**Syllabus**
Intro to Computer Science (CS 101) -- Fall 2014

This page contains the syllabus for Intro to Computer Science for Spring 2014. "The course syllabus contains important information regarding course requirements and the grading system utilized. It is the responsibility of the students to read the syllabus and consult the instructor if they have questions." (from UNC 2013-2014 Undergraduate Catalog)

**CS 101 002 - Intro to Computer Science - 3 credits**
Spring 2014

**Class meeting time:** Monday and Wednesday, 12:20pm - 1:35pm

**Class Location:** Ross Hall 2261

All class material is accessible through Blackboard.

**Instructor:** Mehrgan Mostowfi, Ph.D.

**School:** Mathematical Sciences

**Office location:** Ross Hall 2240B

**Office hours:** Monday, Tuesday, and Wednesday, 10:30am - 11:30am, or email to schedule an appointment.

**Email:** mehrgan.mostowfi@unco.edu

**Homepage:** [http://www.mathsci.unco.edu/facstaff/mostowfi/](http://www.mathsci.unco.edu/facstaff/mostowfi/)

**Required textbook:** The required textbook is *Computer Science Illuminated, Fifth Edition*, by Nell Dale and John Lewis. There will be assigned readings to complement the lectures. These readings will come from handouts and/or material in the textbook. The required supplementary textbook is *A Byte of Python* by Swaroop C. H., which is available for free from the author's website.

**Catalog course description:** Breadth-first study of computer science concepts. Topics include machine architecture, programming, problem solving techniques, algorithms, operating systems, networking, security, computations, graphics, GUIs, AI, databases, software engineering, and social issues.

**Course objectives:** As a result of successfully completing this course, the students will:

1. Obtain a solid, broad understanding of how a computing system works.
2. Develop an appreciation for and understanding of the evolution of modern computing systems.
3. Be given enough information about computing so that they can decide whether they wish to pursue the subject further.

**Prerequisites:**
- C or above in College Algebra

**Course topics:** This course will cover the following topics:

- Week 1 (Jan 13 – 19, 2014): Overview and layers of a computing system, Information Layer, Number Systems
- Week 2 (Jan 20 – 26, 2014): Number Systems
- Week 3 (Jan 27 – Feb 2, 2014): Data Representation
- Week 4 (Feb 3 – 9, 2014): Data Representation, The Hardware Layer, Gates and Circuits
- Week 5 (Feb 10 – 16, 2014): Gates and Circuits
- Week 6 (Feb 17 – 23, 2014): Computing Components
- Week 7 (Feb 24 – Mar 2, 2014): Wrap-up for Midterm Exam, Midterm Exam
- Week 8 (Mar 3 – 9, 2014): Computing Components
- Week 10 (Mar 17 – 23, 2014): Spring Break (No Classes)
• Week 12 (Mar 31 – Apr 6, 2014): Programming in Python
• Week 13 (Apr 7 – 13, 2014): Programming in Python
• Week 16 (Apr 28 – May 4, 2014): Wrap-up and Review for Final Exam
• Week 17 (May 5 – 11, 2014): No classes, comprehensive final exam, project due

Detailed course outline: A detailed course outline that includes readings, assignment and project deadlines, and exam dates is here.

Grading: Students will earn a grade based on assignments, quizzes, project, a mid-term exam, and a comprehensive final exam. The grade breakdown is:

• Assignments: 20% (five assignments, assigned roughly every other week, the lowest grade will be dropped)
• Quizzes: 20% (five quizzes, given roughly every other week, the lowest grade will be dropped)
• Project: 20% (due on Sunday, May 11, 2014 by 11:59pm - early submission is very highly recommended, late submissions will not be accepted)
• Midterm exam: 15% (held in class on Wednesday, February 26, 2014)
• Comprehensive final exam: 25% (held in class on Friday, May 9, 2014 1:30pm - 4:00pm)

The grading scale is "no worse than" (+" or "-" grades MAY be given to marginal performance, but do not expect them):

• A = 90% through 100% and above
• B = 80% through 89.99%
• C = 70% through 79.99%
• D = 60% through 69.99%
• F = Less than 59.99%

Course policies:

• If you must submit work late you need to talk to me at least one-week before the due date in question. Otherwise, late work cannot be accepted except in cases of verifiable emergencies.

• It is highly recommended that you attend class. I may choose to track attendance.

• We will be observing all university policies regarding religious holidays and disability policies. Any student requesting disability accommodation for this class must inform the instructor giving appropriate notice. Students are encouraged to contact Disability Support Services (www.unco.edu/dss) at (970) 351-2289 to certify documentation of disability and to ensure appropriate accommodations are implemented in a timely manner.

• Incomplete ("I") grades will only be given in the case of severe hardship including verifiable medical emergencies or legal troubles. Simply being "overloaded" and unable to complete your work is not grounds for an "I" grade.

• Out of courtesy to other students please make sure that you turn off, or place in silent mode, your cell phone.

Academic Integrity/Academic Dishonesty: I expect students to be honest and not cheat on their assignments, quizzes, project, and exams. Students may work together on the project with one other person in the class. Both students will earn the same grade. The exams must be completed without giving or accepting assistance from other students. Any source code copied from another source must be credited as such. Open source software used must maintain all headers and other information as required by the open source license used. I expect you to know the University's policies on student conduct, academic dishonesty, etc. UNC's policies and recommendations for academic misconduct will be followed. For additional information, please see the Dean of Student's website, Student Handbook link and current catalog.

Every part of this syllabus is subject to adjustment as the semester progresses. Please contact me as soon as possible if you have particular interest in material that is relevant to the class topic but not covered in enough detail; I will be happy to accommodate reasonable requests for modifications.

Last update on January 8, 2014