Course Syllabus for CIS 480 Extreme Programming Fall 2011

Basic Course Information:

Instructor: Sharon Tuttle

Lecture time and location: Tuesday 3:00 – 3:50 pm BSS 308

Lab time and location: Tuesday 4:00 - 4:50 pm BSS 313

Thursday 3:00 - 4:50 pm BSS 313

Instructor's office: BSS 322

st10@humboldt.edu or

Instructor's e-mail: sharon.tuttle@humboldt.edu or

smtuttle@humboldt.edu

Instructor's office phone: (707) 826-3381

Instructor's office hours:

(tentative)

Monday, Wednesday 1:00 - 2:00 pm

Tuesday, Thursday 10:00 - 11:30 am

or by appointment

follow link from:

Course public web page: http://users.humboldt.edu/smtuttle/

or follow link from course Moodle site

Course Description:

This course will introduce and then allow you to experience a taste of the agile programming methodology known as Extreme Programming. Extreme Programming seeks to be a more robust, more productive alternative to traditional software engineering.

The first 3-5 weeks will be an overview of the practices that make up Extreme Programming.

The remaining weeks will be a Python project (using PyUnit for unit testing), in which the entire class will make up the project team, to experience these practices in action.

Course Objectives:

After successfully completing this course, students should:

- be familiar with the classic Extreme Programming core practices;
- have had some experience practicing some of these core practices in a team software project;
- be able to use PyUnit to write unit tests.

Course Prerequisites:

CS 132/CIS 291 and CIS 480 - Python, or instructor permission

Required Course Text, Materials, etc.:

• Required readings will be made available either on-line, or via resources available through the HSU Library such as the ACM Digital Library and Safari TechBooks Online.

Course Software:

We will be using Python (and its included PyUnit module) for the course project.

Also, throughout the semester, you will be making some use of the UNIX operating system (since that's what nrs-labs.humboldt.edu uses). Note that you may access nrs-labs.humboldt.edu by using ssh (secure shell) and sftp (secure ftp); one of several versions of ssh may be downloaded for free from:

http://www.humboldt.edu/its/software

(A nice introductory tutorial, including screenshots, for the graphical Windows version of ssh and sftp can be found at:

http://oit.colorado.edu/node/1657

)

Grading Breakdown:

If you are a Computer Science (CS) or Computer Information Systems (CIS) major, it is important that you note that you must earn **at least a C in CIS 480 - Extreme Programming** for this course to count as a CS or CIS major elective.

Your semester grade will be determined by the percentage of points that you earn, **subject to some minimum requirements**. Here are the grade percentages, followed by those minimum requirements:

Attendance/participation 20.0% Class project: 45.0% Exam 1: 15.0%

Final Exam: 20.0% Tuesday, December 13, 3:00 - 4:50 pm, BSS 308

Grade Requirements:

- 1. To earn a grade of C or better in this course, the following four requirements must all be met:
 - your overall semester average must **equal or exceed 72.5%** this is to show a reasonable level of overall mastery of the course material.
 - the **average** of your Exam 1 and Final Exam grades must **equal or exceed 60%** this is to show that you understand at least a minimal reasonable level of the most important course concepts.
 - your Attendance/Participation grade must **equal or exceed 60%** this is because the core of this course is practicing Extreme Programming practices in class, and you cannot do so without attending and participating in these practices as part of the class team!
 - your Class Project grade must **equal or exceed 60%** this is because the project is the heart of this course. If you have not met this requirement, you have not truly shown minimal competence in this course's material.
- 2. If all four 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.

(That is, if a student had an overall semester average of 74% but an Attendance/participation grade of 55%, that student would receive a **C**- for his/her semester grade; if a student had all component averages all above 60%, but an overall semester average of 65%. then that student would receive a **D** for his/her semester grade. You are expected to ASK ME if this aspect of the grading policy is not clear to you.)

3. Including the four requirements noted above, your semester grade will be computed according to the mapping given below:

Overall Percentage (based on the given weights)	Exams average	Attendance/ Participation grade	Class Project grade	Letter grade
>= 93	>= 60	>= 60	>= 60	A
>= 90 and < 93	>= 60	>= 60	>= 60	A-
>= 87 and < 90	>= 60	>= 60	>= 60	B+
>= 83 and < 87	>= 60	>= 60	>= 60	В
>= 80 and < 83	>= 60	>= 60	>= 60	В-
>= 77 and < 80	>= 60	>= 60	>= 60	C+
>= 73 and < 77	>= 60	>= 60	>= 60	C
>= 73	< 60	any	any	C-
>= 73	any	any	any	C-
>= 73	any	< 60	any	C-
>= 73	any	any	< 60	C-
>= 70 and < 73	any	any	any	C-
>= 67 and < 70	any	any	any	D+
>= 60 and < 67	any	any	any	D
< 60	any	any	any	F

Final Exam:

Again, the Final Exam for this course is scheduled for **Tuesday**, **December 13**, **3:00** – **4:50 pm**, in **BSS 308** (unless I announce otherwise). Note this time and date BEFORE making your end-of-semester travel plans.

Students with Disabilities:

Persons who wish to request disability-related accommodations should contact the **Student Disability Resource Center** in the Learning Commons of the Lower Library, **826-4678 (voice)** or **826-5392 (TDD)**. You can reach the Student Disability Resource Center's web site at:

http://www.humboldt.edu/disability/

Please note that some accommodations may take up to several weeks to arrange. If you are eligible for such accommodations, please contact me as soon as possible to discuss them.

Add/Drop Policy:

Students are responsible for knowing the University policy, procedures, and schedule for dropping or adding

classes. You can find these on the web at:

http://www.humboldt.edu/registrar/students/regulations/schedadjust.html

You can find the University policies for repeating classes at:

http://www.humboldt.edu/registrar/students/regulations/repeat.html

Note that the CSU (and thus HSU) policies on withdrawing from and repeating courses changed as of Fall 2009:

- Students may withdraw from no more than 18 semester-units after the first four weeks of instruction; that is, students may withdraw from no more than 18 semester-units between census and the final 20% of instruction, and only then with a serious and compelling reason. (Note that: "Withdrawal from courses for reasons that are catastrophic, such as accident or serious illness do not count toward the 18-unit limit." [from the Registrar's web site])
- Students may repeat courses for grade forgiveness only if they earned grades lower than a C.
- Students may repeat up to 16 semester-units with grade forgiveness.
- Students may only repeat a course for grade forgiveness two times and each of these attempts counts toward the 16-unit maximum for repeats.
- Students may repeat up to an additional 12 semester-units with grades averaged.

Be careful – as of Fall 2009, HSU is being much more strict about what constitutes a "serious and compelling reason".

The census date for Fall 2011 (before which you can drop without a W, and without it counting toward your 18 semester-units drop limit) is: **Monday, September 19th**.

The last date for Fall 2011 to drop with a W on your transcript, with a serious and compelling reason, and subject to the 18 semester-unit drop limit, is: **Monday, October 31st**.

If you do drop the course, note that it is **your responsibility** to complete and submit the appropriate paperwork.

Incompletes:

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 (**if** that is still possible according to the University policies for dropping courses).

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 at least 9 hours a week spent outside of class for this 3-credit course.

However, you should be warned that:

- Because of the nature of this course -- as a team project course where the entire class is the project team -- there may also be the need to try to meet with other team members outside of class times as well.
- Project deadlines will **not** be extended because you waited too late to start or because you did not allocate
 enough time before the deadline to work on it; likewise, they will **not** be extended because of hardware or
 network failures. You need to keep backups of your files at all times, and need to plan your schedule to be
 able to work on on-campus computers as necessary.
- If you have not completed a project milestone by the deadline, your best choice is to submit whatever you have managed to do by then, as partial credit is your friend, to ask me about anything there that is still unclear, and to get a good early start on the next milestone.

Academic Honesty:

Students are responsible for knowing policy regarding academic honesty. For more information, visit:

http://www.humboldt.edu/studentrights/academic honesty.php

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

Asking Questions/Getting Help:

- 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 class regularly, who start coursework promptly after it is made
 available, and who practice course concepts as much as possible.
 - It is better to ask a question sooner than later -- for example, it is better to send an e-mail with a specific question as soon as you think of it than it is to wait a day or two until the next class meeting or office hour. If you wait to ask such questions, you may not have time to complete the assignment.
 - It is perfectly reasonable if you send me a question and then end up finding out the answer yourself before
 you receive my answer; likewise, it is not a problem if you end up sending me several questions in
 separate e-mails (as you work on different parts of a homework while awaiting earlier answers).
- That said, I am expecting that you will ask **specific** questions overly vague or broad questions are problematic. (For example, an example of a specific question is, "When I try to run function: (paste in the function), I receive the following error message: (paste in the error message) Can you point me in the right direction about what is wrong?" An example of an overly vague or broad question is: "Here's my part of a project milestone. Is it right?")
- I try to check my e-mail (st10@humboldt.edu or sharon.tuttle@humboldt.edu or smtuttle@humboldt.edu) about once a day on weekdays, and about once over each weekend. This is another reason to start assignments early, so that you have time to receive a reply to any questions that might arise. Include CIS 480 and a general description of your topic in the Subject: line, both because including this makes it less likely that I'll overlook your question, and because it will make your message stand out if it the spam filter gets confused and puts it in the university spam quarantine.
 - If I have not replied to your e-mail within 24 hours, please re-send it, just in case it did get overlooked somehow.
 - Also, DON'T INCLUDE the word "password" in your e-mails to me -- pwd is a handy abbreviation to
 use instead -- because, due to phishing scams, HSU's spam filtering definitely does not like e-mails with
 that word in it! (Odd, but this was definitely the case in Spring 2010...)

Additional Coursework-Related Policies:

- Because of the team-oriented and heavily participatory nature of this class, you will lose attendance/participation credit for each absence and/or for a class in which you do not participate sufficiently (in the instructor's judgment). You may miss up to 3 class sessions for approved, excused reasons (which must be sent to me in e-mail either before the absence or as soon as is reasonably possible after the absence) without losing attendance/participation credit; other than that, you will lose 5 points for each absence, and up to 5 points for each class session in which you are not, in the instructor's judgement, participating sufficiently in that day's class activities.
- Each project milestone must be submitted as is specified to be accepted for credit. This may vary for different milestones. Often, parts of project milestones will be submitted using a special tool on nrs-labs.
- Each project milestone will be clearly marked with one or more due dates (a single milestone could have

multiple parts with multiple due dates).

- No project milestones will be accepted late. If you wish to receive any credit for a milestone, 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 milestone for the last minute and there are technical problems, you still must turn in whatever you have by the deadline. As with any work done on computer, make frequent back-ups of your files!
- You may submit multiple versions of project milestone files before the deadline; I will grade the latest predeadline submission unless you inform me otherwise. This is to encourage you to turn project milestone parts in early (since you will know that you can always turn in an improved version if further inspiration strikes). You also don't have to worry about forgetting to submit something that has already been submitted.
- The tool that you will be using to submit some project milestone 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 project milestone. 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!
- It is nearly impossible to write unambiguous specifications. If you have questions about "what she means", get them resolved very early in the development cycle by **asking**.
- There is more to computer code than simply whether it runs or not...
 - Part of your grade will be determined by how well your work meets the agreed-upon requirements. Work
 that you turn in is expected to meet agreed-upon specifications precisely; when one works within a team,
 following the specifications precisely is vital, and can mean the difference between a working product and
 one that just sits there.
 - Note that work may be graded on **style** as well as on whether it runs properly and whether it precisely
 meets the agreed-upon specifications and requirements. Discussions on style will be ongoing throughout
 the semester.
- Some coursework may be graded simply based on whether it has been attempted (the instructor's decision is final as to whether this is the case) -- other coursework may be graded for correctness, style, and whether it meets specifications. You will not know in advance which will be the case.

Additional Course Policies:

- You are expected to read this syllabus and be prepared to sign a statement that says you have received it, have read it, and understand its contents.
- 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.
- Exam dates are given in the course schedule below. Make-up exams are only possible by special prior arrangement or because of a valid medical excuse.
- 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 Account Center and Moodle accordingly. Course-related messages from me will include CIS 480 in the Subject: line.
- You are expected to check the public course web page and the course Moodle site regularly --- course handouts, examples from class, 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.

- When reading assignments are given, you are expected to prepare (read and study) assigned readings before class and to participate in class discussions.
- Attendance and disruptive behavior: Students are responsible for knowing policy regarding attendance and disruptive behavior:
 - http://www.humboldt.edu/studentrights/attendance_behavior.php
- Regular attendance at class sessions is expected (and for this class, is critical). If you should happen to miss a class, then you are responsible for finding out what you missed. "I wasn't there that time" is never an acceptable excuse.
- Late arrival to class: Please attempt to come to class on time, with your headphones put away and your cell phones turned off. 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.
- Class disruption: University policy requires that instructors eliminate disruptions to the educational process. Distractions such as excess talking, ringing cell phones, working on assignments for other classes, inappropriate or distracting laptop/tablet/smartphone/gadget use, demonstrations of affection, packing of books early, loud music leaking from headphones, 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.
- Emergency Evacuation: Please review the evacuation plan for the classroom (posted on the orange signs), and review the campus Emergency Preparedness web site at: http://www.humboldt.edu/emergency Procedures. During an emergency, information regarding campus conditions can be found at 826-INFO or: http://www.humboldt.edu/emergency

Very Tentative Course Schedule: (very subject to change!)

- Introduction to PyUnit
- Introduction to Extreme Programming Core Practices
- Exam 1 Tuesday, September 20
- Practicing Extreme Programming on a whole-class team project

Final Exam:

TUESDAY, December 13, 3:00 - 4:50 pm, in BSS 308 (unless I announce otherwise)