CSCE 181 – Introduction to Computing
Fall 2024, Section 599

Location/Time: Synchronous Online on ZOOM every **Tuesday*** 12:45pm - 2:00pm Central Time.

* NOTE: We will only meet on Thursdays as EXCEPTION. In every such exception, a 1+ week advance notice will be provided.

Class Web Page: https://canvas.tamu.edu/courses/322540

Teaching Staff:

- Instructor
  - Aakash Tyagi
  - Office Hours over ZOOM: By appointment
    - E-Mail: tyagi@tamu.edu

Course Objectives:

The objectives of this course are to inform students about the field of Computer Science and Engineering, and to introduce them to the wide range of exciting applications of computation and technology in society. Important terms and concepts in the field will be introduced, as a preview to what will be learned in other courses. We will explain the motivation for various aspects of our majors, including the core course sequence in our curriculum, math requirements, supporting area, co-ops, etc. We will also discuss practical issues that are faced by Software Engineers (abstraction, test and verification, ethics). Invited speakers will give guest lectures on current topics which will be used to give students an overview of different areas within the broad field of Computing.

Course Structure:

The course lecture content will be deployed in the form of seminar presentations associated with the above stated objectives.

Student Outcomes:

At the completion of this course, students will be able to:

- explain how computation influences many aspects of our technological society.
- explain how computer science is about algorithms, not just programming.
- be familiar with important terms and concepts in the field.
- understand the rationale for the sequence of courses required of our majors.
- understand different aspects of being a software engineer.

Prerequisites: None

Grading: Course grade is based on attendance and quiz components.

- Total 14 sessions
- For each session, we log seminar attendance on ZOOM + a follow-on quiz on Canvas.
  - The quiz, based on the session content, will be released online on Canvas every Wednesday morning. It must be completed by 11:59pm on Friday.
  - Two attempts will be provided for the quiz and the highest score will be taken. A score of 70% or higher is considered passing.
- For each **session** j, a PASS is recorded if ($Attendance_j$ == *TRUE* && $Quiz_j$ *Grade* == *PASS*)
- The course grading scale is A >= 85% > B >= 75% > C >= 65% > D >= 55% > F.
  - Translated to # of recorded PASS (*requirement will not change if we end up having more than 14 sessions*)
    - A: # of PASSES $\geq$ 12
    - B: 12 > # of PASSES $\geq$ 10
    - C: 10 > # of PASSES $\geq$ 8
- ***Example***: If a student attended 12 sessions and scored 70% or higher in 11/12 session quizzes, then their course grade is B because they recorded a PASS in 11 sessions.

Optional Textbooks:

- Understanding the Digital World, Brian W. Kernighan, Princeton University Press, 2017.
- Great Ideas in Computer Science, A Gentle Introduction, Alan W. Biermann, MIT Press, 1997.

Attendance Policy: Grade depends on attendance (stated above).

Communication: A class web page (listed at the top of this syllabus) will be maintained throughout the semester. Students are responsible for checking the announcements regularly for class updates.

Academic Honesty: The Aggie Honor Code is: "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. For additional information please visit: www.tamu.edu/aggiehonor/

For this course, the honor code will be upheld as follows: Students are expected to adhere to the honor code when recording their attendance and taking the online quiz.

ADA Statement: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability

requiring an accommodation, please contact the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Links:

- TAMU CSE Department wiki - information about accounts, labs, web page hosting, VPN, free software, etc.
- Honors for info, email: honors@cse.tamu.edu
- TACS - Texas A&M Computing Society, chapters of ACM and IEEE
- TAGD - TAMU Game Developers organization
- ACC – Aggie Coding Club
- TAMU-UPE - Upsilon Pi Epsilon - International Honors Society for the Computing and Information Disciplines
- TAMU Cybersec – TAMU Cybersecurity Club
- AWICS - Aggie Women in Computer Science

Acknowledgment:

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