

**Western Illinois University  
School of Computer Science  
CS420(G) Networks, Spring 2020**

**Instructor:** Kim, Yeongkwun, Ph.D.

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<http://www.wiu.edu/users/yk106>

**Office:** Stipes 447 F (298 – 1351)

**Office Hours:**

Tue: 11:00 AM – 11:50 AM

Wed: 2:00 PM – 4:30 PM

Thursday: 11:00 AM ~ 11:50 AM

Or by appointment

**Course Credit:** 3

**Lecture Hour:** Tue/Thu 2:00 PM – 3:15 PM

**Textbook:** Computer Networking: A Top-Down Approach Featuring the Internet,  
7th Ed. by Kurose & Ross

**References:**

- IETF RFCs: <http://www.ietf.org>
- Computer Network by Tanenbaum, Prentice Hall
- Computer Networks: A Systems Approach, 3<sup>rd</sup> Ed. by Larry Peterson & Bruce Davie
- Efficient Reading of Papers in Science and Technology  
by Michael Hanson & Dylan McNamee

**Course Objectives**

Provide the student with an overall perspective of network by covering the fundamentals of data transmission, transmission media, standard protocols operating over networks with various topologies. Provide also broad computer networking technologies and practical use so that people can have right vision for fast developing communication area. In this course, we use the Internet's architecture and protocols, especially transport layer and network layer, as our primary vehicles for studying fundamental networking concepts.

**Method of Instruction:** Lecture

**Method of Evaluation and Grading**

<b>Homework Assignments:</b>	<b>20 points</b>
(Some assignments may require programming works)	
<b>2 Exams:</b>	<b>40 points (20 points/each exam)</b>
<b>Exam 1: February 11</b>	
<b>Exam 2: March 17</b>	
<b>Final Exam (University Schedule):</b>	<b>30 points</b>
<b>Research project:</b>	<b>10 points</b>

**Letter grade (For the undergraduate students, +/- grading system will be applied)**

- A:  $\geq 90$
- B:  $\geq 80$
- C:  $\geq 70$
- D:  $\geq 60$
- F:  $< 60$

## Major Topics To Be Discussed

- History of Computer Network and the Internet
- Data transmission and their media
- Protocol basics and operation of multi-layered protocol
- Circuit / Packet Switching
- Application layer concepts with Internet applications
- Transport layer with the basic operation of TCP/UDP, including connection establishment and release, buffered transfer, adaptive retransmission, and congestion
- Network layer including addressing and routing

**Note 1:** Point ranges for letter grades will be based on number of factors, including absolute and relative performance. Instructor reserves the right to lower the scale if performance warrants it.

**Note 2:** The topic for the research project will be related to computer networks, topic will be announced later.

**Note 3:** Written homework should be clearly **TYPED**. **Otherwise, it will not be accepted!**  
For written homework, you must write up your own solutions and may neither read nor copy other student's solutions.

**Note 4:** All assignments are due at **the first 5 minutes of the class**. Late assignments will be given 20 % penalty **BUT WILL NOT** be accepted after 24 hours of the due.  
No excuse PRINT problem! No email submission allowed!

In case of programming assignment, the late penalty is **20% PER A DAY** and **WILL NOT** be accepted after 2 days.

**Note 5:** No Make-up Exam will be given unless providing written proof of the emergency situation.  
In case, student must contact instructor immediately.

**Note 6:** The pop quizzes may be administered during the semester.

**Note 7:**

- I check email throughout the day from Monday through Friday, but please allow 24 hours for a response from me during business days. Between Friday evenings and Sunday nights, I rarely check email. So if you send me an email over the weekend, you will most likely receive a response from me the following Monday morning.
- To ensure that your email reaches me safely, please put **CS420** or **Networks** in the "subject" header at all times. Remember to be polite and respectful, and be careful and attentive to how the email is written students are expected to use professional language and tone in all communications with the instructor, including e-mail correspondences.
- **If you do not receive an e-mail response from me within the specified response times above, take another look at the construction of your e-mail.** The tardiness or lack of a response on our part may be the result of an inattention to the prescribed method of professional e-mail correspondence. In that case, please revise with proper attention to e-mail etiquette and resend the e-mail.

**Note 8:** Class attendance is FULLY student responsibility.

- Active class participation is expected
- You may ask anytime
- You are expected to attend all classes

**Note 9: Cheating** - It is expected that students will conduct themselves with integrity. If you cheat or assist others in cheating, you violate a trust. Cheating includes but is not limited to the following: taking exams for another person, copying files or lending your storage device to another student, turning in assignments that have been used in other classes, or purchasing or selling assignments or exam materials. If you cheat, some or all of the following actions will be taken: You will receive a lower point score up to and including a zero for that particular assignment or exam. A report of the incident may be forwarded to the Dean for a full investigation. The Dean may file the report in your permanent record and/or take further disciplinary action. Please refer to the **Academic Dishonesty Policy** at <http://www.wiu.edu/policies/acintegrity.php>

Additionally, every student should know his/her rights in the classroom and the university and should refer to **Student Rights & Responsibilities**: <http://www.wiu.edu/policies/stucode.php> for information on your rights and responsibilities.

**Plagiarism:**

It is assumed that students will learn from each other and in many cases exchange ideas regarding projects, papers and assignments. It is also required that student complete their assignments as an individual effort. Copying retyping or taking other's work and turning it in as your own will result in a zero for the material and may further be dealt with using the University's established plagiarism policy.

**Remarks:**

- **The contents on this syllabus can be changed with advance notification.**