

Sul Ross State University
Course Syllabus
CSA 4311: Senior Capstone
Spring 2024

Instructor: Neal Xiong

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Office Hours: MTWR 10-11am, 12:15-1:15pm, TR 11-12:15pm, + by appointment

Time and Place of Class Meetings: TR 11:00-12:30 pm, or by appointment, at BAB-00302

Course Description

Students will investigate a topic, apply cumulative knowledge, and use appropriate tools, techniques, and principles in completing a project that has been selected and/or approved by the instructor. Students will perform 20 hours of service learning to the university or to the community as approved by the instructor.

Note: It is about 3 Credit Hours. The course may be repeated once for a maximum of six credit hours with the approval of the instructor, provided that the six hours are spent on a single project of sufficient complexity.

Course Prerequisites and/or Co-requisites

CS 4203 Software Engineering

Course Purpose / Goals

Students are introduced to the related Professional Development in Computer Science from conceptual models of a requirement to an actual system. The course covers external view of the Computer Science model to include administration, architecture, and others.

Student Learning Objective:

At the end of this course, students should be able to:

- Describe the Computer Science conceptual models and related application environments.
- Explain the architecture of a Computer Science system and the tasks of Computer Science administration.
- Discuss the relational Computer Science model and discuss the related issues and properties.
- Examines a diverse range of Computer Science Technology topics, with special emphasis placed on how Computer Science Technology can save businesses energy and money.
- Discuss the impact of Computer Science Technology to our life.

Student Learning Outcomes (SLO):

At the end of this course, students will be able to: prepare a technical report, and will give a presentation about this report. The basic computer science concepts, computer resources allocation and management, and their implementation will be involved into this technical report.

Marketable Skills:

1. Students will develop logical and analytical skills
2. Students will use problem-solving skills
3. Students will know computing methodologies in demand by public and private sectors

Instructional Methods / Strategies

The course is a combination of lecture, class discussion, hands-on lab work, assignments, peer review, and reading outside of class.

Students will be required to check their email daily. Make sure that your email address in Blackboard is set up correctly in case I use the Blackboard email system.

Weekly activities include some or all of the following:

- Reading assigned material
- Researching assigned topics
- Participating in one or more assigned Discussions Boards by posting a contribution and responding to contributions of other students and/or the instructor
- Participating in Discussion Board forums related in Individual Projects
- Participating in Discussion Board forums related to Group Projects
- Submitting status reports on project progress
- Writing and posting papers
- Preparing and posting PowerPoint presentation
- Communicating with the instructor or other class members

Learning Outcome Assessment Methods include:

- 2-3 exams, and one of these will be the comprehensive final exam
- Weekly assignments, and you will be required to review your peers as part of the assignment. You will get full credit for completed homework, but you will also get feedback about your “real” performance though the Peer Review process.

For specific dates and point values, see the end of this document.

Instructional Materials

TEXT: None. You will be required to watch certain online lectures or read selected online readings. Details will be found on Canvas as assignments are made.

Optional book: Cloud Computing for Engineering Applications, ISBN-13:9783030404444, ISBN-10:3030404447, Author: Benito A. Stradi-Granados, Edition: 0.

Grading Policy / Scale:

For classes taught on one campus only, you still must come to class. For classes taught on both

campuses simultaneously, the designation of the class is ITV. Classrooms are reserved for the whole semester, not for selected dates of the semester.

I record attendance and give attendance points. You can only get attendance points if we are in the same classroom, or if you are online when I am on the opposite campus. Partial session attendance may result in partial points. Missed class meeting may receive attendance points if you provide proper documentation, at my discretion. Participation points may be unevenly distributed over the semester (i.e. not each day gets equal points).

Lab computers are a shared resource. You would not want to start a test and have computer problems because someone spilled food or drink on the keyboard. The first time I see you bring food or drink into a lab, I will give you one (1) penalty point. Each subsequent infraction earns you fifty (50) penalty points.

I work with multiple student Teaching Assistants. Some may have taken this class; others are currently taking the class. Each TA will be available for help. You can see who is supposed to be available on the online schedule under “Tutor availability”.

Grading

The grade you earn in this course will be based upon the accumulation of points that will be distributed in this manner:

GRADES: Grades will be calculated in the following manner:

Discussion issues

Project (Mid-Exam +Final Exam)

The instructor reserves the right to lower the cutoffs for each grade, but he will not raise the cutoff. In other words, an 86% may end up being an A at the instructor’s discretion, but a 91% is guaranteed to be an A. I will let you know after each exam what the current grading scale is.

For simplicity, we use a 1,00-point scale (calculated as a percentage %).

90+ = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

less than 60= F

The Family Educational Rights and Privacy Act of 1974 (FERPA) governs university policies regarding family educational and privacy rights. Copies of the act, policies and regulations are maintained in the Office of Admissions and Records, John Vaughn Library, and the Office of the Vice President of Academic Affairs. Students can find their course grades in the Blackboard gradebook. I will NOT post grades elsewhere, nor provide grades via telephone, or any other manner in violation of FERPA or any other local, state, or federal regulations.

Assignments

- Homework assignments count for a significant part of the course. (Almost) all homework assignments work with the Peer Review feature in Blackboard. This means, that you will be required to review and give constructive feedback on the homework of other students in the class, and that you will receive feedback on your assignment from other students in the class. The

review period is always for one week after the due date for the assignment. Reviews are anonymous. You do not know the identity of the students giving you feedback (unless they let you know), and the students reviewing your work will not know who you are (unless you add your name to the assignment). Otherwise, I am the only one who knows who reviews whom. You earn points both for doing the homework and for doing the reviews. Of course, I will be reviewing your assignments too. I will use them to show examples of good work and examples of room for improvement.

- You will get full credit for homework you turn in, no matter how good or bad. If you don't turn it in on time, Blackboard automatically switches to the review period and you get no points for homework submission. I want you to get into the habit of working regularly.
- I discuss the homework on the first day of the week, and then your peer reviews will be available. Your reviews may be evaluated critically, and you can lose points there. If someone to review did not turn in homework, you will see a message that the user did not submit the assignment and gets an automatic zero. Make sure to click the Submit button so you get the full points for your review.
- Be sure to review the feedback from your peers after the review period has ended.
- All students must complete their own assignments, but **assistance from other students both during class time and outside class time is encouraged**. This does not include copying and pasting someone else's material or files. If two students work together, the two do the assignment twice - from scratch. If three students work together, the three do the assignment three times - from scratch. You will find that each time gets easier and faster; that you start finding improvements on the next try, and that you never really end up with exactly the same file. Repetition is an integral part of the learning process. Of course, group assignments are limited to the group.
- All work is due at the date and time indicated in the schedule. When the time to submit has passed, the assignment automatically switches from submission mode to review mode. There is no opportunity to make up missed or late assignments. You can still get points for reviewing your peers' work.
- Check your homework assignments in the Grades page. You can download and check the files you submitted there.
- I will only grade work submitted over Blackboard. Do not email files. If you make a mistake, or would like to send different files before the due date, just send all the assignment files again. If you must send multiple files, make sure to send them all together. If Blackboard only allows you to attach one file, create a compressed (zipped) file. If you want to, you can also send a backup copy of assignments to neal.xiong@sulross.edu. It is an email address that I do not monitor actively, but an email with assignment attached, sent before the due date, would be a consideration for adjustments to your final grade under my instructor discretion.

Tests

- You can only take the tests in the classroom. Some tests will be done with paper and pencil in class. Online tests will be password protected and the password will only be available to students in class. For classes alternating between Tahlequah and Broken Arrow, someone else will monitor the test in Broken Arrow. Students in the BA section are welcome to come to Tahlequah so you can ask me to help with computer problems.
- Unless specifically announced in writing, all tests are closed book and done without any aids. This includes cellphones. Turn off your cellphone before the test and do not turn it on until you have left the classroom.

The final exam is comprehensive. If you miss one of the earlier tests, you can ask by email to neal.xiong@sulross.edu to have the score on the comprehensive final to replace the score on the missed test.

MY TEACHING PHILOSOPHY

I think that the following promote better learning, so I build them into my courses.

- Multiple-choice tests are a poor tool to measure if students learn. I mainly use MC quizzes to force students to read the material. In programming courses, you work mostly on programs.
- You need frequent feedback on how you are doing. I use low-stakes testing (frequent, small assignments, few points) for regular homework, and high-stakes testing (infrequent, large tests, high points) to test “for real”.
- Repetition helps. We practice the same thing at least once, but preferably multiple times, before the test.
- A great way to learn is to review someone else’s work, evaluate it on clear criteria, and providing constructive feedback. I use peer grading for homework. Everything can be anonymous (for the students). Unless you choose otherwise, peer reviewers do not know the identity of the student reviewed, and students whose work is reviewed do not know who reviewed them.
- Regular work helps. I use that in my courses by setting clear dates for assignments, and providing timely feedback. Over the years, I have noticed more and more that one of the main reasons students fail is poor planning. Cramming before a test just does not work in the long run. I make the chunks smaller and more frequent, but that only works if both I as instructor and you as student work on that together.
- Peer pressure is a positive thing. In class, I show examples of your homework to show anonymous examples great work and not-so-great work. If you want your reviewer to know your name, reveal it in the Comments box on submission. Do not put it in the files you send. Be proud if I show your work as an example of great work, and you do not have to be embarrassed if your work is criticized – just do better next time.
- Life happens. Some will say that "sh*t happens". You get sick; the car breaks down, etc. I record all class sessions on Collaborate, so it is easy to catch up with the material if something happens.
- Coming to class helps. I have C students making As because they come to class and turn in work on time. I have A students getting Cs because they underestimate the material, skip class, and think that they can make it all up on the final. Of course, I also have A students making As and C students making Cs. To encourage you to attend, I give attendance points. Please check your attendance points in the gradebook and if you did not get the points, contact me so I can check.
- You need to know how you are doing in the class. I use a very simple system: 1,000 points in the course. As soon as you have 700 points, you have EARNED a C. When you get to 800 points, you have EARNED a B.

Class and Instructor Policies

Attendance is required with 100 credit points, and hope everyone can enjoy this course. If there is any special case, please contact with your instructor directly.

Academic Policies / Required Information

Please go to our university website for required information pertaining to:

- Academic Misconduct

- American with Disabilities Act
- Inclement Weather/Disaster Policy
- Release of Confidential Information
- Student Handbook
- Teach Act
- Textbook Information
- Title IX
- Library Services
- Distance Education Statement

GRADE APPEALS ([source](#))

A student may petition a grade change by using the Grade Appeals Process if satisfactory resolution cannot be achieved after consultation with the instructor and/or Dean. The Grade Appeals Process must be formally initiated with a written appeal to the Dean within four months following awarding of the original grade. Please contact the dean of the college in which the grade was given for a copy of the grade appeals process.

Conditions allowing for a Grade Appeal (source):

By student:

- Allegations that an instructor's policy in assigning final grades is not applied consistently to all students within a class and section.
- Allegations that the method of assigning grades differs from the method described in the instructor's course syllabus or in other material made available by the instructor to the students.
- Allegations that the instructor's policy on assignment of grades was not made known to students.

By instructor:

- Allegations that the student achieved a grade through plagiarism, cheating, or misrepresentation. There is no time limit for an instructor to take corrective action as a result of a grade received through plagiarism, cheating, or misrepresentation.

DROPPING THE CLASS

Each semester, NSU sets a deadline during the semester when students may drop a course with an automatic "W". The deadline is available at the Academic Calendar of the university. Your work is reviewed regularly and promptly, and I post the grades as soon as possible. Knowing your current points total and how many points you can still earn, tells you your standing in the class. If you do not do well before the deadline to drop with a "W," consider dropping the class.

If you decide to drop after the deadline to drop with an automatic "W," there is a second deadline for withdrawing from the class. You will only get a "W" if you are passing at the time of withdrawal based on the University's policy:

.....Withdrawal after Twelfth Week: If a student formally withdraws from single classes or completely from the University after the twelfth week, the instructor will assign a W or F depending on the student's standing in the class at the time of withdrawal. A "W" will be assigned if the student was passing at the time of withdrawal. An F will be assigned if the student was failing at the time of withdrawal.....

I follow this policy, so please do not ask to give you a W after the deadline for withdrawing with a W. Furthermore, instructors have the option dropping students from the class under the Academic Withdrawals policy. This is what the policy says:

“Students who enroll in a course or courses and have poor attendance or participation as determined by the instructor may be administratively withdrawn “AW.” Students who are withdrawn for non-attendance or administratively withdrawn will be responsible for payment and repaying any financial aid received for the course or courses that must be returned to the provider.”

(http://catalog.nsuok.edu/content.php?catoid=5&navoid=125#Administrative_Withdrawal)

Finally, faculty must report students who do not attend the course. We usually have to do this in the second week of the course. Logging into an online course is not sufficient to constitute attendance. You need to have participated in some way - a discussion board, assignment, etc.

ACADEMIC DISHONESTY

The navigation menu on the left has a special button for academic integrity. This is the university policy. Read it, and notice that the sanction for being caught cheating is up to the instructor. The following applies to all courses I teach: **My standard sanction for any cheating is an F in the course.**

[Note: you may add any additional sections or appendices that you would like to include in your syllabus.]