

Spring 2026 CSCI 8795 – Advanced Topics in Cloud Computing

General Information

Instructor:	In Kee Kim, inkee.kim@uga.edu
Credits:	4
Time/Classroom:	M – 02:55 p.m. – 03:50 p.m. (@Cedar Street Building, 0574) TR – 02:55 p.m. – 04:15 p.m. (@BOYD. 0208)
Office Hours:	By email appointment

- Required Course Materials: Will be given via course web site
- Exam policy: No exam for this course

Course Description

Cloud Computing has become a *de facto* infrastructure in many business and research organizations to deliver various user-facing, business, and scientific applications to end users. The goal of this course is to introduce the underlying technologies that created the current cloud computing and infrastructure, then discuss the future of clouds by investigating the cutting-edge research that will soon be part of cloud ecosystems.

This course is designed for “**graduate students**” and is (most importantly) focused on “**research project and seminar**.” We will quickly cover fundamental concepts of cloud computing with lectures, then move onto (more) research-oriented components (seminar and project) of this course. In addition, the students will have opportunities to present assigned research papers. The students’ presentation should clearly address and summarize motivation, problem statement, the authors’ approach, evaluation, and discussion topics (e.g., pros/cons, further improvement, etc.).

- **Prerequisite:** Not required, but prior knowledge of operating systems, distributed systems, and computer networks will be a plus.
- **Required textbooks:** This class does not require a textbook. Course materials will be recent publications from top-tier cloud/system conferences and journals.

Course Assignments and Final Research Project

1) Class Presentation: The presentation should be prepared for 20 – 25 minutes talk and clearly explain motivation, problem statement, related work (additional literature survey is a plus), the authors' approach, evaluation, and discussion topics (e.g., pros/cons, further improvement, etc.).

2) Final Research Project: An essential component of this course is a final research project. You are expected to work on a cutting-edge research problem, which is relevant to the topic (as well as the theme of the semester) of this course. You can work either individually or with other students (no more than three students). **Project idea has to be discussed with the instructor.**

3) Late Submission Policy: Late submission policy will be applied to all deadlines and submissions, including paper selection and team building. **Less than 24 hours late – 20% penalty. 24 to 48 hours late – 40% penalty. Later than 48 hours – 0 pt**

Grading Distribution (Tentative, likely to change)

Items	Percent
Class Participation	10%
Paper Presentation	25%
Research Project	65%

Academic Integrity and Ethics

All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe, and ignorance is not an acceptable defense. For more detail, please see the UGA policy at: <https://honesty.uga.edu/Academic-Honesty-Policy/>