SYLLABUS
CS 1313 010 — Programming for Non-majors — Fall 2019
Course website: http://cs1313.ou.edu/

LECTURES: Monday/Wednesday/Friday 9:30-10:20am, Dale Hall (DH) 103
INSTRUCTOR: Dr. Henry Neeman
(hneeman@ou.edu, 405-325-5386, Engineering Lab 212)

HELP SESSIONS WITH INSTRUCTOR: (held in Carson Engineering Center S-18, in the sub-basement)
Mondays 1:00-4:00pm starting Mon Aug 26

OFFICE VISITS (at EL 212): BY APPOINTMENT ONLY, MADE AT LEAST 24 HOURS IN ADVANCE
CONTACTING INSTRUCTOR & TAs: Please contact Dr. Neeman and ALL the TAs by e-mail unless it’s an emergency; when contacting one, unless it’s a personal matter, please contact ALL (instructor and all TAs). Please DON’T call the main offices of the School of Computer Science, the Gallogly College of Engineering or OU Information Technology UNDER ANY CIRCUMSTANCES.

TEACHING ASSISTANTS:
Abinash Borah (abinashborah@ou.edu)
Reza Gheibi (rezagheibi@ou.edu)
Justin Reynolds (justinreynolds@ou.edu)
Zahra Sadri (zahra.sadri@ou.edu)

LAB SECTIONS: attendance is MANDATORY (held Fridays in Carson Engineering Center 205+206)
Section 011: Fridays Carson 205+206 11:30am – 12:20pm Reza Gheibi & Justin Reynolds
Section 012: Fridays Carson 205+206 10:30am – 11:20am Justin Reynolds & Reza Gheibi
Section 013: Fridays Carson 205+206 8:30am – 9:20am Zahra Sadri
Section 014: Fridays Carson 205+206 2:30pm – 3:20pm Zahra Sadri & Abinash Borah
Section 015: Fridays Carson 205 3:30 – 4:20pm Abinash Borah

TA HELP SESSIONS (location to be announced)
Reza Gheibi: Tuesdays TIME TO BE ANNOUNCED starting Tue Aug 27
Justin Reynolds: Tuesdays 12:30pm – 2:00pm starting Tue Aug 27
Abinash Borah: Tuesdays 3:30pm – 5:00pm starting Tue Aug 27
Zahra Sadri: Wednesdays 8:00am – 9:15am starting Wed Aug 28

| CS 1313 CONTACT OPPORTUNITIES |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| MON                           | TUE             | WED             | THU             | FRI             |
| 8:00 am                       |                 |                 |                 |                 |
| 8:30 am                       |                 |                 |                 |                 |
| 9:00 am                       |                 |                 |                 |                 |
| 9:30 am Lecture               |                 |                 |                 |                 |
| 10:00 am DH 103               |                 |                 |                 |                 |
| 10:30 am                      |                 |                 |                 |                 |
| 11:00 am                      |                 |                 |                 |                 |
| 11:30 am                      |                 |                 |                 |                 |
| 12:00 noon                    |                 |                 |                 |                 |
| 12:30 pm                      |                 |                 |                 |                 |
| 1:00 pm Help Session Henry    |                 |                 |                 |                 |
| 1:30 pm                       |                 |                 |                 |                 |
| 2:00 pm Neeman                |                 |                 |                 |                 |
| 2:30 pm                       |                 |                 |                 |                 |
| 3:00 pm CEC                   |                 |                 |                 |                 |
| 3:30 pm S-18                  |                 |                 |                 |                 |
| 4:00 pm Abinash               |                 |                 |                 |                 |
| 4:30 pm                       |                 |                 |                 |                 |
| Help Session Location TBA     |                 |                 |                 |                 |
| Lab 013 CEC 205+206           |                 |                 |                 |                 |
| Lab 014 CEC 205+206           |                 |                 |                 |                 |
| Lab 015 CEC 205               |                 |                 |                 |                 |

NOTE: CS1313 provides over 15 hours of scheduled time (lectures, lab sessions, help sessions) per week, except when otherwise announced.

1Dale Hall is on Lindsey at Elm, just west of the South Oval.
2Engineering Lab is on the southeast corner of Asp Ave & Felgar St, a block south of Carson Engineering Center.
3Carson Engineering Center (CEC) is on Boyd between Jenkins & Asp.
**Ambitious, Tentative List of Topics** (not all topics necessarily covered, not necessarily in this order)

- Computer Organization
  - Hardware
  - Software
- C Introduction
- Introduction to Data & Expressions
  - Variables & Constants
  - Numeric Data Types (`int` & `float`)
  - Arithmetic Expressions (`int` & `float`)
  - Symbolic Logic & Boolean Values
  - Boolean Data Type & Expressions
- Branching (`if`)
- Loops (`while` & `for`)
- Arrays
- Procedures (Functions)
  - C Standard Library Functions
  - User-Defined Functions
- Bit Representation of Integer Values
- Characters & Strings
- Pointers
- User-Defined Data Types (`struct`)
- File Input/Output

**Prerequisite:** MATH 1523 (Precalculus and Trigonometry) or equivalent, either before or concurrent with CS 1313

*Note:* CS 1313 is **NOT** for students majoring or minoring in CS or enrolled in CS option/emphasis programs.

**To Be Purchased**

- **Textbook** (OPTIONAL — no readings or exercises from the book will be used):
  
  *C: How to Program*, 8th ed., Deitel & Deitel, Prentice Hall, 2015 (7th ed. is also fine)

  Available at the University Bookstore


  Cost: $25 per student for the entire semester; the first 10 exercises are free.

**Required Work** (and percent of overall grade)

- 5-10 Programming Projects (45%) (due every 1 to 3 weeks on Wednesdays — PP#1 due Wed Sep 4)
- Short Programming Assignments (10%) — CodeLab: due every Friday starting Fri Aug 30 UNLESS OTHERWISE ANNOUNCED — Each assignment has **MULTIPLE** numbered CodeLab exercises (SORT BY DEADLINE).
- **MANDATORY Weekly Lab Attendance** (10%), weekly starting Fri Aug 23
- Weekly Quizzes (10%): every Monday, 9:30-9:45am in DH 103, starting Mon Aug 26, except as announced
  
  (open book, open notes but not open neighbor nor open device UNLESS OTHERWISE ANNOUNCED).

  Quiz questions will be taken verbatim (word-for-word) from the homework assigned the previous week, UNLESS OTHERWISE ANNOUNCED.

- 2 In-Class Exams (15% for both): Wed Sep 25 & Wed Oct 30, 9:30-10:20am, Dale Hall 103
  
  (open book, open notes but not open neighbor nor open device UNLESS OTHERWISE ANNOUNCED)

  Comprehensive Final Exam (10%): Fri Dec 13, 8:00-10:00am, Dale Hall 103
  
  (open book, open notes but not open neighbor nor open device UNLESS OTHERWISE ANNOUNCED)

**Recommended Work:**

- Homeworks will be assigned every week, starting Mon Aug 19, UNLESS OTHERWISE ANNOUNCED.

  Quiz questions will be taken **WORD-FOR-WORD** from homeworks, which **WON’T** be collected or graded.
Web-based Short Programming Assignments (CodeLab)
Instructions on how to register for and use CodeLab are posted on the CS1313 website. EACH SHORT PROGRAMMING ASSIGNMENT WILL CONSIST OF MULTIPLE NUMBERED CODELAB EXERCISES.

- Each numbered CodeLab exercise that is COMPLETE, CORRECT AND ON TIME will receive FULL CREDIT;
- each numbered CodeLab exercise that is COMPLETE AND CORRECT BUT LATE will receive QUARTER CREDIT;
- each numbered CodeLab exercise that is incomplete and/or is incorrect will receive NO CREDIT.

Lab Sessions

- ATTENDANCE AT ALL LAB SESSIONS IS MANDATORY starting Fri Aug 23, and will constitute 10% of your overall CS1313 grade. Failure to attend labs may cost as much as a full letter grade.
- At the BEGINNING of each lab session, the lab instructor will TAKE ATTENDANCE.
- The lab instructor may then spend up to half of the session discussing an important topic, possibly including how to design a newly-assigned programming project.
- After that, you will spend the remainder of the lab session working on CS1313 assignments (programming projects, short programming assignments, and/or homeworks).
- At the END of the lab session, the lab instructor will TAKE ATTENDANCE AGAIN.
- For each lab session, you will receive one of the following scores:
  - 2: You were marked present at both the beginning and the end of the lab session.
  - 1: You were marked present at either the beginning or end of the session, but not both.
  - 0: You were marked absent at both the beginning and the end of the lab session.
- You may miss as many as 2 lab sessions without penalty. (Alternatively, you may arrive late or leave early from as many as 4 lab sessions, or you may mix and match.) DON’T squander them. THERE ARE NO EXCUSED ABSENCES FROM LAB; the two free absences should be sufficient to cover any legitimate situations that might arise.
- If you cannot participate in lab sessions at all for a LEGITIMATE reason (for example, religious observance as mentioned below), then you must provide WRITTEN DOCUMENTATION of your situation BY 10:20AM WEDNESDAY AUGUST 28. In such a case, your overall grade will be calculated without using a lab grade. Job or course schedules, planned personal trips, perceived lack of need and so on are NOT legitimate reasons (or, more accurately, are good reasons to use your free labs).
- You will receive credit only for attending your officially enrolled lab session, but you’re welcome to attend other lab sessions as well (for no additional credit).
- There will be no labs held during official campus holidays (see below for listing).
- If for some reason a lab session has to be cancelled, then other lab sessions during the same week will be optional and attendance won’t count toward your lab score, even if some of that week’s lab sessions have already been held before such a declaration is made.

Web Postings: All printable course materials, including lecture slides, homework assignments and programming project specifications, will be posted on the course website. YOU are responsible for downloading and printing these materials. You should check the course website AT LEAST twice a week, but daily is even better. The only printed materials that you should expect to receive in lecture are this syllabus, the quizzes and the exams.

E-mail: Often, we need to alert the class to an important issue or problem. You should check your e-mail AT LEAST twice a week, but daily is even better. Course e-mails are sent to your official OU e-mail address; YOU are responsible for making sure that course e-mails are getting to you. DON’T delete CS1313 e-mails, EVER.

Campus/Course Holidays (no lectures, labs or help sessions)
- Mon Sep 2: Labor Day
- Fri Oct 11: OU-Texas Day
- Wed Nov 27 – Fri Nov 29: Thanksgiving Vacation
Grading

• A: G ≥ 90%; B: 80% ≤ G < 90%; C: 70% ≤ G < 80%; D: 60% ≤ G < 70%; F: G < 60%

• We reserve the right to curve the grades as we see fit, but the curve won’t be harsher than this.

• Your overall (non-curved) grade for the course will be calculated this way:

\[ G = W_Q \frac{Q_1 + Q_2 + \cdots + Q_{N_Q}}{Q_{1\text{max}} + Q_{2\text{max}} + \cdots + Q_{N_Q\text{max}}} + W_P \frac{P_1 + P_2 + \cdots + P_{N_P}}{P_{1\text{max}} + P_{2\text{max}} + \cdots + P_{N_P\text{max}}} + \]

\[ W_C \frac{C_1 + C_2 + \cdots + C_{N_C}}{C_{1\text{max}} + C_{2\text{max}} + \cdots + C_{N_C\text{max}}} + W_E \frac{E_1 + E_2 + \cdots + E_{N_E}}{E_{1\text{max}} + E_{2\text{max}} + \cdots + E_{N_E\text{max}}} + \]

\[ W_L L + W_F \frac{F}{F_{\text{max}}} \]

where

- \( G \) is your overall (non-curved) grade for the course, expressed as a percentage;
- \( Q \) refers to quizzes, \( P \) refers to programming projects, \( C \) refers to CodeLabs, \( E \) refers to in-class exams, \( F \) refers to the final exam, \( L \) refers to labs (calculation of \( L \) shown below).
- \( W_A \) is the percentage weight of assignment type \( A \) (that is, \( W_Q = 10, W_P = 45, W_C = 10, W_E = 15, W_F = 10 \) and \( W_L = 10 \));
- \( A_j \) is your score on the \( j^{\text{th}} \) assignment of type \( A \);
- \( A_{\text{max}}^j \) is the maximum possible score on the \( j^{\text{th}} \) assignment of type \( A \) (excluding bonus points, if any);
- \( N_A \) is the number of assignments of type \( A \);
- Your total lab grade \( L \) will be calculated as:

\[ L = \text{MIN} \left( \frac{L_1 + L_2 + \cdots + L_{N_L}}{2 \cdot (N_L - 2)}, 1 \right) \]

where

- \( N_L \) is the number of lab sessions
- \( L_j \) is your score for the \( j^{\text{th}} \) lab session
- \( \text{MIN}(x, y) \) is defined as the lesser of \( x \) or \( y \)

Course Policies

• Lateness penalties for programming projects
- No lateness deduction: if turned in no later than 10:20am on the due date (or at any earlier time)
- 20% deducted for every lecture session late (after 10:20am)
- Example: If a particular programming project is due by 10:20am Wed Sep 4, then ...
  * If you turn it in by 10:20am Wed Sep 4, then there is no lateness penalty.
  * If you turn it in 10:21am Wed Sep 4 through 10:20am Fri Sep 6, then you will lose 20% of its value right off the top (before other deductions are assessed by the graders).
  * If you turn it in 10:21am Fri Sep 6 through 10:20am Mon Sep 9, then you will lose 40% of its value right off the top (before other deductions are assessed by the graders).
  * If you turn it in 10:21am Mon Sep 9 through 10:20am Wed Sep 11, then you will lose 60% of its value right off the top (before other deductions are assessed by the graders).
  * If you turn it in 10:21am Wed Sep 11 through 10:20am Fri Sep 13, then you will lose 80% of its value right off the top (before other deductions are assessed by the graders).
  * If you turn it in 10:21am Fri Sep 13 or later, then you will get a score of zero.

- Lab sessions and help sessions **DON'T** count as lecture sessions for the purpose of determining lateness.
- If you submit an assignment early, then you may submit a new version of it up through the due date without penalty. The last version submitted by the due date will be graded; earlier versions will be discarded. **BE SURE THAT THE LAST VERSION SUBMITTED IS COMPLETE**; for example, it should include an appropriate cover page etc.
- No assignment submissions will be accepted after 10:20am Fri Dec 6 except by arrangement made in writing with the instructor by no later than 10:20am Wed Dec 4.
You MUST Take the Final Exam, Even If You Have Enough Points
If you’re doing really well in CS1313, then do you have to take the final exam, even if you’d have gotten an A in the course without the final exam?
Answer: YES, you MUST take the final exam, even if it won’t change your grade.
If you choose not to take the final exam, YOU RISK GETTING AN F IN THE COURSE, NO MATTER WHAT YOU WOULD OTHERWISE HAVE EARNED.

Here’s what the OU Faculty Handbook says:
"... When a final examination is given, the student must take the examination. ... A student absent from a scheduled final examination [for unavoidable legitimate reasons] ... shall be given a grade of Incomplete (I) if that student’s work in that course has been satisfactory until the time of absence. ... In all other cases of absence from the scheduled final examination, a student may be given a grade of Failure (F).”

https://apps.hr.ou.edu/FacultyHandbook/#4.7

DON’T DELETE ANY of your CS1313 files or e-mails, EVER!!!

DON’T THROW AWAY ANY of your CS1313 graded assignments, EVER!!!

Helping each other
We encourage you to discuss homeworks, short programming assignments and programming projects with each other, to help each other with debugging, and to study for exams together. However, it is NOT ACCEPTABLE to develop programs together, nor to copy each other’s work, in whole or in part, on ANY ASSIGNMENT. Writing programs, like writing prose, is highly idiosyncratic; it is virtually impossible for two people working independently to produce code that is more than superficially similar, on any but the most trivial assignments. So, we can generally spot shared code with little difficulty. We reserve the right to use automatic cheating detection software. Cheating can result in, and has resulted in, severe penalties, up to and including EXPULSION from the University (see below), so DON’T EVEN THINK ABOUT IT!

Help from us
If you have questions or you’re having trouble with the material, we urge you to ask questions during lectures and labs, to come talk to us during help sessions, to send us e-mail, or to make an appointment (at least 24 hours in advance) to meet at other times.

Using Outside Sources
If, in completing an assignment, you use ANY sources (for example, books, online resources, classmates, friends, relatives, other professors) other than the exceptions that follow, then you MUST clearly reference them in the assignment. Exceptions: the course instructor and TAs, the course textbook, and the course resources available directly from the course website (that is, materials other than links to other sites). NOTE: Referencing an inappropriate source ISN’T a defense against accusations of academic misconduct (see below).

Working on programming projects
DON’T wait until the last minute to start your programming projects. Developing software takes a lot of time, and may depend on the availability and reliability of systems that you have no control over. If the computers are down the night before a due date, DON’T count on that buying you extra debugging time – it certainly wouldn’t in the real world.

Studying for exams
DON’T wait until the last minute to start studying for exams. The best way to ensure success is to keep up with the course material, and to ask questions. Students who actively participate in lectures and attend lab sessions and help sessions typically learn and retain the material much better.

Registration in CS1313: Fri Aug 23 is the last day to add CS1313.

Withdrawal from CS1313
– Through Fri Aug 30: No record of grade on dropped courses
– Tue Sep 3 – Fri Nov 8: Automatic grade of W for dropped course for undergraduate students
– Mon Nov 11 - Fri Dec 6: Undergraduate students MUST petition to the College Dean to drop the course AND instructor’s signature and grade of W or F required (based on assignments graded to date)

Will this be on the exam? Yes. Everything covered in lectures, readings, labs, homeworks, programming projects and short programming assignments (CodeLab) is fair game unless specifically stated otherwise.
Disability
Students requiring academic accommodation should contact the Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website http://www.ou.edu/drc/home.html

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Religious Observance
It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty. (OU Norman Campus Faculty Handbook, 2017, https://apps.hr.ou.edu/FacultyHandbook/)

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 your professor or the Disability Resource Center at 405/325-3852 as soon as possible. Also, see http://www.ou.edu/eoo/faqs/pregnancy-faqs.html for answers to commonly asked questions.

Title IX Resources and Reporting Requirement
For any concerns regarding gender-based discrimination, sexual harassment, sexual assault, dating/domestic violence, or stalking, the University offers a variety of resources. To learn more or to report an incident, please contact the Sexual Misconduct Office at 405/325-2215 (8 to 5, M-F) or smo@ou.edu. Incidents can also be reported confidentially to OU Advocates at 405/613-0013 (phones are answered 24 hours a day, 7 days a week). Also, please be advised that a professor/GA/TA is required to report instances of sexual harassment, sexual assault, or discrimination to the Sexual Misconduct Office. Inquiries regarding non-discrimination policies may be directed to: Bobby J. Mason, University Equal Opportunity Officer and Title IX Coordinator at 405/325-3546 or bjm@ou.edu. For more information, visit http://www.ou.edu/eoo.html

Academic Misconduct
All cases of academic misconduct will be reported to the Dean of the appropriate College for adjudication. For clarification of OU’s policies on academic misconduct, see http://integrity.ou.edu/

It is YOUR responsibility to be familiar with these policies and to comply with them. Ignorance of these policies is NOT an excuse for violating them.

Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community, it is your responsibility to protect your educational investment by knowing and following the rules.

To be successful in this class, all work on all assignments, including programming projects, short programming assignments, quizzes and exams, must be yours and yours alone. You may not receive outside help in composing your programming solutions and/or quiz/exam responses. On quizzes and exams, you will never be permitted to use devices of any kind (anything with a power button/switch, a power cord and/or a battery), unless explicitly stated otherwise, nor will you be allowed to use any other study aid that isn’t explicitly approved for that quiz or exam. (For example, you ARE allowed to use printed materials such as lecture slides, your own graded assignments, etc., unless explicitly stated otherwise.)

Should you see someone else engaging in this behavior, I encourage you to report it to myself, or directly to the Office of Academic Integrity Programs. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for
academic misconduct can include expulsion from the University and/or an F in this course, so don’t cheat – it’s simply not worth it.

**Final Exam Preparation Period**

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU’s Final Exam Preparation Period policy:

https://apps.hr.ou.edu/FacultyHandbook#4.10

**Emergency Protocol**

During an emergency, there are official university procedures that will maximize your safety.

**Severe Weather**: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather:

1. **LOOK** for severe weather refuge location maps located inside most OU buildings near the entrances.
2. **SEEK** refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
3. **GO** to the building’s severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. **GET IN, GET DOWN, COVER UP.**
5. **WAIT** for official notice to resume normal activities.

**Severe Weather Refuge Areas**

http://www.ou.edu/content/dam/emergencypreparedness/docs/Building%20Severe%20Weather%20Refuge%20Areas.xlsx

**Severe Weather Preparedness Video**

https://vimeo.com/237922159

**HOW TO DO WELL IN CS1313**

- **The BEST way to improve your understanding in CS1313**
  
  You’ll notice, as the semester progresses, that the course lecture notes (available for downloading from the course website) contain many short example programs. Type them in, compile them and run them, and you’ll understand the course material much better. This approach is especially valuable because **SEVERAL PROGRAMMING PROJECTS ARE LONGER, MORE COMPLICATED VERSIONS OF EXAMPLE PROGRAMS IN THE LECTURE NOTES.**

- **When you come to lecture, lab or help sessions, and when you work on course assignments on your own, ALWAYS ALWAYS ALWAYS bring ALL CS1313 materials with you — current and previous assignment descriptions, lecture notes, syllabus, graded assignments, etc.**

- **When working on a CS1313 assignment, whether a homework, a programming project, a short programming assignment (CodeLab) or an exam, ALWAYS ALWAYS ALWAYS read EVERY SINGLE WORD of the assignment description. EVERY WORD THAT DR. NEEMAN WRITES DOWN IS PURE GOLD.**

- **When in doubt, LOOK IT UP, DON’T MAKE IT UP.**