

# SYLLABUS COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING DEPARTMENT OF INFORMATION TECHNOLOGY IT 7733: FUNDAMENTALS OF ENTERPRISE CLOUD ACADEMIC TERM – SPRING 2022

# **Course Information**

Class meeting time: TBA Modality and Location: Online *Syllabus is posted in D2L* 

### Instructor

Name: Dr. Shirley Tian E-mail: xtian2@kennesaw.edu Office Location: J-378B Office Phone: 470-578-5168 Office Hours: Monday/Thursday 1:00 – 4:00 PM Course Communication:

- Email is the best way to reach the instructor. Use D2L email if possible. Instructor's KSU email (xtian2@kennesaw.edu) should only be used when you don't have access to D2L site. [You may choose either to use D2L email or KSU email for communication]
- Students' emails will be replied WITHIN 24 hours during the weekday. Weekend and holidays don't apply.
- When email the instructor using accounts other than D2L email, put the course number in the subject line. Emails without proper subject line will not be replied.
- Avoid using personal email. Sensitive information (such as your grades) can ONLY be sent to D2L email or KSU email account.

# **Course Description**

Prerequisites/Corequisites: IT 6413 Credit Hours: 3 Required Texts: Non-Textbook Required Recommended Texts: Course Description:

This course will cover the fundamental ideas behind enterprise cloud, the evolution of the paradigm, its applicability; benefits, as well as current and future challenges; The basic ideas and principles in enterprise cloud; cloud management techniques and enterprise cloud deployment considerations; Cloud storage technologies and relevant distributed file systems, NoSQL databases and object storage. The course also covers the hands-on labs to practice on the cloud platform.

# 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: <a href="http://uits.kennesaw.edu/support/d2ltraining.php">http://uits.kennesaw.edu/support/d2ltraining.php</a> .
- Internet Connection. A high-speed Internet connection such as DSL or cable Internet access is highly recommended. You may also use computer labs on campus to complete the coursework.
- A web camera is required for a student to take quizzes/exam.

# **Student Learning Outcomes**

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

- 1. Define and explain enterprise cloud with a focus on the Cloud, its architecture, and its global infrastructure.
- 2. Describe and use security and compliance measures of enterprise cloud.
- 3. Utilize IT cost and control concepts, e.g., total cost of ownership, and tools for comparing on-premises IT, cloud IT and hybrid IT with a focus on the cloud scaling, monitoring, costing, and pricing tools.
- 4. Explain and arrange the fundamental components of enterprise cloud, including networking and content delivery, compute, storage, and databases, practice in labs.

# **Course Requirements and Assignment**

The course has five quizzes for module 2, 3, 5, 8, and 11, and six lab assignments (The cloud platform will be provided to students for lab assignment and practice). It is highly recommended that you complete the learning modules and exercises before attempting the lab assignments. Please see details in course schedule.

The quizzes consist of true-false and multiple-choice and will be automatically graded upon submission. You will have 3 attempts (different questions in each attempt) for each quiz and the highest score will be taken. The passing score is 80% or above. Only incorrect answers will be displayed after submitting an attempt.

This course has a final exam and a research paper. The final exam is comprehensive at the end of the semester. Students will submit a research paper about cloud computing.

### **Evaluation and Grading Policies**

#### Weight Distribution

Grading Item	Weight
Quizzes (10)	40%
Lab assignments (6)	40%
Final Exam	10%
Research paper	10%
Total	100%

**Grading Scale:** 90% - 100% A 80% - 89% B 70% - 79% C 60% - 69% D 0% - 59% E

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 Policies**

#### **Course Attendance Policy**

The attendance is highly recommended.

### Grading Items Turnaround Time

- The grades for the quizzes and exams will be available 48 business hours after the due date
- The grades for labs/assignments/projects will be available 96 business hours after the due date

### Assignments & Exam Policy

- All assignments MUST be submitted through D2L (<u>https://kennesaw.view.usg.edu/</u>) course website by the deadline specified in course calendar. Email submission will NOT be accepted. Any assignment that is less or equal than 24 hours late is subject to 10% penalty. Any assignment that is less or equal than 48 hours late is subject to 20% penalty. Any assignment that is more than 48 hours late will NOT be accepted.
- All quizzes and exams MUST be completed on D2L website by the deadline specified in course calendar. The quizzes 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 to the scheduled time will produce an automatic zero for the exam. NO makeup test except for emergencies with proof (e.g. doctor's slip).

### Proctored Exam

Respondus Lockdown Browser + Web Camera will be used for the final exam.

#### LockedDown Web Browser Student Guide

Students will take a LockedDown browser practice quiz which contain 1 dummy question and unlimited attempts to get familiar with the LockedDown Browser. Please contact the instructor if you have any questions.

### **Student Responsibility**

For this class, you are expected to spend seven to eight hours each week on coursework:

- Check KSU email regularly;
- Login D2L course website frequently to access the course material (at least every other day);
- Follow the weekly study guide in the learning module;
- Study the assigned material such as virtual lectures, textbook chapters and the PowerPoint slides;
- Complete assigned quiz/assignment/discussion/project on time.

# 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. You can either email or text me and your message is guaranteed to be replied within 12 hours.
- 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.

# **Course Schedule**

The course schedule is tentative and is subject to change. Please use D2L course calendar as accurate due dates.

[Can be week by week for day by day. Should highlight content covered, assignments, and exams. Academic calendar can be found at: <u>https://registrar.kennesaw.edu/academic-</u>

<u>calendars/index.php</u> ]

Week	Date	Course Contents	Notes
01	01/10 – 01/16	Module 1 Course Overview and Background of Cloud	Course introduction due LockedDown Browser quiz
			due
02	01/17 – 01/23	Module 2 Cloud concepts	Quiz 1 due
03	01/24 – 01/30	Module 3 Cloud economics and billing	Quiz 2 due
04	01/31 – 02/06	Module 4 Cloud Global Infrastructure	Quiz 3 due

05	02/07 – 02/13	Module 5 Cloud security	Quiz 4 and Lab 1 due
06	02/14 - 02/20	Module 6 Networking Content	Lab 2 due
		delivery part 1	
07	02/21 – 02/27	Module 6 Networking Content	Quiz 5 due
		delivery part 2	
08	02/28 – 03/06	Module 7 Compute part 1	Lab 3 due
09	03/07 – 03/13	Spring Break	
10	03/14 – 03/20	Module 7 Compute part 2	Quiz 6 due
		3/15 – Last Day to Withdraw without	
		Academic Penalty	
11	03/21 – 03/27	Module 8 Storage	Quiz 7 due
			Lab 4 due
12	03/28 – 04/03	Module 9 Databases	Quiz 8 due
			Lab 5 due
13	04/04 - 04/10	Module 10 Cloud architecture	Quiz 9 due
14	04/11 – 04/17	Module 11 Auto Scaling and	Lab 6 due
		monitoring	Quiz 10 due
15	04/18 – 04/24	Course review	
16	04/25 – 05/01	Research paper presentation	Research paper due
17	05/02 - 05/08	5/2 – Last Day of Class	Final Exam
		Final Exam – 5/4-5/7	

# **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 2<sup>nd</sup> violation, the student will receive a fail grade for this course.

### **KSU Statements on 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.

#### **COVID-19 illness**

If you are feeling ill, please stay home and contact your health professional. In addition, please email your instructor to say you are missing class due to illness. Signs of COVID-19 illness include, but are not limited to, the following:

- Cough
- Fever of 100.4 or higher

- Runny nose or new sinus congestion
- Shortness of breath or difficulty breathing
- Chills
- Sore Throat
- New loss of taste and/or smell

COVID-19 vaccines are a critical tool in "Protecting the Nest." If you have not already, you are strongly encouraged to get vaccinated immediately to advance the health and safety of our campus community. As an enrolled KSU student, you are eligible to receive the vaccine on campus. Please call (470) 578-6644 to schedule your vaccination appointment or you may walk into one of our student health clinics.

For more information regarding COVID-19 (including testing, vaccines, extended illness procedures and accommodations), see KSU's official Covid-19 website.

#### **Face Coverings**

Based on guidance from the University System of Georgia (USG), all vaccinated and unvaccinated individuals are encouraged to wear a face covering while inside campus facilities. Unvaccinated individuals are also strongly encouraged to continue to socially distance while inside campus facilities, when possible.

# **Student Resources**

This link contains information on help and resources available to students: <u>KSU Student Resources</u> for Course Syllabus