Syllabus

Course Information

Course Number:	CSCE 181
Course Title:	Introduction to Computing
Section:	500
Time:	TR 9:45-11:00
Location:	Online
Credit Hours:	1

Instructor Details

Instructor:	John Keyser
Office:	HRBB room 527C
Phone:	(979)458-0167
E-Mail:	keyser@cse.tamu.edu
Office Hours:	Tuesday, Thursday 3:00-4:00 (via zoom: https://tamu.zoom.us/my/johnkeyser)

Course Description

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. We will explain how Computer Science is not just about programming, but about computational thinking and the study of algorithms. 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, ethics). In addition, invited speakers will give guest lectures on current topics which will be used to illustrate algorithmic ideas and give students an overview of different areas within Computer Science.

Course Prerequisites

None

Course Learning Outcomes

At the completion of this course, students will be able to:
- explain what computational thinking means, and how computation influences many aspects of our technological society.
- explain how computer science is about algorithms, not just programming.
- identify definitions and importance of key terms and concepts in the field.
- describe the rationale for the sequence of courses required of our majors.
- describe different aspects of being a software engineer.

Textbook and/or Resource Materials

None

Grading Policy

The grade for the course will be determined as follows:
Attendance - 100% (There will be no exams except the course quiz mentioned at the end.) You will receive attendance credit for a class by completing **both** of the following:
A.   During class time, logging in to the online presentation system (Zoom) with your TAMU ID, paying attention, and remaining throughout the presentation, and
B.   Immediately after the presentation, completing a short online quiz that is designed to verify you were paying attention to the presentation. The quiz will not be available long-term.
You will receive credit for the presentation if you attended the full Zoom presentation and achieved a quiz grade of 70% or greater.

Attendance will be taken for each class meeting *except* the first meeting.

Following the course there will be a short online quiz, focused particularly on the ethics information in the course. This will be available no later than after the final class meeting and will need to be completed before the final day of semester classes. The quiz *score* will not affect your overall grade, but **failure to complete the quiz will result in the loss of 3 attendance grades.**

Your numerical grade for this component will be based simply on the proportion of classes (among those checked for attendance) you attend over the semester. For example, if the class actually meets 14 times during the semester when attendance is taken, and a student misses 3 classes, they will receive a grade of 11/14 = 78.6% (which will be a C). Excused absences (see Student Rule 7) are always allowed, and students may make up any absences as described below.

The grading scale will be A >= 90% > B >= 80% > C >= 70% > D >= 60% > F.

Make-up assignments:
If making up an absence, you must first attend a research seminar. These may be seminars that you attend in person, or those you access online through video; they should be about one hour in length, though some may vary (longer or shorter).   Research seminars that may be used are any of the following:
- The CSCE 681 Graduate Seminar presentations in the Department of Computer Science and Engineering.
- Other research presentations hosted by the Department of Computer Science and Engineering. This includes Distinguished Lectures, special invited seminars, and the research presentations of tenure-track faculty candidates.
- A Master's Thesis or PhD Dissertation defense in the Department of Computer Science and Engineering
- A regular meeting of a research group within the Department of Computer Science and Engineering in which a paper or original research is presented
- The Computer Engineering seminars offered in the Department of Electrical and Computer Engineering

- A presentation from a Computer Science research conference. Note that this does not include developer conferences, in general. If these presentations are used, then it might be necessary to listen to more than one paper/keynote presentation; the total length of presentations that should be watched in this way should be 50-75 minutes. A list of several possible conferences will be posted online.
- Other research seminars with instructor approval.

Note that in general, company presentations, presentations from developer conferences, tech podcasts, TED talks, etc. are not considered research presentations (though they are still valuable!). If you have a presentation not listed above that you would like to use (e.g. a presentation by a computer scientist in a different department, or an online presentation that is research-oriented), please check with the instructor first.

Then, you must submit a paper about the seminar by turning it in online (in Canvas) within two weeks of the date you watched it or 5 p.m. on the last day of the semester classes, whichever comes first. The following guidelines must be adhered to; papers not following these guidelines will not be accepted.
- Use a 12 point font, either Times New Roman or Calibri.
- Use 1 inch margins
- Use single-spacing
- The document should be formatted as follows:
  - The first 2 lines should include your name, your UIN, the class (CSCE 181) and semester
  - The next line should be blank
  - The next 3 lines should contain the title of that particular seminar, the name and affiliation of the speaker, and the date of the seminar (if in person or live-cast) or web address of the presentation (if an online recording).
  - The next line should be blank
  - The following lines should contain the text. Use paragraphs with indentation to mark the start of the paragraph; there should not be blank lines between paragraphs
    - Note: following these guidelines, the summary should end up at 35 +/- 1 lines
- The document text should contain the following information:
  - You must include a brief summary of what the speaker spoke about. You may include any background explanation for the topics as appropriate.
  - You may include any personal reflection about the talk. This might include:
    - Questions you had about the topic before/during/after the talk
    - Topics that were not clear or you did not understand from the talk
    - Ideas you thought of when listening that you want to learn more about
  - Basically, your summary should indicate that you paid attention to the whole presentation.

Late Work Policy

Late work is not accepted.   Please note carefully the deadlines for submitting make-up work. Also, note that the quiz to receive attendance credit must be completed immediately after the presentation; it will not be left up long-term.

Course Schedule

The course meets 15 times; 14 of these (all but the first) will be graded. The following schedule of topics is subject to change:

Meeting	Date	Topic
0	Tue. 8/25	Introduction (attendance not graded)
1	Thu. 8/27	Computing Topic 1: Algorithms
2	Tue. 9/1	Internship Panel
3	Thu. 9/3	About the Major and Advising (with Q&A from Rick Furuta)
4	Tue. 9/8	Undergraduate Research – Dilma Da Silva
5	Thu. 9/10	Faculty Research Area: Artificial Intelligence – Guni Sharon
6	Tue. 9/15	Computing Topic 2: Programming
7	Thu. 9/17	Faculty Research Area: Data Science – Ben Hu
8	Tue. 9/22	Computing Topic 3: Key Ideas in Computer Science
9	Thu. 9/24	Faculty Research Area: Systems – Khanh Nguyen
10	Tue. 9/29	Career Center – Bradley Collet
11	Thu. 10/1	Faculty Research Area: Distributed Computing Theory – Jennifer Welch
12	Tue. 10/6	Grad School, Research, and the way a University Works
13	Thu. 10/8	Ethics for Software Developers
14	Tue. 10/13	Town Hall with Dr. Scott Schaefer
	Tue. 11/24	Deadline for turning in all makeup assignments (5:00 p.m.)

University Policies

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to Student Rule 7 in its entirety for information about excused absences, including definitions, and related documentation and timelines.

This is a seminar course; the main point of the course is to hear and pay attention to the presentations given throughout the semester. Attendance is mandatory and is the only graded aspect of the course. All absences are considered excused and you do not need to provide documentation. However, any absence, for any reason, must be made up for using the make-up process described, if you wish to receive attendance credit for that seminar presentation.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to Student Rule 7 in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (Student Rule 7, Section 7.4.2).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See Student Rule 24.)

Please see details regarding make-up work in the section, above, on grading.

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

For this class, the interpretation of the code will be as follows: You are expected to attend the full seminar for any class you receive attendance credit for. This means that if you log in to the class meeting, and participate in the post-class quiz, you are indicating that you paid attention to the entire presentation. Logging in but not watching the seminar presentation, receiving quiz answers from other students, sending quiz answers to other students, or other activities that are intended to give credit to yourself or another student who has not watched the seminar presentation will be considered honor code violations. Likewise, for make-up work, you are expected to watch the full presentation(s) (for 50-75 minutes) for the research seminar(s) you use as a make-up. The default penalty for a first violation is an F* in the class.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit disability.tamu.edu. Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see University Rule 08.01.01.M1):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with Counseling and Psychological Services (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper self-care by utilizing the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.

COVID-19 Temporary Amendment to Minimum Syllabus Requirements

The Faculty Senate temporarily added the following statements to the minimum syllabus requirements in Fall 2020 as part of the university's COVID-19 response.

Campus Safety Measures

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University has adopted policies and practices for the Fall 2020 academic term to limit virus

transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. **Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction.**
- Face Coverings—Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Description of face coverings and additional guidance are provided in the Face Covering policy and Frequently Asked Questions (FAQ) available on the Provost website.
- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in course and course-related activities.
- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting classrooms and other teaching spaces. Leave classrooms promptly after course activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.
- To attend a face-to-face class, students must wear a face covering (or a face shield if they have an exemption letter). If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the Student Conduct office for sanctions. Additionally, the faculty member may choose to teach that day's class remotely for all students.

Personal Illness and Quarantine

Students required to quarantine must participate in courses and course-related activities remotely and **must not attend face-to-face course activities**. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Students experiencing personal injury or Illness that is too severe for the student to attend class qualify for an excused absence (See Student Rule 7, Section 7.2.2.) To receive an excused absence, students must comply with the documentation and notification guidelines outlined in Student Rule 7. While Student Rule 7, Section 7.3.2.1, indicates a medical confirmation note from the student's medical provider is preferred, **for Fall 2020 only, students may use the Explanatory Statement for Absence from Class form in lieu of a medical confirmation. Students must submit the Explanatory Statement for Absence from Class within two business days after the last date of absence.**

Operational Details for Fall 2020 Courses

For additional information, please review the FAQ on Fall 2020 courses at Texas A&M University.