | 26-Feb | 27-Feb | 28-Feb | 1-Mar | P2 |
| 8 | Interfaces (7.1-2) | 4-Mar | 5-Mar | 6-Mar | 7-Mar | 8-Mar |  |
| 9 | Spring Break | 11-Mar | 12-Mar | 13-Mar | 14-Mar | 15-Mar |  |
| 10 | Generics (8.1-4) | 18-Mar | 19-Mar | 20-Mar | 21-Mar | 22-Mar |  |
| 11 | Recursion (9.1-9) | 25-Mar | 26-Mar | 27-Mar | 28-Mar | 29-Mar | P3 |
| 12 | Searching (linear, binary) - Iterative/Recursive (10.1-4) | 1-Apr | 2-Apr | 3-Apr | 4-Apr | 5-Apr |  |
| 13 | Sorting (11.1-5) | 8-Apr | 9-Apr | 10-Apr | 11-Apr | 12-Apr | T2 |
| 14 | Memory Management (12.1-6) | 15-Apr | 16-Apr | 17-Apr | 18-Apr | 19-Apr |  |
| 15 | Array-Based Lists | 22-Apr | 23-Apr | 24-Apr | 25-Apr | 26-Apr | P4 |
| 16 | Linked Lists | 29-Apr | 30-Apr | 1-May | 2-May | 3-May |  |
| 17 | Final Exam TBA |  | |  |  |  |  |