COSC 1302 – Introduction to Computer Science

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Include course # and assignment in subject line, e.g. 1302, Lab 1  
Office hours: Mon+Wed 12-1, Fri 12:2

This course has 1 section, both taught in SCIENCE 208 (lecture and lab)

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Lab</th>
<th>Final exam</th>
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<tbody>
<tr>
<td>MWF 10-10:50 AM</td>
<td>Tue 2:40-4:30 PM</td>
<td>May 2, 3-5:30 PM</td>
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Effort expected: The average student will need 6 hours of individual work\(^2\) per week for this course. Please reserve these 6 hours on your weekly schedule. What you should do during this time:
- Immerse yourself in Python in particular, and Computer Science in general.
- Study the material covered from the textbook, along with the notes taken in class.
- Solve the individual work problems assigned for the next class.
- Solve homework problems.
- Go over quiz problems, and solve the additional “individual work” problems.
- Develop your own “memory-sheet”.

Intended Student Learning Outcomes:
At the conclusion of the course, a successful student will know the following:
- The history and evolution of computer hardware and software
- How to represent numbers and non-numerical data in binary
- Analysis and design of simple combinational circuits at the gate level
- The role and parameters of the main components of a computer
- How to write simple programs in machine and assembly language
- How to design algorithms in pseudocode, and implement them in a high-level programming language\(^3\).
- **Object-oriented** concepts: classes, instantiation, constructors, inheritance
- Basic **searching** and **sorting** algorithms, including recursive algorithms and basic Abstract Data Types (ADT) – stacks, queues, lists, trees, graphs
- OS concepts: memory, process and CPU management
- One or two computer applications\(^4\) in more depth

Keeping in touch: the following channels of communication will be used. Please do your best to check them often (evening before class is a good idea):
- Email. Please check your Tarleton student email and make sure you clean your mailbox regularly – if it’s full, the messages will bounce back.
- Messages posted on the course website www.agapie.net

\(^1\) If you get them for the campus bookstore, they will come in the same package, otherwise you’ll have to buy them separately.  
\(^2\) Individual work does not include the lectures and labs.  
\(^3\) We’re currently using Python.  
\(^4\) AI/Robotics – see Ch.13 of “Illuminated” 5th ed.
Grading:
- **Individual work and quizzes** (not graded): During most classes, short quizzes will be assigned to solve on the spot. At the end of class, the instructor will provide a list of easy problems which are recommended to solve before the next class. They are intended as a self-check for the student, to make sure the material covered was understood. Solve both quizzes and individual work in your notebook (see below).
- **Homework**: One set of problems will be assigned for most chapters, due in 1 week, at the beginning of class. Late submissions will not be credited. Exceptions only in extraordinary circumstances, if you have notified the instructor before the due date.
- **Lab reports** are due at the end of the lab, and they count as 15% of the final grade (see Grading below). Keep in mind that the programming problems on the exams are closely modeled after the problems covered in the lab.
- Two exams during the semester, **Feb.9** and **March 15**, both during lab time.
- One final exam **May 2, 3-5:30 PM**
- **100-page notebook**: Carry it with you to all lectures, labs and exams. Contains: class notes, quizzes, solutions to individual work problems, interesting code and other tidbits from the lab, etc. About one page of notes for each lecture and lab is expected.

Weights: Homework 15%  
Lab reports 15%  
Notebook 10%  
3 exams 20% each

Intervals:  
90-100 = A, 80-90 = B, 70-80 = C, 60-70 = D, below 60 = F.
- Up to 5% of the final score can be gained as **extra-credit** for answering questions in class or lab, or for solving homework problems assigned as extra-credit.

Useful dates:  
January 27: Last day to drop 1st 8 week classes with no record  
March 25: Last day to drop a course with a "Q" or withdraw with a "W"

No classes: Jan.18 (MLK Day), March 7-11 (Spring Break), March 25 (Easter Friday)

Academic Conduct: Students guilty of academic dishonesty, cheating, or plagiarism in academic work shall be subject to disciplinary action. The instructor may initiate disciplinary action in any case of academic misconduct.
- For homework and lab work, it is allowed (actually recommended) for students to brainstorm and develop solutions together, however, the writing and coding have to be done individually.
- **It is forbidden to use a solutions manual, or to copy solutions found online.**

Absence Policy: Attendance will not be recorded for this course. The student is responsible for any material covered in class and in the lab, and for obtaining assignments and other materials for classes from which they are absent.

Make-up Policy: The instructor has the responsibility and authority to determine if work can be made-up because of absences. Students may request to make-up work for valid and verifiable reasons such as: illness, death in the immediate family, legal proceedings, or participation in sponsored University activities. Let instructor know in advance of any absence/make-up issues. **No make-up requests after the due date!**

Students with disabilities: It is the policy of Tarleton State University to comply with the Americans with Disabilities Act and other applicable laws. If you are a student with a disability seeking accommodations for this course, please contact the Center for Access and Academic Testing at 254.968.9400 or caat@tarleton.edu. The office is located in Math 201. More information can be found at www.tarleton.edu/caat, in the University Catalog, or at www.ada.gov.