Computer Science 1323

Sections 10, Spring 2016

Class Time: 1:30-2:20 MWF  Class Location: Adams 150
Prerequisite: Math 1523 or equivalent or concurrent enrollment.
Section 10 is appropriate for students without any prior programming experience.

Instructor: Dr. Deborah A. Trytten (rhymes with mitten)
Office: Devon 252
Office Phone: 325-4299 (email usually gets a quicker response)
Personal URL: http://www.cs.ou.edu/~trytten
Email: dtrytten@ou.edu
Teleconference: Download at http://vsee.com. All class personnel can be reached at VSee ID cs1323@cs.ou.edu. My personal VSee ID is dtrytten@ou.edu. My Skype ID is deborah.trytten.
My office hours sometimes have to be changed during the semester.

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>4-5 p.m.</td>
<td>Devon 252 and Teleconference</td>
</tr>
<tr>
<td>Tuesday</td>
<td>10-11 a.m.</td>
<td>Action Center Tutoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wagner Hall 245</td>
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<tr>
<td>Wednesday</td>
<td>9-10 a.m.</td>
<td>Devon 252 and Teleconference</td>
</tr>
<tr>
<td>Friday</td>
<td>10-11 a.m.</td>
<td>Action Center Tutoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wagner Hall 245</td>
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</tbody>
</table>

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

Required Materials: You must purchase the following items immediately (all contain graded assignments that cannot be completed any other way):

- TuringsCraft Java CodeLab package (http://www.turingscraft.com). The access code is OKLA-22643-KLGY-27 purchased over the Internet directly from the company. 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.
- 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.
- 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.

Topics: Programs, Java, input and output, identifiers, variables, assignment statements, constants, memory diagrams, primitive data types, operations on primitive data, conditional statements, repetition, methods, parameters, arguments, return values, nested control statements, one dimensional arrays, objects, introduction to user defined classes, and classes from the Java Application Programmers Interface (API) (including Arrays, ArrayList, Character, Collections, Double, Integer, Float, Math, 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.

**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 if they are not helping people who are attending in person. The VSee username for all staff related to this course is cs1323@cs.ou.edu. All TA office hours are open to students from all sections.

Mamta Yadav: mamta.go4@ou.edu
Stephen Smart: stephen.d.smart-1@ou.edu
Prathyusha Kondapalli: prathyusha.kondapalli@ou.edu

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

University College Action Center Tutor: Austin Graham: austin.p.graham-1@ou.edu
Action Tutoring Session (co-taught by Dr. Trytten) Tuesday and Friday 10-11 a.m., Wagner 245

The College of Engineering tutoring schedule will be here (usually about two weeks into the semester):
[http://www.ou.edu/content/coe/currentstudents/studentsupport/tutoring.html](http://www.ou.edu/content/coe/currentstudents/studentsupport/tutoring.html).

**Useful Links**

This course is run from [http://janux.ou.edu](http://janux.ou.edu). Login with your OU 4x4.

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/t8ldjeqp2i09ga4/AAAYhstLIUtNwMSLfCrr7RNqa?dl=0](https://www.dropbox.com/sh/t8ldjeqp2i09ga4/AAAYhstLIUtNwMSLfCrr7RNqa?dl=0)

The complete day by day schedule of deadlines is here (remember this changes FREQUENTLY):
[https://www.dropbox.com/s/b4e0albujiqoqm/CS%20201323%20Schedule%20Spring%202016.xlsx?dl=0](https://www.dropbox.com/s/b4e0albujiqoqm/CS%20201323%20Schedule%20Spring%202016.xlsx?dl=0)

**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 and fill in all fields.

Coding Bat [http://codingbat.com/](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 cs1323-section10-spring2016@cs.ou.edu so we can get your grades recorded properly. 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.

Problets and Epplets are used to gain understanding of how programs work. The URL for both is: [http://problets.org/user/s16/ou/](http://problets.org/user/s16/ou/)
Course Policies

Platform: You are responsible for things posted on janux or sent by email with a 24 hour delay.

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 February 19 (Friday), April 1 (Friday) and April 22 (Friday). Midterm examinations are 50 minutes long.

Final Examination: The final examination date is from 8-10 a.m. on Monday, May 9. The final is comprehensive, as required by College of Engineering policy. No final examinations can be given early, except as required by University policy. The final examination is two hours long.

Clickers: 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.

Pair Programming: During the laboratory sessions (after Laboratory 1), you will have a partner to program with all semester. Partners are selected by the instructor and change periodically. Only students who arrive on time and attend the whole laboratory will be able to submit laboratory assignments for a grade.

Laptop Computers: 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) 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 laboratory assignments 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. Remember, I can do internet searches too.

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 that
will get you in trouble.

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.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Integrity Violation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students A and B meet and work on their homework together.</td>
<td>Yes</td>
</tr>
<tr>
<td>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.</td>
<td>No</td>
</tr>
<tr>
<td>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.</td>
<td>Yes</td>
</tr>
<tr>
<td>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.</td>
<td>Yes</td>
</tr>
<tr>
<td>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.</td>
<td>No</td>
</tr>
<tr>
<td>Student A has completed a project and is helping student B complete the same project.</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Student B is having trouble getting one part of the program to work, so student A texts student B three lines of their solution.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>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.</td>
<td>Yes</td>
</tr>
<tr>
<td>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”).</td>
<td>No</td>
</tr>
<tr>
<td>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.</td>
<td>No</td>
</tr>
<tr>
<td>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. *</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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 and being suspended 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).

Ownership of Course Materials: The instructor retains ownership and all rights to original content. This includes but is not limited to exams, lectures, quizzes, handouts, protocols, electronic documents, syllabi, and all other materials. Original or transcribed course content may not be copied, recorded, retransmitted, posted on-line, or sold without the expressed written consent of the instructor. Violation of content ownership will be treated as academic misconduct.

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.

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.

**Laboratory, Homework, Quizzes, Attendance**

**Late Work:** I do not accept late work. Flat tires, parking problems, trips (even if academic), alarm clock failures, personal illness, internet outages, doctor’s appointments, and dependent care are not acceptable excuses for submitting late work.

**Excused Absences:** The grading policies in the course are designed to allow students to miss one full week of class without a grade penalty. There will be no further excused absences for any event of duration shorter than a week. If you have an absence that is longer than one week and appropriately documented, work can be excused by the instructor.

**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.

**Projects:** Incomplete projects may be turned in for partial credit. Projects which do not compile will generally receive no credit (beyond Project 2).

**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. 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 if you have reliable internet access. 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 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.

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Forgiveness Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turingscraft/Javabat/Problets/Epplets*</td>
<td>10</td>
<td>100 free points (not to exceed 100%)</td>
</tr>
<tr>
<td>Zyante^</td>
<td>5</td>
<td>100 free points (not to exceed 100%)</td>
</tr>
<tr>
<td>iClicker Questions *</td>
<td>5</td>
<td>3 lowest days</td>
</tr>
<tr>
<td>Laboratory assignments</td>
<td>20</td>
<td>1 lowest</td>
</tr>
<tr>
<td>Homework</td>
<td>10</td>
<td>1 lowest</td>
</tr>
<tr>
<td>Midterm Examinations</td>
<td>30</td>
<td>1 lowest</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20</td>
<td>None</td>
</tr>
</tbody>
</table>

+ Each Turingscraft exercise is worth one point. Each proble or epplet 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.
^Zyante grades are based on the number of problems answered correctly before the deadline for participation activities only.
The challenge exercises are not graded. They can be used to get additional practice.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90+</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>40-69</td>
</tr>
<tr>
<td>F</td>
<td>Otherwise</td>
</tr>
</tbody>
</table>

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.