**CSCI 1470**

**Computer Science 1**

**Class Schedule**: Tuesday and Thursday 11:30am –1:20pm, Bayou 3-606

**Instructor**: Dr. Sharon P. Hall

**Office**: Delta 115

**Phone**: 281.283.3868

**Email**: [perkins@uhcl.edu](mailto:perkins@uhcl.edu) ; please note!

**Blackboard**: displays syllabus, assignments, notes, grades, and office hours

**Office Hours: posted in Blackboard**

**Mentors**: bsc.uhcl.edu

**Online Text:** Learning with Python by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers, <http://openbookproject.net/thinkcs/python/english3e/> (required)

**Course Goals**:

This course intends to teach students to solve problems and to prepare them to design and write programs in a basic level programming language. Elements of Critical Thinking will be introduced and emphasized in this course.

**Learning Outcomes**: Students will be able to:

C1. Design solutions to problems using flowcharts.

C2. Design solutions and convert problem steps into pseudocode.

C3. Write small programs that make branching decisions.

C4. Write small programs that use looping structures to do iteration.

C5. Write more complex programs that combine basic programming concepts.

C6. Test programs using black-box and white-box testing methodologies.

C7. Write programs that use functions.

C8. Write programs that use lists.

C9. Use binary and hexadecimal number systems.

**Student Expectations**: Expect to spend 4 – 6 hours a week on this class, outside of class. Students are expected to always attend class and be on time. Students will read the material assigned, work all assigned classwork and homework, and take daily or weekly quizzes. Classes will consist of lecture, demonstrations, pair programming and solution design, and working examples. Expect quizzes at any class at any time.

**Academic Honesty**:

The honesty policy that is defined in the UHCL Honesty Code states:

**I will be honest in all my academic activities and will not tolerate dishonesty.**

Students are expected to show respect for themselves and others by being honest in their educational pursuits. Academic dishonesty will result in a grade penalty and an academic dishonesty notice placed in your file. Upon two honesty violations, students may be expelled from UHCL.

**Disability Services**:

Any individual with a disability who requires a special accommodation should inform me and contact the Disability Services Office, Room 1402 in the Bayou Building, or call 281.283.2627.

**6 Drop Rule:**

Students who entered college for the first time in Fall 2007 or later should be aware of the course drop limitation imposed by the Texas Legislature.  Dropping this or and other course between the first day of class and the census date for the semester/session does not affect your 6 drop rule count. Dropping a course between the census date and the last day to drop a class for the semester/session will count as one of your 6 permitted drops. You should take this into consideration before dropping this or any other course. Visit [www.uhcl.edu/records](http://www.uhcl.edu/records) for more information on the 6 drop rule and the census date information for the semester/session.

**Assignments**

All assignments are due by 11:59 pm on the assigned date. Assignment submissions should be completed through Blackboard, unless otherwise indicated.

**Grading**: Exams (15, 15 and 20) 50%

Assignments 25%

Robotics Projects 6%

Term Project 6%

# Quizzes 10%

Class Participation 3%

### Revised Course Schedule CSCI 1470: Computer Science 1

| **Week** | **Dates** | **Topics** | **Readings from Wentworth** |
| --- | --- | --- | --- |
| 1 | September 5, 7 | Course Intro, Introduction to Python, Variables, Expressions and Statements | Chapters 1 and 2 |
| 2 | September 12, 14 | Turtles | Chapter 3 |
| 3 | September 19, 21 | Structures: Sequence, Selection, and Loops | Chapters 5 and 7 |
| 4 | September 26, 28 | Problem solving using flowcharts and pseudocode | In Class |
| 5 | October 3  October 5 | **Exam #1**  Functions | Chapter 4 |
| 6 | October 10, 12 | Fruitful Functions | Chapter 6 |
| 7 | October 17, 19 | Strings and Lists | Chapters 8 and 11 |
| 8 | October 24, 26 | Decimal, Binary, Octal and Hexadecimal arithmetic  More on Lists | In Class Only |
| 9 | October 31  November 2 | **Exam #2**  Files and SDLC | Chapter 13 |
| 10 | November 7, 9 | Arduino | In Class Only |
|  | November 13 | Last day to drop a course |  |
| 11 | November 14, 16 | Files | Chapter 13 |
| 12 | November 21 | Testing and Debugging |  |
| 13 | November 28, 30 | Tuples  Sorting | Chapter 9 |
| 14 | December 5, 7 | Projects |  |
|  | **Tuesday December 12th**  **10:00am – 12:50 pm** | **Final Exam** |  |