

# Computer Science 1323

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*Sections 1, 10, and 995, Spring 2015*

## General Information

**Section 1 Class Time:** 3-4:15 MW

**Section 10 Class Time:** 9:30-10:20 MWF

**Section 995:** No scheduled class time or location

**Section 1 Class Location:** 270 Devon Energy Hall

**Section 10 Class Location:** 128 Dale Hall

**Prerequisites:** Math 1523 or equivalent or concurrent enrollment.

**Section 1** is appropriate for students with some prior programming experience.

**Section 10** is appropriate for students without any prior programming experience.

**Section 995** is appropriate for students with or without programming experience.

**Section 995:** This section is offered online. Online classes can be wonderful for people who work full time and for students with scheduling conflicts. However, taking an online class requires a tremendous amount of discipline, maturity, and responsibility. If you are new to college, have had academic difficulties in the past, or struggle with meeting deadlines, an online course may not be a good choice.

**Instructor:** Dr. Deborah A. Trytten (rhymes with mitten)



**Office:** Devon 252

**Office Phone:** 325-4299 (voice mail available, but email usually gets a quicker response)

**Personal URL:** <http://www.cs.ou.edu/~trytten>

**Email:** [dtrytten@ou.edu](mailto:dtrytten@ou.edu)

**Teleconference:** Download at <http://vsee.com>. All class personnel can be reached at VSee ID [cs1323@cs.ou.edu](mailto:cs1323@cs.ou.edu). My personal VSee ID is [dtrytten@ou.edu](mailto:dtrytten@ou.edu).

My office hours sometimes have to be changed during the semester. My current office hours are located on Janux, are in a spreadsheet on the shared dropbox folder and are always posted by my door. In addition to being in my office during office hours, I can also teleconference with students during office hours. While this may seem awkward at first, teleconferencing is a vital professional skill that you would be wise to develop now. Besides, it is convenient to not have to walk across campus for some quick help. My current office hours are in the table below.

Day	Time	Location
Monday	1-2 p.m.	Devon 252 and Teleconference
Tuesday	8-9 p.m.	Teleconference
Wednesday	8-9 p.m.	Teleconference
Thursday	4:30-5:30 p.m.	Devon 252 and Teleconference
Friday	10:30 – 11:30 a.m.	Action Center Tutoring Wagner 245
Friday	8-9 p.m.	Teleconference
Sunday	7-8 p.m.	Teleconference

Appointments for additional office hours are scheduled through email, preferably 24 hours in advance.

### Teaching Assistants and Tutors

All teaching assistant office hours will be held in Devon 115. The TAs will also be available for help through teleconference software during their office hours. The VSee username for all staff related to this course is [cs1323@cs.ou.edu](mailto:cs1323@cs.ou.edu). All TA office hours are open to students from all sections.

**Sections 1 and 10:** Mamta Yadav: [mamta.go4@ou.edu](mailto:mamta.go4@ou.edu)

**Sections 1 and 10:** James Land: [jamespl1@ou.edu](mailto:jamespl1@ou.edu)

**Sections 1 and 10:** Sarah Otts: [sotts@ou.edu](mailto:sotts@ou.edu)

**Section 995:** Stephen Smart: [stephen.d.smart-1@ou.edu](mailto:stephen.d.smart-1@ou.edu) .

**Section 995:** Taner Davis: [taner.davis@yahoo.com](mailto:taner.davis@yahoo.com)

**All office hours will be posted on a spreadsheet in the shared dropbox.**

**All Sections:** University College Action Center Tutor: Austin Graham: [austin.p.graham-1@ou.edu](mailto:austin.p.graham-1@ou.edu)

Action Tutoring Session (cotaught by Dr. Trytten) Friday 10:30-11:30 a.m., Wagner 245

Action Tutoring Session Tuesday 7-8 p.m., Wagner 245

The College of Engineering tutoring schedule will be here (about two weeks into the semester):

<http://www.ou.edu/content/coe/currentstudents/studentsupport/tutoring.html> .

### Useful Links:

I share a dropbox folder that contains the semester schedule, PowerPoints from lecture, code that we develop in class, and other useful documents here:

[https://www.dropbox.com/sh/ho3tuc6gcqcmtoS/AABUlwQIM\\_jU51uQlaTO7u6ca?dl=0](https://www.dropbox.com/sh/ho3tuc6gcqcmtoS/AABUlwQIM_jU51uQlaTO7u6ca?dl=0).

The complete day by day schedule of deadlines is here (remember this changes FREQUENTLY):

<https://www.dropbox.com/s/ivg9qjgfy0va0r6/CS%201323%20Schedule%20Fall%202015.xlsx?dl=0>.

This course is run from <http://Janux.ou.edu> . Login with your OU 4x4.

## Required Materials:

Most of the learning materials are integrated into the Janux platform and are freely available to students. This includes one online textbook (not the main textbook for the class), many problem solving videos, assignments, a dropbox to submit work, and the official course gradebook.

You must purchase the following items:

- Zyante Introduction to Java (online textbook). Sign up at <http://zyBooks.com> . The zyBook code is: **OUCS1323Fall2015**. Click Subscribe. Pick the proper section.
- TuringsCraft Java CodeLab package (<http://www.turingscraft.com> ). The access code is purchased over the Internet directly from the company.

Section	Access Code
1	OKLA-20438-YPAJ-26
10	OKLA-20439-YPAJ-26
995	OKLA-20440-ZPAJ-26

If you do not have a credit or debit card available, call Turingscraft and they will turn on your account while you mail a check.

- **Sections 1 and 10 only:** iClicker interactive classroom response unit. To get credit for your iClicker questions, you must register your remote here: <https://www1.iclicker.com/register-clicker/>. If you change remotes during the semester, remember to register again. People with unregistered remotes will not get credit for their in class work. Students in Section 1 should review the section entitled **Grading** before deciding whether to purchase a clicker or not.

**Sections 1 and 10:** Working laptop computer with 2 hours of battery life, and wireless network access. We will use computers during class time every day. You are expected to bring your laptop to class.

## Software Installation

Java JDK Version 8, Update 51 from <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>. You will need to the Java Runtime Environment (JRE) installed on your computer. You may also wish to install the documentation on your computer if you have difficulties with internet connectivity.

We will use Eclipse as our integrated development environment (IDE) this semester. Eclipse can be downloaded from eclipse.org (Eclipse IDE for Java Developers is the preferred installation: <http://www.eclipse.org/downloads/packages/eclipse-ide-java-developers/lunasr2>). Please use the most current version.

We will use VSee from <http://vsee.com> as our teleconferencing software. This software allows screen sharing, which is critical to getting effective help programming.

## Free Software Tutorial Products

We will use a number of software products to help you learn to program. You need to login to all products in order for grades to be recorded. When asked to enter your name, **please use the name that appears in official University records**, not a nick name.

Coding Bat <http://codingbat.com/> requires you to create an account of your own. Please give your name in the account, use your student number, and not just your email. Share your responses with the correct email in the table below so we can get your grades recorded properly.

Section	Email Address to Share for Javabat
1	cs1323-section1-fall2015@ou.edu
10	cs1323-section10-fall2015@ou.edu
995	cs1323-section995-fall2015@ou.edu

Also, remember to login when you work exercises—it isn't required and if you are not logged in then your grades will not be recorded.

**Sections 10 and 995:** Proplets are a website used to gain understanding of how programs work.

Section	URL
10	<a href="http://proplets.org/user/f15/ou/10/">http://proplets.org/user/f15/ou/10/</a>
995	<a href="http://proplets.org/user/f15/ou/995/">http://proplets.org/user/f15/ou/995/</a>

## Topical Coverage

Topics: Programs, Java, input and output, identifiers, variables, assignment statements, constants, memory diagrams, primitive data types, conditional statements, repetition, methods, parameters, arguments, return values, one dimensional arrays, objects, classes, and classes from the Java Application Programmers Interface (API) (including Arrays, ArrayList, Character, Collections, Double, Integer, Float, Scanner, String, StringBuffer, and StringBuilder).

In this class, students will increase their ability to meet the following ABET outcomes:

- Outcome B: Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Outcome C: Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs,
- Outcome K: Apply design and development principles in the construction of software systems of varying complexity.

## Course Policies

**Platform:** This class will use the Janux platform (<http://janux.ou.edu>). You are responsible for things posted on the site or sent by email with a 24 hour delay.

**Class Email Alias:** Urgent announcements will be sent through email. It is your responsibility to:

- Have your university supplied email account forwarded to the location where you read email.
- Make sure that your email address on the course home page is correct, and forwards email to the place where you read it. I'll send out a test message during the first week of class. If you do not receive this message, it is your responsibility to get the problem resolved.
- Have your email program set up so that replying to your email will work correctly. You can send email to yourself and reply to yourself to test this.

If you need assistance in accomplishing any of these tasks, contact 325-HELP. You are responsible for reading emails within 24 hours.

**Examinations:** There will be three midterm examinations and a final examination. Missing an examination without a previously approved excuse will result in a grade of zero for that examination. Makeup examinations are only available when required by University policy, in other words, almost never. Midterms are currently scheduled on Friday, September 25, Monday, November 2, and Monday November 23 (two days before Thanksgiving break). **Midterm examinations are 50 minutes long.**

**Sections 1 and 10:** Examinations are given in our regular classroom.

**Section 995:** Examinations are given in Devon 320 from 8-5 on the scheduled examination days. You may take your examination at any time during this window that is convenient for you. If you are not able to take examinations during this time frame, you may use <http://ProctorU.com> to take your examinations. This online service costs \$25 per examination, more if you schedule it on short notice.

**Final Examination:** The final examination date is listed in the table below. The final is comprehensive, as required by College of Engineering policy. No final examinations can be given early, except as required by University policy. Final examinations are two hours long.

Section	Day/Time	Location
1	4:30-6:30 p.m. Thursday, December 17	Devon 270
10	8-10 a.m. Tuesday, December 15	Dale Hall 128
995	8 a.m. – 5 p.m. Tuesday, December 15	Devon 320
	12:00 a.m.-11:59 p.m. Tuesday, December 15	<a href="http://ProctorU.com">http://ProctorU.com</a>

**Clickers (Sections 1 and 10 only):** I will use clickers in class every day to gauge student learning and track attendance and participation. Bringing someone else's clicker to class and entering answers for them is academic misconduct. I will do integrity checks during the semester to ensure that people are using only their own clickers.

**Discussion Groups and Email:** The discussion group on Janux should be the primary method of communication outside of class. This allows everyone in the class to benefit from the answer to your question, and provides students with more timely answers since other students may be able to answer your questions. Matters of only personal interest should be directed to email instead of to the newsgroup, *e.g.* informing me of an extended personal illness.

**Laptop Computers (Sections 1 and 10 only):** It is the responsibility of each student in this class to have a working laptop computer available for every class. If your computer requires repair during the semester, it is your responsibility to make arrangements to have another computer available and get the necessary software installed before the class time. A student without a fully usable laptop computer will be at a severe disadvantage in this class.

**Adjustments for Pregnancy/Childbirth Related Issues:** Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see <https://www.ou.edu/content/eoo/faqs/pregnancyfaqs.html> for answers to commonly asked questions.

**Religious Observances:** It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Please check the schedule and inform me of conflicts as soon as possible.

**Title IX Resources:** For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocate on call 24/7, counseling services, and mutual no contact orders, scheduling adjustments and sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5) or the Sexual Assault Response Team 405-615-0013 (24/7) to learn more or to report an incident.

**Academic Integrity Violations:** The University of Oklahoma defines an integrity violation to be any act that improperly affects the evaluation of a student's academic performance or achievement. The Student's Guide to Academic Integrity ([http://integrity.ou.edu/students\\_guide.html](http://integrity.ou.edu/students_guide.html)) gives examples: "cheating on examinations with cellphones, notes, or neighbors; plagiarism, improper collaboration on assignments intended for individual completion."

The most common violations in this course are plagiarism, usually on projects and homework. Plagiarism is defined (<http://dictionary.reference.com/browse/plagiarism?s=t>) as "an act or instance of using or closely imitating the language and thoughts of that author's work as one's own, as by not crediting the original author." I avoided committing plagiarism by putting words in quotes and citing the source in the previous sentence. However, this mechanism does not work on homework and laboratory assignments since it only changes one form of academic misconduct (plagiarism) into another (improper collaboration on assignments intended for individual completion).

When you pass this class with a grade of C or better, I am certifying to the world that you are a competent Java programmer. I cannot make this certification without seeing work that you did on your own. Interactive programming tutors, laboratories, homework and examinations should be the work of a single individual, not their friends and not their tutor. Although I can't really believe I have to say this, the solutions to assigned work should not be copied from internet sources, including cheat sites and paid professional programmers.

1. Do not show, give, or email another student a copy of your work before the submission deadline. Every semester I have multiple students submit another student's work as their own with the other student's name still on it. Do not trust other students to not do stupid things.
2. The penalties for permitting your work to be copied are usually the same as the penalties for copying someone else's work because it is not always possible for me to distinguish the person who copied from the person who allowed his or her work to be copied. In cases where I can make the distinction, the person who copied the work will have a more severe sanction.

It is permissible to talk to other students in the class to get help completing or improving your work as long as this help does not interfere with my ability to properly evaluate the quality and quantity of your understanding of computer programming. To understand the distinction, review the examples in the table below. These are typical examples and are not intended to be a comprehensive list of all of the ways in which academic integrity can be or not be violated.

Situation	Integrity Violation?
Students A and B meet and work on their homework together.	Yes
Students A and B create drafts of their homework assignment independently and get together to compare answers and discuss their understanding of the material. Each person decides independently whether to make changes that are discussed.	No
Students A and B agree to prepare drafts of their homework assignment independently, but only Student A does. Student A shares his draft to Student B who reviews it and offers suggestions for improvement.	Yes
Students A and B agree that student A will work the even problems and student B will work the odd problems. They share their work.	Yes
Student A has completed a project and is helping student B complete the same project. Student A explains to student B what student B's code actually does, which is different than what student B thinks the code does. Student B determines how to modify the code independently.	No
Student A has completed a project and is helping student B complete the same project. Student B is having trouble getting one part of the program to work, so student A texts student B three lines of their solution.	Yes
Student A has completed a project and is helping student B complete the same project. Student B is having difficulty getting the program to work, so student A tells student B exactly what to type for several lines.	Yes
Student A has completed a project and is helping student B complete the same project. Student B is having difficulty getting the program to work, so student A suggests that student B use a specific debugging strategy (e.g. "Print out the contents of the variable").	No

Student A has completed a project and is helping student B complete the same project. Student A shows student B an example program in the textbook that will be helpful in figuring out the solution to the problem.	No
Students A and B work on a project together. After they have finished it, student A takes the code and modifies it so the programs do not appear to be identical. *	Yes

\*Please be aware that I have software at my disposal that can detect these kinds of changes, so this strategy is likely to be detected.

**If you work with anyone else in completing an assignment, you must include that person's name on the submitted work.** Failure to list a student you worked with on the assignment is a violation of academic integrity. If I find that the submitted work appears to be plagiarized, all students involved will be invited to my office individually to explain the work and/or perform similar work. The instructor will determine whether plagiarism occurred based on the match between the depth of understanding of the material displayed in the assignment and the individual interviews.

I sometimes use automated software to determine when student work is overly similar. The results of using this software are then evaluated manually by the instructor before any academic integrity violations are filed.

Upon the first documented occurrence of academic misconduct, I will report the academic misconduct to the Campus Judicial Coordinator. If you are found to have committed academic misconduct by this process, the least penalty is usually failing the class, often with suspension from college for a semester. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code. In the event that I elect to admonish the student, the appeals process is described here: [http://integrity.ou.edu/summary\\_of\\_the\\_process.html](http://integrity.ou.edu/summary_of_the_process.html).

**Tutors:** Before you hire a tutor, remember that the TAs, Action Center Tutor, College of Engineering tutors and I are available and glad to help students learn course material. In addition to regularly scheduled office hours, I'm available in my office at many other times. If you email, I can often make an appointment. And I often answer questions through email or teleconference. In other words, use the resources that the University provides to help you with this course before spending a lot of money getting what may be less effective help elsewhere.

**Tutors and Academic Integrity:** Private tutors can be a source of support for students who are having difficulty in the class, but only if the tutor is aware of the distinction between teaching you the material so that you ultimately can do your own work, and doing work for you. Tutors who do work for you are not only failing to help you learn, they are committing academic misconduct. All of the situations in the table of academic integrity scenarios above apply equally whether student A is a tutor.

If your tutor doesn't know how to teach properly, please ask them to call or visit me and I will provide training and guidance. If you are tutoring someone else in the class (with or without pay), you can be accused of academic misconduct if you allow this person to copy your work.



**Incompletes:** The grade of I is intended for the rare circumstance when a student who has been successful in a class has an unexpected event occur shortly before the end of the class. I generally will not consider giving a student a grade of I unless the following three conditions have been met.

1. It is within two weeks of the end of the semester.
2. The student has a grade of C or better in the class.
3. The reason that the student cannot complete the class is properly documented and compelling.

**Accommodation of Disabilities:** The University of Oklahoma and I are committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with me as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325-3852 or TDD only 405/325-4173.

**Classroom Conduct (Sections 1 and 10 only):** Disruptions of class will not be permitted. Examples of disruptive behavior include:

- Allowing a cell phone or pager to repeatedly beep audibly.
- Playing music or computer games during class in such a way that they are visible or audible to other class members.
- Exhibiting erratic or irrational behavior.
- Behavior that distracts the class from the subject matter or discussion.
- Making physical or verbal threats to a faculty member, teaching assistant, or class member.
- Refusal to comply with faculty direction.

In the case of disruptive behavior, I may ask that you leave the classroom. If your behavior was especially egregious I may charge you with a violation of the Student Code of Responsibilities and Conduct.

## **Laboratory, Homework, Quizzes, Attendance**

**Late Work:** I do not accept late work. If there is a legitimate reason for missing a deadline, work can be excused. Excused work is given a neutral grade. Legitimate reasons for an excused absence include illness severe enough for a doctor to state that class attendance is not advised, a death or funeral in the immediate family, and sudden illness of a dependent. Excused absences require substantial documentation. Flat tires, parking problems, trips (even if academically related), alarm clock failures, minor personal illness, routine internet outages, general doctor's appointments, and routine dependent care are not acceptable excuses for submitting late work.

**Computer Literacy Expectations:** A list of specific expectations for computer literacy is posted on Janux. If you do not meet these expectations, it is your responsibility to remedy this situation immediately or drop this class.

**Timing:** The only way to learn programming is through practice. This course has many assignments to allow students to practice enough to become proficient and successful as programmers. The amount of time between when a homework assignment is given and when it is due will always be a week or less—often only two days. You should expect to devote some study time to this class every single day. A schedule is posted in the shared dropbox that records the current deadlines. This schedule changes frequently to meet student learning needs.

**Projects:** Incomplete projects may be turned in for partial credit.

- Projects which do not compile will generally receive no credit.
- Beyond the first two projects, projects that do not execute will generally receive no credit.

**Project Strategy:** The grades for projects are determined by how well the material presented meets the objectives stated on the project handout. If you have to turn in an incomplete project, the way to maximize the points received is to meet as many objectives as possible. One effective strategy is to meet objectives one at a time. If you save a copy of our current project to a separate directory when an objective is met, this can prevent many problems.

**Project Submission:** The .java file(s) (not the .class files) should be exported from eclipse, uploaded on Janux. A single folder/file should be submitted. All submissions have a required file name. Do not deviate from this file name because it makes it difficult for graders to complete their work.

**Backup Copies of Projects:** It is your responsibility to back up your files appropriately. No extensions to deadlines will be given as a result of lost files, unless there is a massive, network wide problem which affects the entire class. Do not rely on anyone else to back up your important files. Buy a jump drive and make backing up your work a routine part of computer usage. Dropbox or other cloud services are also useful for this. It is particularly important to save a backup copy of any homework or laboratory project that is submitted. This backup version should not be opened or edited after submission in case something goes wrong with the submission (like submitting the .class files instead of the .java files, a very common error).

**Homework Submission:** Homework is due by 11:59 p.m. on the selected due date and submitted on Janux in **a single, well formatted document that contains your name and has the problems in the original order in PDF format**. Homework must be word processed. Photographs of hand written or word processed work are not acceptable.

## Evaluation

**Grade Corrections:** My TAs and I spend a lot of time carefully grading student work. Please take the time to review our grading to maximize your learning. This is the way that feedback that we provide improves your conceptual understanding. After graded work been returned, there is a one week period of time when grades can be disputed. After this time, the grades are final even if they are found to be in error. If there is a dispute about the grading of an examination problem, you may stay after class the day the tests are returned to discuss it. If you cannot stay at this time, return the paper to me and stop by during

my office hours. Once a test has been removed from the classroom after it has been returned, the grade is final and will not be changed, even if it is found to be in error.

**Interactive Tools:** In this class we use multiple interactive tutors (Turingscraft, problets, Javabat, iClickers, and Zyante) to help you learn to program. Each interactive tutor has a different setup process to be navigated. This can be frustrating, both for students and for me. Please make sure that your account is setup up properly, that you use your official name that is in university records, and include your email address and student ID whenever possible (particularly if you have a common name). Also make sure that the first exercise from each tutor is correctly recorded so we can fix setup problems as soon as possible. I will generally excuse only one exercise from each interactive tool due to setup problems.

**Grade Summary:** Janux has a grade book that is used to store the raw data that is used to calculate your course grade. It is the responsibility of each student in this class to check their grades periodically and make sure that they are properly recorded. If an error is found, bring the grading document to me, and I will correct it.

**Submission and Formatting Failures:** Submitting files on Janux is a two-step process. First the file is uploaded, then submitted. Each student will be forgiven for failing to hit submit once during the course of the semester. Each student will also be forgiven for submitting assignments in the wrong format only once (usually submitting a Word document instead of a PDF file).

**Grading:** There are 6 components to the course grade. They are weighted as follows. The percentage of the grade that comes from interactive tutors, homework and laboratory activities is designed to be small to allow students to make mistakes and learn from them with only small penalties. However, completing these exercises is how most students develop the conceptual understanding that make it possible to do well on the homework, midterms and final.

Item	Section 1: Option 1	Section 1: Option 2	Section 10	Section 995	Drop
Turingscraft/Javabat/Problets <sup>+</sup>	10 (no problets)	10 (no problets)	10	10	None
Zyante <sup>^</sup>	5	5	5	5	None
iClicker Questions *	5	0	5	0	3 Lowest
Laboratory assignments	20	20	20	20	1 lowest
Homework	10	10	10	10	1 lowest
Midterm Examinations	30	30	30	30	1 lowest
Final Exam	20	25	20	25	None

+ Each Turingscraft exercise is worth one point. Each problet is worth 10 points. Each Javabat exercise is worth 5 points.

\* Clicker grading is based on the number of days when questions are assigned that you achieve at least 50% success on the clicker questions given in class. Each day one point is given for attendance to students who answer any iClicker question (whether correctly or not). The first week of classes will not be counted.

<sup>^</sup>Zyante grades are based on the number of problems answered correctly before the deadline for participation activities only. The challenge exercises are not graded.

**Section 1:** There are two options for grading—one that includes iClickers and one that does not. This section of the class is taken by some students who are experienced programmers who wish to brush up in Java. Option 2 is intended for these students, as it allows them to work independently on assignments instead of coming to class. I strongly encourage most students to plan to attend class every day and be graded according to Option 1. The final grade will be the higher of the grades calculated by either option.

The grading scale will be no higher than the following. It may be lower at the discretion of the instructor.

Grade	Percentages
A	90+
B	80-89
C	70-79
D	40-69
F	Otherwise

**Borderline Grade Decisions:** Although it would be preferable that all grades are cleanly decided, it is usually the case that a few final course grades are decided by only a few points. I have an algorithm for determining grades in these difficult cases. A grade is a borderline grade if it is within two points of the next higher grade. Therefore, grades like 69 and 78 are borderline grades, but grades like 81 and 92 are not. The grade on the final examination will be used to determine borderline grades. If the grade on the final is below the threshold for the higher grade, the lower grade will be given. If the grade on the final is above the threshold for the higher grade, the higher grade will be given.