CS 135: Computer Science I
Spring 2018
Section 1003, MW 1:00 PM - 2:15 PM, TBE B-176
Section 1005, TTh 1:00 PM 2:15 PM, SEB 1240
Section 1006, MW 5:30 PM - 6:45 PM, CEB 239

Contact details:

<table>
<thead>
<tr>
<th></th>
<th>Instructor</th>
<th>Graduate Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Dr. Derek Williams</td>
<td>Mr. Piyush Puranik</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:derek.williams@unlv.edu">derek.williams@unlv.edu</a></td>
<td><a href="mailto:piyush.puranik@unlv.edu">piyush.puranik@unlv.edu</a></td>
</tr>
<tr>
<td>Office:</td>
<td>TBE A-212</td>
<td>SEB 4236 / TBE B-361</td>
</tr>
<tr>
<td>Office phone:</td>
<td>(702) 895 - 0526</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Office hours:

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Williams in TBE A-212</td>
<td>4 - 5:30 PM</td>
<td>4 - 5:30 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Puranik in TBE B-361</td>
<td>2 - 4 PM</td>
<td>3 - 5 PM</td>
<td>2 - 4 PM</td>
<td>3 - 5 PM</td>
<td></td>
</tr>
</tbody>
</table>

Learning outcomes:

- Develop algorithmic solutions to problems and translate their algorithms into C++ programs that meet a provided set of specifications
- Compile and execute their programs in the Linux operating environment and use appropriate testing and debugging strategies
- Use appropriate control structures (sequence, selection, and iteration) in their programs
- Develop modularized programs using functions and passing parameters
- Understand and properly use strings and file streams
- Understand and properly use one-dimensional arrays and records
- Demonstrate and use good programming style and adequately document programs

Required materials:

- **Text:** C++ Programming: From Problem Analysis to Program Design by D. S. Malik 8th edition
  - Pre-reading and reading assignments will come from this textbook
- **Course website:** [http://web.cs.unlv.edu/williams/](http://web.cs.unlv.edu/williams/)
  - Assignments, grades, schedule, and other important information will be located here
- **Supplementary website:** [http://tux.cs.unlv.edu/](http://tux.cs.unlv.edu/)
  - Additional reference materials will be located here
**Grading Scale and Criteria:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 - 100</td>
<td>A-</td>
<td>90 - 93</td>
<td>B+</td>
<td>87 - 90</td>
</tr>
<tr>
<td>B</td>
<td>83 - 87</td>
<td>B-</td>
<td>80 - 83</td>
<td>C+</td>
<td>77 - 80</td>
</tr>
<tr>
<td>C</td>
<td>73 - 77</td>
<td>C-</td>
<td>70 - 73</td>
<td>D+</td>
<td>67 - 70</td>
</tr>
<tr>
<td>D</td>
<td>63 - 67</td>
<td>D-</td>
<td>60 - 63</td>
<td>F</td>
<td>0 - 60</td>
</tr>
</tbody>
</table>

- **Exam 1:** 10%
- **Exam 2:** 15%
- **Final exam:** 25%
  - Each exam is comprehensive; exam 2 will partially cover concepts from exam 1, the final exam will partially cover concepts from both exams 1 and 2, though newer concepts will dominate
- **Quizzes and pre-reading assignments:** 15%
  - There will generally be a pre-reading assignment due and/or quiz on every class day
  - Quizzes will always be announced in advance
  - More difficult quizzes, typically later in the semester, will be worth more points
- **Assignments:** 35%
  - Mix of written questions, short programs, and long programs
  - All assignments must be submitted using the `submit` script on `bobby` and printed out
  - More difficult assignments, typically later in the semester, will be worth more points

Upon receiving your first grade you will be assigned a random ID to check your grades online. Note: We do not have a class day between when exam 2 is given and the final withdrawal/audit date. You will be notified of your exam 2 grade prior to 12 PM on Friday, March 23 (the last day to withdraw/audit).

Any late assignments will receive a grade of 0 and no individual extensions will be given. There are no makeups for missed quizzes or exams. The only exception to either of these policies is with a valid documented excuse (e.g. medical, emergency) presented in a timely manner or per University policy (see below).

Any issues regarding the correctness of a grade must be brought to the instructor’s attention before the following class period after the graded work is returned to the class.

The only time a curve will apply is in the case of exams. Typically this is done when different copies of each exam are created so that the average grade amongst all is consistent and/or when the exam average is below 70%. The curving method applied is based on a root function and awards more points to lower grades (e.g. if 50% curves to 60% then 90% may only curve to 95%).

Students may also receive a higher final grade than they earned, typically when they are very close to the next grade level and/or due to clustering. For instance, if a group of students had final grade averages of 83.1, 83.3, 83.7, 86.7, 87.1, and 87.2, the 86.7 student would likely receive a final grade of B+ instead of a B. Do not ask me to adjust your final grade.

Under no circumstances will a student receive a lower grade due to a curve or clustering.

Failing to have an average weighted assignment grade or average weighted exam grade of 60% or higher will result in the highest possible grade being a D. This is to ensure that students that pass this course can both write programs and are able to explain the concepts behind programming. As an example, if a student gets a 40% on exams 1 and 2 and 100% on the final exam then their weighted exam average is 70%, however if a student gets a 100% on exam 1 and 40% on exam 2 and the final exam, their weighted average is 52% and, even if they had a perfect grade on all assignments and quizzes, they would not get a final grade higher than D.
Grading rubric for programs:

The following rubric outlines the components that will be considered when grading any work for this course. The weight of each category and formula used to determine the grade will always be stated. Generally speaking the grading will be done by the course GA and the lab instructors.

For programming assignments:

There are four rubric categories:

- **Coding style (CS):** identifiers, declarations, and coding standards
- **Visual style (VS):** comments, spelling, indenting, whitespace, and hard copies
- **Program design (PD):** assignment instruction/restrictions, correct output, efficient algorithms
- **Submission, compilation, and execution (SCE):** turned in on time, compiles, executes with correct I/O style

Each category is graded on a 0 - 4 scale:

- **Excellent (4):** Perfect or near perfect adherence to requirements
- **Good (3):** Few minor issues related to requirements
- **Satisfactory (2):** Multiple minor issues or one major issue related to requirements
- **Poor (1):** Many minor issues or one major and some minor issues related to requirements
- **Unacceptable (0):** Many major issues related to requirements

Example grade calculation:

- A programming assignment worth 30 points has the formula SCE * ( CS + VS + 2 * PD )
- The maximum raw score would be 4 * ( 4 + 4 + 2 * 4 ) = 64, thus the assignment grade is calculated as raw / 64 * 30
- A student gets grades of excellent on SCE and PD, good on VS, and satisfactory on CS
- The student’s raw score is 4 * ( 2 + 3 + 2 * 4 ) = 52
- The student’s assignment grade is 52 / 64 * 30 = 24.375

For exact details regarding the specifics of each category and examples of what constitutes a grade from one category or another, please consult the course website.

For non-programming assignments:

Pre-reading assignments, quizzes, and exam questions will be based on a 0 - 4 grading scale and scaled accordingly.
Lab information:

The lab is a required component of this course in which your lab instructor will give short lectures about topics including C++ and Linux usage. Your lab instructor will also be available for assisting with assignments during the scheduled lab time and their office hours.

Final exam date, time, and location:

- Section 1003, MW 1:00 PM - 2:15 PM: Monday, May 7, 1-3 PM in TBE B-176
- Section 1005, TTh 1:00 PM - 2:15 PM: Tuesday, May 8, 1-3 PM in SEB 1240
- Section 1006, MW 5:30 PM - 6:45 PM: Wednesday, May 9, 6-8 PM in CEB 239

Course structure:

This course will utilize a flipped classroom structure in which:

- Before class:
  - Short pre-reading will be assigned to be completed before class
  - Short video lectures will be assigned to be watched before class
- During class:
  - The lecture will be highly interactive and exploratory
- After class:
  - Examples created and shown in class will be publicly accessible on bobby
  - More thorough reading will be assigned to be done after class

Class rules:

- You may eat or drink in class, so long as it is not distracting
- Nothing should ever be written in cursive, even your name
- Nothing should ever be written in ink
- You are not permitted to use any electronic device during any lecture period, including phones, music players, and laptops
- You are permitted to use an audio recorder
- Students who have accommodations from the DRC (see below) may be exempt from these restrictions

Expectations:

I have high expectations and students that do well in this course should, at the completion of it:

- Meet all of the learning outcomes on page 1 of this syllabus
- Understand both the syntax used for Linux commands and C++ programming as well as the process by which solutions are realized using both
- Be able to apply the principles of appropriate style and presentation with respect to C++ programming
- Be able to utilize resources within Linux, textbooks, and on the Internet to find solutions to problems they are encountering when using Linux and writing C++ programs
- Be able to teach any of the concepts and syntax we cover in this course to someone else
Contact and office hours:

- Contacting me:
  - You should only contact me via your Rebelmail account, per University policy
  - I will not read or respond to student emails that come from non-Rebelmail accounts
  - Although I typically reply to emails quickly, I may not reply for up to 24 hours
  - Unless explicitly given permission to, you are not to email me entire programs; it is fine to copy a specific segment of a program and/or a compiler error and ask me about it
  - If you miss a lecture, do not ask me what we covered; you should attend another of my lecture sections, check the website, and/or obtain notes from a classmate
- Contacting the GA:
  - You should only contact the GA via your Rebelmail account, per University policy
  - Write CS202 or CS135 (no spaces) in the subject line or he may not reply
- Contacting the lab instructors:
  - You should only contact the lab instructors via your Rebelmail account, per University policy
- Updates & contacting you:
  - If I need to make an immediate announcement such as a homework correction / extension, class cancellation, or office hours cancellation, I will typically email the class and post it on the course website
  - When I email the class as a whole I will do so via MyUNLV which means the email will go to your preferred email address, which you may have changed to a non-Rebelmail address
- My office hours:
  - I am always in my office during office hours unless previous notification is given
  - I do not take appointments during office hours, it is first come first serve
  - If you cannot meet me during office hours, email me at least 24 hours in advance to request an appointment; my best appointment meeting times are TTh at 12:00 PM or 2:30 PM
  - Office hours are not to be used to “catch up” with respect to a lecture you missed -- they are mainly for specific questions about individual concepts or the assignments

Academic misconduct:

Violation of the academic misconduct policy (see below) the first time will result in an automatic grade of 0% for the relevant graded work. A second violation during the course will result in a grade of F for the course, even if both violations were discovered at the same time.

It is your responsibility to protect all materials you produce for this course. Do not share assignments, quizzes, or exams. You should only seek & offer assistance in a conceptual/general sense. It is never permissible to copy any portion of any work unless explicitly specified by the instructor.

Violating the academic misconduct policy in relation to this course after completion subjects you to an automatic letter grade deduction. For example, if you earn a B in the course and then give your assignments to another student who reuses them, your letter grade will be reduced to a C.

In any case of an academic misconduct policy violation, the office of student conduct will be notified.

Right to modify syllabus:

I reserve the right to modify this syllabus at any time and will notify students if and when it is changed.
University Policies for the 2017 - 2018 Academic Year:

**Academic Misconduct**—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV’s function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: https://www.unlv.edu/studentconduct/student-conduct.

**Copyright**—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: http://www.unlv.edu/provost/copyright.

**Disability Resource Center (DRC)**—The UNLV Disability Resource Center (SSC-A 143, http://drc.unlv.edu, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

**Final Examinations**—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: http://www.unlv.edu/registrar/calendars.

**Incomplete Grades**—The grade of I—Incomplete—can be granted when a student has satisfactorily completed threefourths of course work for that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

**Library Resources**—Students may consult with a librarian on research needs. Subject librarians for various classes can be found here: https://www.library.unlv.edu/contact/librarians_by_subject. UNLV Libraries provides resources to support students’ access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at https://www.library.unlv.edu/.
Rebelmail—By policy, faculty and staff should e-mail students’ Rebelmail accounts only. Rebelmail is UNLV’s official email system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students’ e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=6&navoid=531.

Transparency in Learning and Teaching—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

https://www.unlv.edu/provost/teachingandlearning
https://www.unlv.edu/provost/transparency

Tutoring and Coaching—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit http://www.unlv.edu/asc or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TBE second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: http://writingcenter.unlv.edu/.