CS4314 Computer Networking  
Spring 2021 Syllabus


**General Course Information**

**Instructor:** Lopamudra Roychoudhuri  
**E-mail:** lroychoudhuri@angelo.edu  
**Office:** MCS 205E  
**Campus Phone:** (325) 486-5448  
**Class Times:** MWF 12:00-12:50 pm  
**Classroom:** MCS 114/Online  
**Course Web Site:** Blackboard  
**Office Hours:** MTWRF 3:00-5:00 pm on Blackboard Collaborate

**Prerequisite:**  
None.

**Precautionary Measures against COVID-19**

**Split Delivery Model:** To maintain academic quality while accommodating social distancing needs this semester, this course will use a split delivery model that combines face-to-face teaching with remote instruction. Your class will be divided into three groups, A, B, and C, on the first day of class. Group A will come to MCS114 on Mondays and Group B on Wednesdays. Group C will attend the class all online. *This schedule is not flexible or interchangeable.* For instance, if you are supposed to attend class on a Monday, you cannot elect to go on Wednesday with another class group instead. When you are not in the physical class, you will attend virtual sessions synchronously or asynchronously held on Blackboard Collaborate with recording at the class time. Friday class will be online for everyone.  
*Exceptions:*  
- First week of class: **we will meet online on Collaborate on Mon 1/25/21 12:00-12:50 pm.** Group A will come to MCS114 on Wed 1/27 and Group B on Fri 1/29.  
  
**Social Distancing:** When in class, we will abide by the social distancing requirements in our assigned classroom space. A seating chart will be maintained for contact tracing purposes.  
**Masks:** when in MCS114, masks covering both nose and mouth are mandatory for all students.  
**Wipes:** will be provided for everyone to wipe down the keyboards and other surfaces before class starts.  
**Daily Wellness Screening:** please fill this first thing every morning.

Please refer to this [Health and Safety web page](#) for updated information about campus guidelines as they relate to the COVID-19 pandemic.

**Course Objectives:**

This course introduces the principles and basic concepts of computer networking and data communications with a focus on the Internet. Students will study network protocols, architectures and technologies that are used in the Internet layers. Experiments using
Wireshark, a widely popular packet analyzer tool, are included to give students hands-on experience.

**Student Learning Goals:**
Students who successfully complete this course will have demonstrated the ability to:

1. Understand network architecture, both hardware and software,
2. Understand various networking protocols, the TCP/IP protocol stack in particular, and client-server applications,
3. Observe and verify how networking protocols work in real-world scenarios,
4. Solve problems and create solutions in a seminar environment.

**Grading:**

<table>
<thead>
<tr>
<th>Grading Criteria</th>
<th>Dates</th>
<th>Weights</th>
<th>Goals Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>Daily/Weekly/biweekly</td>
<td>50%</td>
<td>1 thru 4</td>
</tr>
<tr>
<td>Exam 1</td>
<td>2/26/21</td>
<td>15%</td>
<td>1 thru 2</td>
</tr>
<tr>
<td>Exam 2</td>
<td>4/9/21</td>
<td>15%</td>
<td>1 thru 3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Mon 5/10/21 1:00-3:00</td>
<td>20%</td>
<td>1 thru 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRADE</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69</td>
</tr>
<tr>
<td>F</td>
<td>0 - 59</td>
</tr>
</tbody>
</table>

**Week by week tentative schedule:**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/25, 1/27, 1/29</td>
<td>Module 1: Introduction to Computer Networks and the Internet; Number systems</td>
</tr>
<tr>
<td>2</td>
<td>2/1, 2/3, 2/5</td>
<td>Module 1: Network Protocols</td>
</tr>
<tr>
<td>3</td>
<td>2/8, 2/10, 2/12</td>
<td>Module 2: Network Devices: Data Link Layer</td>
</tr>
<tr>
<td>4</td>
<td>2/15, 2/17, 2/19</td>
<td>Module 2: Network Devices: Data Link Layer cont.</td>
</tr>
<tr>
<td>5</td>
<td>2/22, 2/24, 2/26</td>
<td>Exam 1 on 2/26; Module 2: Network layer</td>
</tr>
<tr>
<td>6</td>
<td>3/1, 3/3, 3/5</td>
<td>Module 3: Network layer cont.</td>
</tr>
<tr>
<td>9</td>
<td>3/22, 3/24, 3/26</td>
<td>Module 4: Transport Layer</td>
</tr>
<tr>
<td>10</td>
<td>3/29, 3/31</td>
<td>Module 4 Transport Layer cont.; Spring Holiday on 4/2</td>
</tr>
<tr>
<td>11</td>
<td>4/5, 4/7, 4/9</td>
<td>Exam 2 on 4/9; Module 3 Transport Layer cont.</td>
</tr>
<tr>
<td>12</td>
<td>4/12, 4/14, 4/16</td>
<td>Module 4 Transport Layer cont.</td>
</tr>
<tr>
<td>13</td>
<td>4/19, 4/21, 4/23</td>
<td>Module 5 Application Layer</td>
</tr>
<tr>
<td>14</td>
<td>4/26, 4/28, 4/30</td>
<td>Module 5 Application Layer cont.</td>
</tr>
<tr>
<td>15</td>
<td>5/3, 5/5, 5/7</td>
<td>Module 5 Application Layer cont.</td>
</tr>
<tr>
<td>16</td>
<td>5/10/21(Monday)</td>
<td>Final Exam 1:00-3:00</td>
</tr>
</tbody>
</table>
CLASS STRUCTURE AND ASSIGNMENTS:

- **Flipped Classroom:** Videos and readings from the textbook and/or other sources will be announced prior to every class session. You will complete reading and watching these videos **before** class. We will work on many kinds of assignments in class based on this material.

- **Quizzes:** We will work on quizzes that will validate the reading and videos. The grade from the quizzes will constitute 20% of the total Assignment grade.

- **Assignments:** these fall in two categories:

  **In-class Assignments:** We will discuss topics in class and work on assignments. Assignments that cannot be completed in class will be taken out-of-class and turned in. The grade from these assignments will constitute 30% of the total Assignment grade.

  **Homework Assignments:** the purpose of the homework assignments is to give you individual out-of-class practice on the topics that you are learning, and to explore some ideas more deeply. The grade from the homework assignments will constitute 50% of the total Assignment grade.

- **All assignments, unless otherwise specified, must be submitted to Blackboard containing your name, course name, the title of the assignment and the due date.**

- **No late assignment will be accepted. No e-mail or in-person submission is accepted.** There are no exceptions to this rule.

- All homework assignments should be the work product of each individual. Cheating occurs when a student either submits work for a grade that is not entirely due to his/her own effort or allows others to use her/his work. Cheating occurs when a student submits work product that is copied from another student. Cheating on an assignment or exam will result in a failing grade for the course. No student shall look towards the work of any other student during exams as it shall be construed as cheating.

- **Academic Honor Code:** Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. The College of Science and Engineering adheres to the university’s **Statement of Academic Integrity** (can be found in page 96 of the **Student Handbook**). You should familiarize yourself with it. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

- EXAMS

  *We will have three exams. All students must take exams at scheduled times.** There are no makeup exams. Only exception will be student absence for observance of religious holy day (see below). If one exam is missed, the final exam will count double to make up for the missed exam. Only one missed exam can be made up this way. If more than one exam is missed, a grade of zero will be given for the additional missed exam. **The final exam must be taken on its assigned date and time.** For students taking all three exams, the final exam grade can replace a lower grade on one
of the first two exams if the final exam grade is higher. Only one regular exam grade can be replaced in this way.

Exams will be held online on Respondus Lockdown Browser. Students will take exams remotely on their personal computers on Respondus Lockdown Browser, with their webcams turned on for Respondus Monitor. Respondus requires a desktop computer or laptop (not a Chromebook) and a webcam. For best results, use an Ethernet cable to connect to your Internet source instead of relying on Wifi. Please refer to the Blackboard-> Projects and Tests -> Respondus LockDown Browser Resources for a download link and other helpful hints.

ATTENDANCE
Attendance is mandatory (no excused absences). Attendance will be taken for students in classroom. Blackboard attendance date will be noted for virtual students.

GRADEBOOKS
During the course of the semester, you are expected to monitor your performance on assignments and exams by accessing your grades online. It is your responsibility to: (1) ensure that correct entries have been made into the gradebook, and (2) be aware of your performance in the class. Grade percentages are shown on this syllabus so you can compute your own grade standing as the semester progresses.

E-MAIL
You are required to obtain an e-mail account. If you have any question about the course or need assistance, please contact me in person or by telephone during office hours, or by e-mail at any time.

LAB POLICY
No food or drinks are allowed in the lab.

General Policy Statements
Add/Drop Dates
Students may add this course up to January 28, 2021.
Students may drop this class or withdraw from the university until April 30, 2021.

Academic Accommodations for Students with Disabilities:
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about
the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

**Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

**Student Absence for Observance of Religious Holy Day**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

**Title IX at Angelo State University**

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.  
Director of Title IX Compliance/Title IX Coordinator  
Mayer Administration Building, Room 210  
325-942-2022  
michelle.boone@angelo.edu  
You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345. For more information about Title IX in general you may visit www.angelo.edu/title-ix.
Required Use of Masks/Facial Coverings by Students

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](http://www.texastech.edu/downloads/ttus-policy-face-coverings.pdf) to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Modifications to the syllabus

The instructor and the university reserve the right to modify or change the syllabus (schedule, course requirements, grading policy, etc.) as the curriculum and/or program require(s).

---

i [https://www.angelo.edu/covid-19/returning-to-campus/health-and-safety.php](https://www.angelo.edu/covid-19/returning-to-campus/health-and-safety.php)
iii [https://www.angelo.edu/current-students/student-handbook/](https://www.angelo.edu/current-students/student-handbook/)
iv [https://www.angelo.edu/current-students/disability-services/](https://www.angelo.edu/current-students/disability-services/)

vii [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix)