

**HUMBOLDT STATE UNIVERSITY**  
**CIS 130 – Introduction to Programming**  
**Spring Semester – 2007**

**Lecture:** Monday 3:00 - 4:50 pm FH 232  
**Labs:** Wednesday 3:00 - 4:50 pm GH 215  
**Instructor:** Sharon Tuttle **Office:** 236 NHW  
**E-Mail:** [st10@humboldt.edu](mailto:st10@humboldt.edu) **Phone:** 826-3381 (Office/Message)  
or [sharon.tuttle@humboldt.edu](mailto:sharon.tuttle@humboldt.edu)  
**Web Page:** follow link from <http://www.humboldt.edu/~st10>;  
note the link from the course web page to the Moodle site for this course, also.  
(you can also reach your Moodle account via <http://learn.humboldt.edu>)  
**Office Hours:** **M, W 1:00 - 2:30 pm**  
**Tu, Th 1:30 - 2:30 pm**  
or by appointment.

**Course description:**

An introduction to programming, including programming discipline, problem decomposition, algorithm design, modularity, cohesion, coupling, control structures, simple data structures, testing, error detection approaches, and documentation.

**Prerequisites:**

\* Math code 40, and  
\* CIS 110 or three units from 171, 172, 173, or 174. [CIS 110 can also be taken concurrently with CIS 130]  
OR  
Instructor consent.

Please note: if you are a CIS major, you will need to satisfy the CIS 110 requirement for the CIS major even if you have received consent to take CIS 130 without taking CIS 110 first. Please consult your academic advisor.

**Required texts:**

How to Design Programs, Felleison, Findler, Flatt, Krishnamurthi, chapters 1-4 (pp. 1-46) modified to use Python by the course instructor, with permission from MIT Press. [HtDP packet]

\* You need to purchase this from the course instructor (to pay for MIT usage fees). Details will be provided in class.

Other required readings will be assigned (and provided) as necessary. Supplemental references may be provided via O'Reilly's SafariU; if so, the link to this will be posted to the public course web page.

**Course software:**

For the first 8-10 weeks of the semester, you will be using the programming language Python; this is already installed on If you do use your own computer for writing your Python course assignments, you are expected to verify that your completed code also runs on cs-server before submitting it.

For the remainder of the semester, you are expected to use the GNU C++ compiler installed on cs-server.humboldt.edu. This, too, is free software; it is, for example, included in Dev-C++, a free C++ environment available in the GH 215 lab and available for download from <http://www.bloodshed.net/>. (But note that we will be using some specialized C++ tools on cs-server to start out.) Again, if you were to develop preliminary versions of your C++ coding in Dev-C++, it ought to run on cs-server as well --- but it is your responsibility to verify that this is so for your code before submitting it.

Throughout the semester, you will be making some use of the UNIX operating system (since that's what cs-server.humboldt.edu uses). Instruction on how to do so will be provided. Note that you may access cs-server.humboldt.edu by using ssh (secure shell) and sftp (secure ftp); ssh may be downloaded for free from:  
**<http://www.humboldt.edu/~its/techguides/software/software.shtml>**

Note, also, that ssh and sftp are installed on axe, redwood, and sorrel, so if you can reach one of them, you can

generally also reach cs-server.

### **Grading breakdown:**

Homeworks	25%	<b>Grading scale [SUBJECT TO POLICIES BELOW]</b>
Lab exercises	12.5%	A: >=93    A-: 90-92
Lecture exercises	12.5%	B+: 87-89    B: 83-86    B-: 80-82
Exams        Exam #1:	15%	C+: 77-79    C: 73-76    C-: 70-72
Exam #2:	15%	D+: 67-69    D: 60-66
Final Exam:	20%	F: <60

### **Important grading policies:**

1. To receive a **C or better** in this course, the following three requirements must **all** be met:
  - \* your overall semester average must **equal or exceed 72.5%**
  - \* the **average** of your Exam #1, Exam #2, and Final Exam must **equal or exceed 70%**
  - \* the **average** of your Homework assignments must **equal or exceed 60%**
2. If **all three** requirements above are **not** met, then your semester grade will be **either C-** or the letter grade computed according to the mapping given below, **whichever is lower**.
3. If **all three** requirements above **are** met, then your semester grade will be computed according to the mapping given above.

### **Final Exam**

The Final Exam for this course is scheduled for **3:00 pm on MONDAY, MAY 7th** in FH 232 (unless I announce otherwise). Note this time and date BEFORE making your end-of-semester travel plans.

### **Additional Course Policies**

5. You are expected to read this syllabus and be prepared to sign a statement that says you have received and understand these policies.
6. If you are eligible for disability related accommodations as per determination by our campus Disability Resource Center, please contact me as soon as possible to discuss these. Our campus Disability Resource Center (DRC) can assist you with determining eligibility for accommodations and can be reached at: (707) 826-4678, (707) 826-5392 TDD. The DRC is located in House 71 (Little Apartments) off library circle.
7. I generally check my e-mail (sharon.tuttle@humboldt.edu or st10@humboldt.edu) at least once a day on weekdays. Include **CIS 130** in the Subject: line for expedited handling.

You should monitor your e-mail for course-related messages. The University provides a means for you to specify your preferred e-mail address, so if you wish to receive e-mail into an account other than the one HSU provides, change your preferred e-mail address in **both** Banner and Moodle accordingly. Course-related messages from me will include **CIS 130** in the Subject: line.
8. If you would like me to e-mail certain course grades to you during the semester, then you must give me permission in writing on the course information form.
9. Regular attendance at lecture and lab sessions is expected. If you should happen to miss a lecture or a lab, then you are responsible for finding out what you missed. "I wasn't there that time" is never an acceptable excuse. Lecture notes are not posted, although many of the projected examples will be made available on the course web site. Graded lecture and lab exercises missed cannot be made up later.
10. Graded lecture and lab exercises will be given during most class meetings. The lowest two lecture exercise grades and the lowest two lab exercise grades will be dropped from your grade. That means you can be absent from the graded lecture and lab exercises twice each without direct penalty, for whatever reason (although you are, of course, still responsible for the material covered on those days, and it is your responsibility for determining what that material is). Illness does not allow you the privilege of making up

lecture or lab exercises --- plan to be sick no more than twice. [terminology blatantly borrowed from A. Burroughs CIS 315 syllabus]

Note: **no** homework grades are dropped; all count in your homework average.

11. When reading assignments are given, you are expected to prepare (read and study) assigned readings before class and to participate in class discussions. Projected examples will be utilized frequently during discussion. You should understand that there may be material in the reading that will not be discussed in lecture/lab, and material in the lectures/labs that may not be found in the reading. You are responsible for both.
12. As previously mentioned, during lab sessions, there will be lab exercises due during that lab session. Once a lab's lab exercise is complete, the remaining lab time should be used to continue work on the current course homework assignment, to practice course concepts, and/or to ask questions about course-related topics.

You should not expect to be able to finish homework assignments during the lab sessions --- like any college-level course, you should expect to put in a (potentially) large amount of time outside of scheduled class meetings (lectures and labs) doing the assigned reading, working on homework assignments, and practicing concepts discussed.

13. **Time expectations:** Remember the general rule of thumb for college-level courses --- to be successful in a course, you should plan to spend at least 3 hours outside of class for each 1 hour of college course credit. That implies an estimate of 9-10 hours a week spent outside of class for this course.

However, you should also be warned that:

- \* Programming courses can be notorious time eaters --- occasionally, a problem with your program will take large amounts of time to locate and fix. Starting early enough so that you have time to ask me questions when you run into problems can help with this.
  - \* You can only learn programming by practicing it, and it takes some much longer than others to master it. Practicing programming as much as possible helps.
  - \* The course will intensify as the semester progresses --- as you are able to do more, you will be expected to do more.
14. Each homework must be submitted as is specified on the homework handout in order to be accepted for credit. This may vary for different homeworks. Often, parts of homeworks will be submitted using a special tool on cs-server. Code that does not run on cs-server will not receive credit; remember that it is your responsibility to verify that your code runs on cs-server for each homework before submitting its code, regardless of where you developed that code.
  15. Each homework will be clearly marked with one or more due dates (a single homework could have multiple parts with multiple due dates).

**No homework will be accepted late. If you wish to receive any credit for a homework, then you must turn in whatever you have done, even if it is incomplete, by the deadline. Partial credit is usually preferable to no credit.**

Note that "the computer/network/etc. going down" is no excuse --- if you leave a homework for the last minute and there are technical problems, you still must turn in whatever you have by the deadline.

You may turn in multiple versions of homework files before the deadline; I will grade the latest pre-deadline submission unless you inform me otherwise. This is to encourage you to turn homework parts in early (since you will know that you can always turn in an improved version if further inspiration strikes).

16. The tool that you will be using to submit homework parts results in a file that serves as your "receipt" for having submitted items. You are expected to retain these "receipt" files at least until a grade has been posted to the course Moodle site for that homework. If there is a system glitch or other hardware/software/network problem, you may be asked to make me a copy of one or more receipt files; if you do not have them, then you will not receive credit for the files involved. These receipt files are for your protection!
17. The successful student in this course will start homeworks promptly after they are made available from the

course web page. You are encouraged to send me e-mail with questions you have as you work on these homeworks; if you wait until class meetings or even office hours to ask such questions, you may not have time to complete the homework.

It is not a problem if you send me a question and then end up answering it yourself before you receive my answer; likewise, it is not a problem if you end up sending me several questions (as you work on different parts of a homework while awaiting earlier answers).

18. Note that programs may be graded on **style** as well as on whether they run properly and whether they precisely meet the homework specifications and requirements. Discussions on programming style will be ongoing throughout the semester.

Programs are expected to meet homework handout specifications precisely; when one eventually works within a team on large software projects, following the specifications precisely is vital, and can mean the difference between a working product and one that just sits there.

Some course work may be graded based on whether it has been attempted --- other course work may be graded for correctness, style, and whether it meets specifications. You will not know in advance which will be the case.

19. Exam dates are given in the course schedule below. No make-up exams will be given, except by special prior arrangement. Note that the Testing Center's services were severely curtailed in Fall 2003, due to budget cuts.
20. **Academic Honesty:** All course work is to be the work of each student, **individually**, **unless** it is **explicitly** stated otherwise at the beginning of that course work's description. Except for explicit exceptions, this is not a group or team programming course.

(When an assignment does specify that it is acceptable to work in pairs or groups, make sure that you don't get into the situation where you are merely watching someone else learn.)

You are expected to be familiar with Humboldt's policies on academic honesty:  
**[http://studentaffairs.humboldt.edu/judicial/academic\\_honesty.php](http://studentaffairs.humboldt.edu/judicial/academic_honesty.php)**

Observe that among the actions that are unacceptable are submitting another's program as your own and failing to quote material taken from another person's written work.

For individual homeworks, students may discuss general approaches **as long as no one involved in the discussion is writing anything down or typing anything during such discussions**. Students may also help one another in determining causes of program bugs, or in determining the meaning of compiler error messages. However, students may not work together to complete homeworks, one student should not instruct another in how to write the code for a homework, and **any type of copying or modifying of another person's computer files, OR of providing computer files to another, related to homeworks is definitely over the line, and never justified**. This applies to copying of documentation and comments as well as to copying of program code.

Note that it is your responsibility to ensure that course assignment files are read-protected. If you are careless about this, and someone else copies your work, you will share the penalty. (In particular, be very careful about leaving work on shared network drives in campus labs, or in UNIX/LINUX directories that are not read-protected.)

Learning takes hard work; when students turn in others' work as their own, it is a slap in the face to those seriously interested in learning. Not turning in an assignment results in no credit for that assignment, of course, but that is an honest grade. Work that violates the course honesty policy deserves a lower grade than that, and therefore the course policy is that work violating this policy will receive **negative** credit. A person providing a file for copying receives the same **negative** credit as the copier. Repeat offenses will be handled according to University policies.

21. You are expected to check the course web page and the course Moodle site regularly --- course handouts, homework assignments, example code from lectures, and possibly more will be posted to the public course web page, and grades will be posted to the course Moodle site. You are expected to monitor your posted grades and let me know about any discrepancies.

22. Incompletes are rarely given and only in the case of a true emergency. They certainly are not appropriate for students who find they have fallen behind on assignments, missed a test, or taken on too much academic, work, or family responsibilities. For these situations, dropping the course would be appropriate.

Note that you can drop the class at any time until the University deadline (4:00 pm on April 13th). It is your responsibility to complete and submit the appropriate paperwork.

23. **Late arrival to class:** Please attempt to come to class on time. If you must arrive late or leave early, please do so with the least possible distraction to other students. If your late/early habits become disruptive, you may be asked to leave the class permanently.
24. **Class disruption:** University policy requires that instructors eliminate disruptions to the educational process. Distractions such as excess talking, working on assignments for other classes, demonstrations of affection, packing of books early, chronic late arrivals or early departures, excessive comings and goings or other behaviors that disrupt the class are not acceptable. Students indulging in such behaviors will first be warned before being required to leave the class permanently.
25. You are **encouraged** to ask me questions in class, in office hours, and by e-mail. The most successful students are those who are not afraid to ask questions early and often (I will gently let you know if you are overdoing it), who do the assigned reading, who attend lecture and lab regularly, who start assignments early, and who practice programming as much as possible.

**Approximate Course Schedule:** (tentative!! subject to change!!)

- \* Remember that there are graded exercises during most lecture and lab meetings.
- \* Note that this syllabus and this schedule are subject to change. If you are absent from lecture or lab, it is your responsibility to check on announcements made while you were absent.

Week 1 [Python]

- \* Lecture: NO LECTURE; MLK Holiday
- \* Lab: intro to course; a little UNIX, and where to find the **python** interpreter
  - \* HW #1 out

Week 2 [Python]

- \* Lecture: numbers, arithmetic expressions, and intro to functions
- \* Lab: numbers, arithmetic expressions, and intro to functions, continued
  - \* HW #1 due, beginning of lab; HW #2 out

Week 3 [Python]

- \* Lecture: intro to design recipe, auxiliary functions, and named constants
- \* Lab: intro to design recipe, auxiliary functions, and named constants, continued
  - \* HW #2 due, beginning of lab; HW #3 out

Week 4 [Python]

- \* Lecture: intro to conditionals through to the if-statement
- \* Lab: intro to conditionals through to the if statement, continued; review for Exam #1
  - \* HW #3 due, beginning of lab;

Week 5 [Python]

- \* Lecture: EXAM #1
- \* Lab: intro to conditionals through to the if statement, continued
  - \* HW #4 out

Week 6 [Python]

- \* Lecture: intro to statements with side effects
- \* Lab: intro to statements with side effects, continued
  - \* HW #4 due, beginning of lab; HW #5 out

Week 7 [Python]

- \* Lecture: intro to repetition
- \* Lab: intro to repetition, continued
  - \* HW #5 due, beginning of lab; HW #6 out

#### Week 8 [Python]

- \* Lecture: intro to arrays
- \* Lab: intro to arrays, continued
  - \* HW #6 due, beginning of lab; HW #7 out

#### Week 9 [Python]

- \* Lecture: simple file input/output
- \* Lab: simple file input/output, continued; review for Exam #2
  - \* HW #7 due, beginning of lab

#### Week 10 [Python]

- \* Lecture: EXAM #2
- \* Lab: wrapping up the Python portion of the course

#### Week 11 [C++]

- \* Lecture: intro to C++: starting with numbers, arithmetic expressions, and functions
- \* Lab: intro to C++: starting with numbers, arithmetic expressions, and functions, continued
  - \* HW #8 out

#### Week 12 [C++]

- \* Lecture: named constants, conditionals through to the if statement in C++
- \* Lab: named constants, conditionals through to the if statement in C++, continued
  - \* HW #8 due, beginning of lab; HW #9 out

#### Week 13 [C++]

- \* Lecture: intro to side effects in C++
- \* Lab: intro to side effects in C++, continued
  - \* HW #9 due, beginning of lab; HW #10 out

#### Week 14 [C++]

- \* Lecture: repetition and arrays in C++
- \* Lab: repetition and arrays in C++, continued
  - \* HW #10 due, beginning of lab; HW #11 out

#### Week 15 [C++]

- \* Lecture: parameter passing in C++, intro to simple file input/output in C++, maybe intro to Dev-C++
- \* Lab: parameter passing and intro to simple file input/output in C++, maybe intro to Dev-C++, continued; review for Final Exam
  - \* HW #11 due, beginning of lab

from the **Humboldt State University Emergency Management Program:**

## **SAFETY/EMERGENCY PREPAREDNESS INFORMATION FOR FACULTY TO PROVIDE TO STUDENTS**

*Copy and paste the information below into your class syllabi and use as an outline to follow  
in your introductory remarks at the start of each class each semester.*

### **1) Exits, Rally Points, and EAP's:**

- \* In each classroom or lab, identify the exit(s). Take note of alternate exits including doors and windows.
- \* Faculty and students must know how to get to the class "Rally Point" immediately outside the building. This is usually a commonly-known outdoor landmark such as a specific walkway, staircase, fountain, or planter. Gather and count heads.
- \* Emergency Assembly Points (EAP's) are for gathering people when our buildings aren't safe to occupy (e.g. a following a major earthquake). Each class should head there to organize themselves. Police

arrival at EAP's will be delayed.

## 2) **What to Do for the “Big Three”**

- \* Earthquake: Duck, cover, and hold until the shaking stops. Then head to Rally Point.
- \* Fire Alarm: Evacuate whether there is smoke and/or fire or not. Head to Rally Point.
- \* Gunshots/Criminal Activity: If at all possible, get out and get away. Don't linger at Rally Point. If you absolutely can't get out, lock the door and shelter in place.

## 3) **Power Outage Procedures:**

- \* When electrical power is first interrupted, individual faculty members are responsible for deciding on a class-by-class basis, if the class should continue, be relocated, or be canceled.
- \* If the power outage appears likely to continue for several hours or longer, campus-wide information about continuing/suspending classes will be disseminated from the President through deans, departments, and chairs.

## 4) **Campus Conditions and Emergency Information: 826-INFO (4636) or [www.humboldt.edu/emergency](http://www.humboldt.edu/emergency)**

- \* Try to avoid calling University Police for campus status information. Switchboards are swamped with calls after an earthquake, severe winter storm, or power outage.
- \* If campus is closed, that information will be at these sites.
- \* These resources can take multiple inquiries simultaneously, and will be updated daily or as conditions warrant.

## 5) **Students Must Get Themselves Prepared:**

- \* The North Coast is prone to earthquakes, severe weather, road slides, and utility interruptions. The campus cannot feed/shelter all of our students.
- \* Every student must store sealed bottled water, non-perishable food, flashlight, and a battery-operated radio. More information is available at [www.prepare.org](http://www.prepare.org).
- \* Interested students may seek specialized training from the American Red Cross and/or by applying to Humboldt's Campus Emergency Response Team (CERT).

## 6) **ADDITIONAL INFORMATION:**

### **Learn our North Coast Safety Risks:**

- \* River safety: Take river safety training. Study the river with an experienced friend. Watch for “sweeper” branches that can hold you under water. Stay sober.
- \* Coastal safety: Keep an eye on the ocean and for “sneaker” waves that may be 2-3 times larger than the surf pattern. Sneaker waves pull victims out to sea every year. Hypothermia and powerful currents are deadly threats. If the water draws down low or you hear a loud roar, head to higher ground immediately.
- \* Earthquake: duck, cover, and hold on during strong shaking. Then, evacuate.
- \* Tsunami: If you are at the beach and feel strong shaking, head to higher ground immediately. If you hear that a warning is in effect, evacuate **ONLY** if you are in a coastal zone (the HSU main campus is not in a coastal zone).