

#### SYLLABUS College of Computing and Software Engineering Department of Information Technology **IT7923: Advanced Web Technologies** Fall 2022 Section W01

### **Course Information**

Section W01: The course is delivered online asynchronously. There is no scheduled class meeting.

### Instructor

Name: Dr. Zhigang Li Preferred Method of Contact: D2L Email E-mail: <u>zli8@kennesaw.edu</u> \*Please use this for emergency only Office Location: J-378A Office Phone: 470-578-4481

**Office Hours: Monday 2-4pm**. Please free feel to join me for office hours either virtually on Zoom or in-person. You may also reach out to me for an appointment.

#### Zoom Link for Office Hours: https://kennesaw-edu.zoom.us/j/84577241816 Meeting ID: 845 7724 1816 Passcode: Fall2022

#### Email and Classroom Response Time:

Please contact me using **D2L Email** for all course-related questions. I will check my D2L Email at least once a day, not including weekends or holidays. During the week, I generally respond to emails within 24 hours. Over the weekend (starting Friday at 4 p.m.) I will respond to emails the next following business day.

# **Course Description**

This course covers advanced web concepts and technologies such as web business models and strategies, web architectures, cloud-based services, scalability, load balancing, web security, application development lifecycles, and DevOps. Students will complete a major web development project following the proper lifecycle processes by selecting and using the appropriate architecture and technology stack. Students will also complete a research concept paper on future trends and development of web technologies.

Prerequisites/Corequisites: IT6203 Credit Hours: 3-0-3 (3hours of lecture, zero lab hours, 3 hours credit) Required Texts: None. All required learning materials are provided in D2L. Recommended Texts: N/A

# **Technology Requirements:**

- This class uses D2L as hosting site. Run a system check to ensure your computer work with D2L. Check out UITS D2L training: <u>http://uits.kennesaw.edu/support/d2ltraining.php</u>.
- Internet Connection. A high-speed Internet connection is highly recommended. You may also use computer labs on campus to complete the coursework.

## **Student Learning Outcomes**

By the end of this course, a student should be able to:

- 1. Explain major concepts, tools, techniques, and methods of advanced web applications and services.
- 2. Plan, design, and develop a significant project implementing advanced web technologies.
- 3. Conduct research on emerging web business processes, technologies, applications, and services.

# **Evaluation and Grading Policies**

The required learning materials provided in D2L, along with the recommended textbook available through KSU library will be the basis for all lab assignments, discussion boards and the exam.

Category	Weight
Quizzes (6)	30%
Discussions (3)	15%
Web Development Project (3)	30%
Research Paper (group) (2)	25%
Total	100%

**Grade Conversion:** A: (90-100), B: (80-89), C: (70-79), D: (60-69), F: (0-59) Grades will be rounded up if they are > or = .5 or above, for example, an 89.6 is an A, but 79.2 is a C.

# **Course Outline**

\*The course outline below is tentative and is subject to change.

Week	Module	Deliverables
1	Start Here	
2	M1. Advanced Web Business Models and Strategies	Discussion 1
3	M2. Web Architectures	Quiz 1
4	M3. Docker Containers for Full Stack App	Quiz 2
5	M4. Test-Driven Development for DevOps	Quiz 3
6	M5. Front-End Development with React	Discussion 2
7	M6. Front-End Development with React (cont.)	Quiz 4
8	M7. User Authentication	Milestone 1
9	M8. Scalability	Research Plan
10	M9. Load-Balancing	Quiz 5
11	M10. Web Security	Milestone 2, Discussion 3
12	M11. Mobile Apps	Quiz 6
13	Work on Project/Research Paper	
14	Work on Project/Research Paper	
15	Fall Break	
16		Milestone 3, Research Paper

# **Course Policies**

#### Announcement

Important announcements will be made to the class electronically through the D2L Announcements tool. It is important that you check your D2L account regularly for announcements, assignments, and course updates.

#### **Assignments and Exams Policy**

- All assignments MUST be submitted through D2L (https://kennesaw.view.usg.edu/) by the deadline. Email submissions are **NOT** accepted.
- All quizzes and/or exams MUST be completed on D2L website by the deadline. The quizzes and/or exams can't be opened/submitted after the deadline.
- If you must miss an exam due to illness, you must e-mail or call the instructor before the scheduled time. Failure to notify the instructor prior the scheduled time will produce an automatic zero for the exam.

#### Discussions

People learn through interactions, to facilitate interactive learning this course will use the Discussions feature in D2L. Discussions will take place in an **asynchronous** manner.

#### **Grading Turnaround Time**

Grades will be posted in D2L, generally within one week from the due date or submission date whichever is later. Significant assignments such as projects may take longer to grade. If you think there is an error, please make a re-grading request by e-mail within one week of grade posting. A request for reassessment will not be granted if more than two weeks have passed since the grade in question was posted. Check your grades in D2L regularly.

**No "extra credit"** work will be given to improve one's grade. Copies of your class work and test will be kept for record.

### **Tips for Effective Online Learning**

For an online class, students can really enjoy the benefits of learning at you own pace and at the place of your choice. Below are some tips for effective online learning.

- *Check D2L course website frequently*. It's recommended that students should login D2L course site AT LEAST every other day. Always be aware of current status of the course. Take advantage of the posted learning material such as recorded lectures.
- *Work with the instructor closely.* If you have any question, contact the instructor immediately.
- *Start your work early*. If you can start a task early, don't start late. Assuming you spend the same amount of time completing the task, starting later will be much more stressful than starting early. Never start until the last minute! You'll have no turnaround time if you need help or something happens.
- *Keep up with the work*. Don't fall behind. If you do, contact the instructor immediately for what you need to do. The instructor may also contact you if he is concerned. Respond to the instructor's inquiry promptly.

#### **Class Communication Rules**

In any classroom setting there are communication rules in place that encourage students to respect others and their opinions. In an online environment, the do's and don'ts of online communication are referred to as Netiquette. As a student in my course you should:

- Be sensitive and reflective to what others are saying.
- Avoid typing in all capitals because it is difficult to read and is considered the electronic version of 'shouting'.
- Don't flame These are outbursts of extreme emotion or opinion.
- Think before you hit the post (enter/reply) button. You can't take it back! Don't use offensive language.
- Use clear subject lines.

- Don't use abbreviations or acronyms unless the entire class knows them. Be forgiving. Anyone can make a mistake.
- Keep the dialog collegial and professional, humor is difficult to convey in an online environment.
- Always assume good intent and respond accordingly. If you are unsure of or annoyed by a message, wait 24 hours before responding.

### **Institutional Policies**

- Federal, BOR, & KSU Course Syllabus Policies
- <u>Academic Integrity Statement</u>
  - Examples of violation of academic integrity: 1) copy from others or from Internet; 2) allow others to copy your work; 3) use other's help or help other in completing the quizzes or exams.
  - The first violation of academic integrity, the student will immediately receive 0 for the associated grading item. For the 2nd violation, the student will receive a fail grade for this course.

# **KSU Statements on Course Delivery and COVID-19**

### **Course Delivery**

KSU may shift the method of course delivery at any time during the semester in compliance with University System of Georgia health and safety guidelines. In this case, alternate teaching modalities that may be adopted include hyflex, hybrid, synchronous online, or asynchronous online instruction.

### **Face Coverings**

Based on guidance from the University System of Georgia (USG), masks are encouraged based on individual preference and assessment of personal risk. Disposable face coverings can be picked up at the Office of Emergency Management at Chastain Pointe on the Kennesaw campus and Norton Hall Police Precinct on the Marietta campus. Please email oem@kennesaw.edu if you have questions.

# **Student Resources**

This link contains information on help and resources available to students: KSU Online Learning Support.