CpSc 2070 Syllabus – Fall 2021

Course URL: http://people.cs.clemson.edu/~srimani/2070_F21

Instructor: Pradip K Srimani
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Teaching Assistant: TBA

Office Hours: TBA

Course Objectives: This course introduces ideas and techniques from discrete structures that are widely used in the computing sciences. Topics emphasize techniques of rigorous argumentation and application to the computing disciplines.

Prerequisite: CPSC 1010 or CPSC1110; and MATH1020 or MATH1060

Class Meeting times: Online course (asynchronous)

Textbook:


Office Hours: Ask questions as often as you need. The subject header of your email must mention CpSc 2070 along with a brief heading. Do not use chain emails (write a new one each time); do not reply to group emails. I’ll respond as quickly as possible.

Tentative Outline of Topics:

1. Truth values of basic logical operations, compound propositions, use compound propositions to express English sentences and solve word puzzles.
2. Simple proof techniques involving propositions, Disjunction Normal Form, Propositional functions, universal & existential quantifiers
3. Simple number theory, direct and indirect proofs, simple sets and their operations
4. Functions, inverses and composition of functions, proofs involving functions, simple order algebra, sequences and closed forms
5. Inductions and their use in proving propositions, simple recursive definitions
6. Counting, sums and products, principle of inclusion & exclusion
Tentative Grading **(subject to change):**

The final grade for the course will be computed based upon the following distribution (**tentative**):

- Homework – 20%
- 2 Tests – 50%
- Comprehensive Final Exam – 30%

**Class Policy on submission:** You cannot turn in work that you have already turned in for credit in another course.

**Grade Appeal**

Any grade challenges regarding exams or homework exercises must be emailed to the instructor, with detailed justifications, within one week of the date the grades are posted on Canvas.

**Attendance**

*Attendance is expected, but not required.* We may cover material in an order different from any textbook. You are responsible for any material covered in class. You are responsible for any announcements, assignments or assignment modifications that are announced in class whether you are present or not. This also applies to arriving late to class or leaving early.

**Deadlines**

Work is due at the specified deadline. **Late work will not be accepted.** If a homework is only partially completed you should submit what you have by the deadline.

**Instructor Late:** If the instructor is late for class, students are expected to wait for 15 minutes before they leave.

**Cancellation of Class:** If classes are cancelled by the university on the day of a scheduled test, we will reschedule the test.

**Academic Integrity**

As members of the Clemson University Community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning". Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a
Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. Read the university academic integrity statement (along with other important information). Unless otherwise specified in an assignment, you are expected to work independently on projects, assignments, tests and labs. If you are in doubt about the type of help you may give or receive on a project: ASK!

University Accessibility Statement:

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing mailto:studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student’s responsibility to follow this process each semester. You can access further information here: https://www.clemson.edu/academics/studentaccess/

The Clemson University Title IX (Sexual Harassment) Statement

Title IX Policy: Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran’s status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. The University is committed to combating sexual harassment and sexual violence. As a result, you should know that University faculty and staff members who work directly with students are required to report any instances of sexual harassment and sexual violence, to the University’s Title IX Coordinator. What this means is that as your professor, I am required to report any incidents of sexual harassment, sexual violence or misconduct, stalking, domestic and/or relationship violence that are directly reported to me, or of which I am somehow made aware. This policy is located at http://www.clemson.edu/campus-life/campus-services/access/title-ix/. Ms. Alesia Smith is the Executive Director for Equity Compliance and the Title IX Coordinator. Her office is located at 223 Holtzendorff Hall, phone number is 864.656.3181, and email address is alesias@clemson.edu.
**Academic Calendar Fall 2021**

Aug 16, Mon - Aug 17, Tue  
Late enrollment

Aug 16, Mon  
University Convocation

**Aug 18, Wed**  
Classes begin

Aug 24, Tue  
Last day to register or add a class or declare Audit

Aug 31, Tue  
**Last day to drop a class or withdraw from the University without a W grade**

Sep 7, Tue  
Last day to apply for December graduation

Oct 8, Fri  
**Last day for instructors to issue midterm evaluations**

Oct 11, Mon - Oct 12, Tue  
Fall break

Oct 26, Tue  
Last day to drop a class or withdraw from the University without final grades

Nov 1, Mon  
Registration for spring and summer terms begins

Nov 24, Wed - Nov 26, Fri  
Thanksgiving holidays

Dec 2, Thu - Dec 3, Fri  
Classes meet; exams permitted in labs and one-hour courses only

Dec 6, Mon - Dec 10, Fri  
Examinations

Dec 13, Mon  
9:00 A.M.--Deadline to submit candidate grades

Dec 15, Wed  
9:00 A.M.--Deadline to submit other grades

Dec 15, Wed  
**Candidates for graduation may access grades**

Dec 15, Wed  
Doctoral Hooding at the Brooks Center

Dec 16, Thu  
Graduation