CSEE 5590-0003/COMP-SCI 490-0002: Web/Mobile Programming

Spring 2022 | University of Missouri-Kansas City | School of Computing and Engineering | Applied Programming Learning Series | **On-Campus**

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Instructor and TA details:

Instructor: Alanazi, Ahmed Hamdan

Email: aha85b@umkc.edu

Office Hours: Thu. 2:00 pm-3:00 pm CST

Location: Zoom - https://zoom.us/j/8810409240?pwd=R0[EYjRMZ1]ibG14M3hSc2gvT2NZUT09

Teaching Assistant: Cheng Shu **Email:** cs833@mail.umkc.edu

Office Hours: Mon. 8:00 am-9:00 am CST

Location: Zoom -

https://umsystem.zoom.us/j/3604469999?pwd=V1AzLzlDREd0dWxWb1N2Kzc4VnFrUT09

Course Time and Location

Time: Mon. 5:30 pm-8:30 pm CST **Location:** Flarsheim Hall-Rm 00310

Credits: 3 Credit Hours

The instructor and TAs will be available to help you to finish the assignments.

Description

APL Description: Each course in this APL series is for a graduate student and undergraduate (Senior) in the School of Computing & Engineering (SCE) who want to build programming skills in a specialized area. Students must have permission to enroll in any course of this series. This series's courses will count to 3 credit hours toward fulfilling the course requirement for students' degrees at SCE.

Web/Mobile Programming Course Description: This course teaches students how web technologies (Part 1) and mobile technologies (Part 2) work and how to apply them to applications. Students will build applied programming skills using case studies for web and mobile applications (using web services for recognition and analysis of image, speech, sensor, social network trends, etc.).

- Part 1 (Week 1 8): Programming for Web App for Web application using HTML/CSS/JavaScript/ReachJS & MEAN Stack (MongoDB, Express.js, Angular, and Node.js). We will also introduce React.
- Part 2 (Week 9 16): Programming for Mobile App (Android OS & React Native) to learn the foundations of mobile platforms and techniques. Understand how to build a mobile application using knowledge APIs (speech recognition, object recognition, GPS/map, movement recognition, etc.), and learn how to lead successful mobile application projects. Mobile applications will build using Java programming with Android Studio and SDK Tools.

Prerequisites

Prior knowledge and experience with any Programming will be helpful. A willingness to research and explore the given resources will be essential!

Required Textbook

The textbook is not necessary for this course as technology is rapidly changing. We will use online resources for this course.

Course Structure

You can find the course details on the UMKC Canvas site, which you can find here: http://online.umkc.edu/lms/. First, please navigate to the Start Here page on the Canvas site for this course. Inside the Start Here folder, you will find the syllabus and a video to steer everything in the course. I have also posted a video that will describe this course's purpose, the assignments, and course grading policies.

System Requirements

Windows

- 64-bit Microsoft® Windows® 8/10
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a <u>Windows Hypervisor</u>
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution

Mac

- MacOS® 10.14 (Mojave) or higher
- ARM-based chips, or 2nd generation Intel Core or newer with support for <u>Hypervisor.Framework</u>
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution

Linux

- Any 64-bit Linux distribution that supports Gnome, KDE, or Unity DE; GNU C Library (glibc)
 2.31 or later.
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD processor with support for AMD Virtualization (AMD-V) and SSSE3
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution

Chrome OS

For information on recommended devices and specifications, as well as Android Emulator support, visit chromeos.dev.

Technology Requirements

You are expected to have the computing resources necessary to complete this course through personal, University channels (e.g., remote computer labs), or both. Please contact me if you will be without email access for a short-term basis during this course. We can make alternate arrangements should your reason for being without computer access warrant accommodation (note: travel for vacation/work does not necessitate accommodations).

Below is a list of some helpful computer requirements for full participation in this online class:

- The latest version of GitHub Desktop at https://desktop.github.com/
- The latest version of WebStorm IDE at https://www.jetbrains.com/webstorm/
- The latest version of Java is available at http://www.java.com/en
- The latest version of JDK for your OS at http://java.oracle.com
- The latest version of Android Studio at https://developer.android.com/studio
- A current word processing software
- A headset with a microphone
- A webcam
- Internet Explorer, Chrome, or Firefox for Windows computers
- Firefox, Chrome, or Safari for Apple computers
- A Broadband Internet connection is preferred. Examples of broadband Internet connection are high-speed DSL or a Cable modem

Learner Support

Students can get technical support from Instructional Technology Services either by calling 816-235-6700, emailing its@umkc.edu, or using the chat tool. https://online.umkc.edu/support-policies/

Participation Policies

This course is **not designed** to be self-paced. Rather, you are expected to participate in class activities along with the group. At the same time, I recognize that there might be times during the semester that you need to complete work in advance to meet other life demands.

Course Etiquette, Participation, and Canvas

Like other courses, you are expected to communicate with your peers and me professionally, thoughtfully. In this course, there may be opportunities for academic debate. This is encouraged, as it helps us grow as learners. Remember, however, to communicate with respect and mindfulness even when disagreements arise. As an instructor, I will offer corrective feedback if I observe unhelpful communication.

Tips for Course Success

- During the first week,
 - a. Review the material on the start here/home page and email me if you have questions.
 - b. Read the syllabus and explore the course Canvas site -- email me if you have questions. I am happy to schedule a Zoom meeting with you if you have difficulty using the Canvas tools.

• Do not work too far in advance or conceptualize this as a "self-paced" course. You will get more out of it if you participate fully in course assignments the week due.

Course Time Commitment

Both in-person and online, courses can be varied in their design and expectations for student involvement and time. If this course were taught face-to-face during the 16-week session, one would expect to be in class (engaged in lecture and discussion) for approximately 3 hours/week and spend additional time outside of class in preparation for active course engagement and course assessment (reading, completing assignments). So, you should be prepared to spend similar amounts of time engaged in this course. In traditional face-to-face learning environments, you should anticipate that you will experience less time in passive learning activities (i.e., lectures). And more time engaged in active learning activities and communication with your peers and me (i.e., Inclass programming (ICPs), Quizzes via Zoom, Proctorio, and discussion board postings).

Expectations of Faculty in this Course

I will aim to respond to all email and voicemail questions within 48 hours. Questions that are posted to the General Questions Discussion Board will be answered within 24 hours. Weekly assignments will typically be graded by Monday of the following week. Exams, in general, will have a two-week grading turn-around timeframe. Individual feedback will be provided for some assignments, and group feedback will be provided for some assignments.

The SCE Chain of Command for students

If you encounter a problem and wish to speak with someone besides the instructor, below is the chain of command for SCE

- 1. Professor/Instructor (Dr. Yugyung Lee)
- 2. Advisor (Coretta, Darian or Erin)
- 3. CSEE Program Coordinator (Gina)
- 4. CSEE Department Chair (Dr. Chowdhury)
- 5. CSEE Assistant Dean of Student Affairs (Marjory Eisenman)
- 6. SCE Dean (Dean Truman)

University of Missouri-Kansas City Mission

UMKC's mission is to lead in life and health sciences; to deepen and expand strength in the visual and performing arts; to develop a professional workforce and collaborate in urban issues and education, and to create a vibrant learning and campus life experience.

School of Computing and Engineering History and Mission History

The University has offered engineering degree programs since 1956. Increased technology demands during the mid-80s, combined with a generous gift from United Telecom (now Sprint), led to the development of UMKC's high-tech Computer Science and Telecommunications Program in 1984. These programs were combined in 2001 to form the School of Computing and Engineering (SCE).

Mission

The mission of the Department of Computer Science Electrical Engineering (CSEE) is to provide competitive educational opportunities and focused research in the disciplines supported in the department to generate the professional and technical workforce and research needed for economic development. To accomplish this mission, the department seeks to:

- Conduct research that advances knowledge in these disciplines and their applications.
- Educate and graduate students who are knowledgeable about these disciplines who become lifelong learners and leaders.
- Engage in service and outreach to enrich the community, state, and profession.

Intended Learning Outcomes/Objectives

After finishing this course, you will be proficient in web and mobile programming

- 1. Complete the weekly In-class programming assignments (ICPs)
- 2. Complete quizzes
- 3. Complete Two ICP Presentation for each group
- 4. Complete project-based exam

Assignments

In-class programming (ICP)

- 1. 14 ICPs for the course 100 points each/1400 points total
- 2. You will have one ICP for each lesson
- 3. The purpose of the ICP is to get hands-on experience with the current lesson's programming topics/concepts
- 4. ICP is an individual contribution or group of up to two students. However, you can take help from your team for the ICP
- 5. Solve the given programming assignment
- 6. Create a report .pdf and describe the way you solved the assignment. The report should include the below list but not be limited to them
 - a. Title
 - b. Description
 - c. Screenshots
 - d. Important code snippets
 - e. Learnings from the lesson
 - f. Issues with the lesson
- 7. Present your work in class to the instructor or teaching assistant before you leave
- 8. Submit the Feedback form with GitHub link of your codes and report on Canvas

ICP Submission Guidelines

- 1. ICP submission is an individual contribution or group of up to two students
- 2. Submit your source code and documentation (report) to GitHub and represent the work through the report accurately (submit your screenshots as well. The screenshot should have both the code and the output)
- 3. Comment your code appropriately

- 4. Present your work in class to the instructor or teaching assistant before you leave
- 5. Submission after the due date is considered a late submission. (Check the Late Submission Policy on Assignments' in the syllabus)
- 6. Use the related Canvas survey to submit your ICP # and feedback

ICP Presentation

- 1. Two ICP presenations for each team 100 points each/200 points total
- 2. Team or individual will prepare a short presenation
- 3. ICP presenations will have three minutes to be presented at the end of each class

Quiz

- 1. Two quizzes for the course 30 points each/60 points total
- 2. You will have one guiz for each part
- 3. The purpose of the quiz is to help you to revise the content quickly you have learned from the lessons
- 4. The quiz is an individual contribution
- 5. It consists of multiple-choice questions (MCQs) from the specific module

Quiz Submission Guidelines

- 1. The quiz will be available in the Canvas
- 2. You will have to take the quiz at the specified time.
- 3. If you are not taking the quiz, you will not get the credit
- 4. There will not be any makeup quiz in case if you miss one of the quizzes

Project-based Exam

- 1. One project-based exam for the course 100 points total
- 2. You will have one exam for this course
- 3. The purpose of the exam is to improve and implement the programming concepts learned from the lesson to solve the real-world problems
- 4. You should be able to develop web or mobile applications for the exam. Specific guidelines will be provided later in the course
- 5. The exam is a team contribution
- 6. Solve the given exam programming assignment with your team
- 7. Create a GitHub wiki page and describe the way you solved the assignment. The wiki page should include the below list but not be limited to them
 - a. Title
 - b. Description
 - c. Screenshots
 - d. Important code snippets
 - e. Learnings from the exam
 - f. Issues with the exam
- 8. Make a simple video about 3 to 5 minutes, which includes execution of the application and explanation of code snippets

9. Submit the Feedback form with GitHub wiki page and Video links along with the feedback for the exam

Project-based Exam Submission Guidelines

- 1. The exam is submitted by a team of four students assigned at the beginning of the semester.
- 2. Submit your source code and documentation to GitHub and represent the work through the wiki page accurately.
 - a. Include your screenshots as well. The screenshots should have both the code, documentation, and output.
- 3. Document your code appropriately.
- 4. Video submission (3 to 5 min video showing the project's demo, with brief voiceover on the code explanation).
- 5. Submit a report to Turnitin on Canvas, and the similarity score should be less than 15%.
- 6. Submit code to Turnitin on Canvas, and the similarity score should be less than 35%.
- 7. Submission after the due date is considered a late submission. (Check the Late Submission Policy on Assignments in the syllabus.)
- 8. Use the corresponding Canvas survey to submit your exam and feedback.
- 9. The report should include the below details:
 - a. Project Title and Team Members
 - b. Goals and Objectives:
 - The motivation behind the idea
 - Significance
 - Objectives
 - Features
 - Approaches/Methods
 - c. Workflow
 - d. Working screens from project
 - e. If deployed into the cloud, provide the link
 - f. GitHub link for your project
 - g. Work sharing/Module sharing between teammates
 - h. Any issues, blockages with the project
 - i. References
 - i. Conclusion

Project-based Exam Presentation Guidelines

- 1. Your team should be available to present with
 - a. The presentation slides
 - b. The working demo
- 2. Your team will have 10 minutes to present
- 3. Q&A on your project-based exam for each individual in the team

Hack-A-Roo Participation

- 1. Your team must attend the event on April 8 for full credit
- 2. Your team will have to participate in this event by submitting the project
- 3. More information visit https://info.umkc.edu/hack-a-roo

Late Submission Policy on Assignments

Assignments that submitted after the due date will no longer be accepted

- 1. '-10' points for one day late submission with permission/exception
- 2. '-20' points for two days late submission with permission/exception
- 3. '-30' points for three days late submission with permission/exception
- 4. No submission will be allowed after three days, even with permission/exception

DO NOT EMAIL your work to TAs. Always use the appropriate form to submit, and your work should be original and independent

Grading Summary

Assignment	Contribution	% of the final grade	Point Value
Project Report (4) and Exam (1)	Team	35%	100 points
ICPs (14)	Team	30%	100 points each
Quizzes (2)	Individual	20%	30 points each
ICP Presentations (2)	Team	10%	10 points each
Hack-A-Roo Participation	Team	5%	100 points
Total		100 %	

Grading

$A \ge 94.0\%$	C ≥ 74.0%
A- ≥ 90.0%	C- ≥ 70.0%
B+ ≥ 87.0%	D+ ≥ 67.0%
B ≥ 84.0%	D ≥ 64.0%
B- ≥ 80.0%	D- ≥ 60.0%
C+ ≥ 77.0%	F < 60.0%

Course Schedule

The following is the proposed course schedule. The schedule may change due to unforeseen circumstances. Please check the Canvas course site for the most current and up to date information

Module One: January 18 - January 28					
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)	

7 4	XZ -11.1	4 747 (1) (1 (1	LCD4	7 24
Lesson1:	You will learn	1. We will provide the	ICP1	January 24,
Introduction to	GitHub, repository,	necessary reading		2022
the tools that	fork, branch, pull	materials for each lesson		
will use in the	requests, creating	in the Canvas discussion		
course	issues, and be	board and Lesson plan.		
	familiar with GitHub	(Link/Video/Articles)		
	and WebStorm.			
		2. Apart from that, you		
		will have to follow the		
		below resources for this		
		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		
Lesson2: HTML	You will learn how	1. We will provide the	ICP2	January 24,
and CSS		-	ICF Z	2022
allu CSS	the Internet work,	necessary reading materials for each lesson		2022
	HTML elements,			
	attributes, CSS	in the Canvas discussion		
	selectors, box model,	board and Lesson plan.		
	and flex. Able to	(Link/Video/Articles)		
	create an HTML			
	page. And you will	2. Apart from that, you		
	learn how CSS will be	will have to follow the		
	helpful to beautify	below resources for this		
	your simple web	lesson		
	page.	a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		

Module Two: January 31 - February 11					
Lesson Outline Purpose Reading Materials Assignment Due Dates (by 11:59					
				pm CST)	

	T		T	T
Lesson3: Basics	You will learn	1. We will provide the	ICP3	January 31,
of Bootstrap,	Bootstrap,	necessary reading		2022
Grid Layout in	responsive web	materials for each lesson		
Bootstrap,	design, Grid Layout	in the Canvas discussion		
fundamentals of	in Bootstrap,	board and Lesson plan.		
RWD	JavaScript, DOM,	(Link/Video/Articles)		
(Responsive	JavaScript			
Web Design)	programming	2. Apart from that, you		
and some JS,	elements. You will	will have to follow the		
Calculator using	work on the	below resources for this		
JavaScript	calculator web	lesson		
	application using	a. Lesson Plan		
	Javascript.	b. Lesson Presentation		
	-	c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		
Lesson4:	You will learn	1. We will provide the	ICP4	February 7,
Object-oriented	Objected Oriented	necessary reading		2022
JavaScript,	JavaScript,	materials for each lesson		
jQuery, AJAX,	Prototype, jQuery,	in the Canvas discussion		
accessing APIs	jQuery selectors,	board and Lesson plan.		
with jQuery,	AJAX, and RESTful	(Link/Video/Articles)		
Hangman game	API. You will be able			
using JavaScript	to use API.	2. Apart from that, you		
and APIs, and		will have to follow the		
To-Do List using		below resources for this		
jQuery		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
1	1	d. Lesson Videos		

Module Three: February 14 - February 25					
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)	

	1	T	Τ .	_
Lesson5:	You will learn	1. We will provide the	ICP5	February 14,
Angular:	Angular, Importance	necessary reading		2022
Components,	of Angular,	materials for each lesson		
String	TypeScript	in the Canvas discussion		
Interpolation,	Datatypes,	board and Lesson plan.		
Property	TypeScript	(Link/Video/Articles)		
Binding, Event,	Namespaces,			
and two-way	Elements of Angular,	2. Apart from that, you		
Data Binding,	Components, String	will have to follow the		
NgModules and	interpolation,	below resources for this		
Directives	Property Binding,	lesson		
	Event, and two-way	a. Lesson Plan		
	data binding,	b. Lesson Presentation		
	NgModules.	c. Lesson Source code		
	We will also	(.zip)		
	introduce React.	d. Lesson Videos		
Lesson6:	You will learn	1. We will provide the	ICP6	February 21,
Angular:	Angular Routing,	necessary reading		2022
Routers,	Angular Services and	materials for each lesson		
services, HTTP,	Dependency	in the Canvas discussion		
and RESTful	Injection, REST,	board and Lesson plan.		
APIs	Angular Http Client,	(Link/Video/Articles)		
	Requirements to			
	access APIs.	2. Apart from that, you		
	We will also	will have to follow the		
	introduce React.	below resources for this		
		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		

Module Four: February 28 - March 11					
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)	

Lesson7:	You will learn MEAN,	1. We will provide the	ICP7	February 28,
Node.js:	Node.js, Node.js	necessary reading		2022
MongoDB,	modules, Node.js	materials for each lesson		
NodeJS and	packages, Express	in the Canvas discussion		
MEAN stack,	Framework,	board and Lesson plan.		
App using	MongoDB, and CRUD	(Link/Video/Articles)		
MEAN Stack	operations. You will			
	also learn blocking	2. Apart from that, you		
	and non-blocking io.	will have to follow the		
	We will also	below resources for this		
	introduce React.	lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		
Pre - Exam	Web/Mobile	From Lesson1 to Lesson7	Quiz1 and	March 7,
	Programming		Presentation	2022

Module Five: March 14 - March 25				
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)

Lesson8: Introduction, history, Android Architecture, Code Structure, Manual Login, Social Login	You will learn Android architecture, how android works, the activity life cycle, and deploying the application.	1. We will provide the necessary reading materials for each lesson in the Canvas discussion board and Lesson plan. (Link/Video/Articles) 2. Apart from that, you will have to follow the below resources for this lesson a. Lesson Plan b. Lesson Presentation c. Lesson Source code (.zip) d. Lesson Videos	ICP8	March 14, 2022
Lesson9: Understanding the basics of android, Coffee Ordering app	You will learn Android Layouts, Views, Intents, and how to create a basic android application.	1. We will provide the necessary reading materials for each lesson in the Canvas discussion board and Lesson plan. (Link/Video/Articles) 2. Apart from that, you will have to follow the below resources for this lesson a. Lesson Plan b. Lesson Presentation c. Lesson Source code (.zip) d. Lesson Videos	ICP9	March 21, 2022
Spri	ng Break	March 2	28 – April 3	

Module Six: April 4 - April 15				
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)

		T		1
Lesson10:	You will learn	1. We will provide the	ICP10	April 4, 2022
RESTful	RESTful Services,	necessary reading		
Services,	ListView,	materials for each lesson		
ListView,	Adapter, Recycling	in the Canvas discussion		
Adapter,	Multi-	board and Lesson plan.		
Recycling,	Threading, Async	(Link/Video/Articles)		
Multi-	Task, and able to			
Threading,	create an application	2. Apart from that, you		
Async Task	that uses an API.	will have to follow the		
_		below resources for this		
		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		
Lesson11:	You will learn how to	1. We will provide the	ICP11	April 11,
Accessing	access the Android	necessary reading		2022
different	hardware like	materials for each lesson		
components of	Location/Maps,	in the Canvas discussion		
the android	Camera, Media,	board and Lesson plan.		
system and	Recorder/Audio,	(Link/Video/Articles)		
sensors	Device Storage, and			
	understanding	2. Apart from that, you		
	different sensors.	will have to follow the		
		below resources for this		
		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		

Module Seven: April 18 - April 29				
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)

Lesson12: SQLite, History, Data Types, CRUD operation, Address Book, Firebase authentication, and Database	You will learn databases like SQLite, CRUD operations, and Firebase. And how to develop an application with those databases.	1. We will provide the necessary reading materials for each lesson in the Canvas discussion board and Lesson plan. (Link/Video/Articles) 2. Apart from that, you will have to follow the below resources for this lesson a. Lesson Plan b. Lesson Presentation c. Lesson Source code (.zip) d. Lesson Videos	ICP12	April 18, 2022
Lesson13: Speech to Text, Text to speech, Medical assistant application, SMS Reader	You will learn how to use the Text to Speech and Speech to Text application in the android operating system.	1. We will provide the necessary reading materials for each lesson in the Canvas discussion board and Lesson plan. (Link/Video/Articles) 2. Apart from that, you will have to follow the below resources for this lesson a. Lesson Plan b. Lesson Presentation c. Lesson Source code (.zip) d. Lesson Videos	ICP13	April 15, 2022

Module Eight: May 2 - 13				
Lesson Outline	Purpose	Reading Materials	Assignment	Due Dates (by 11:59 pm CST)

Lesson14:	You will learn how to	1. We will provide the	ICP14	May 2, 2022
Adding the	use Calendar API and	necessary reading		
calendar to	creating & deploying	materials for each lesson		
apps APK	the APK files.	in the Canvas discussion		
generation		board and Lesson plan.		
		(Link/Video/Articles)		
		2. Apart from that, you		
		will have to follow the		
		below resources for this		
		lesson		
		a. Lesson Plan		
		b. Lesson Presentation		
		c. Lesson Source code		
		(.zip)		
		d. Lesson Videos		
Final Exam	Web/Mobile	From Lesson8 to	Quiz2 and	Quiz (May 9,
	Programming	Lesson14	Presentation	2022)
				Presentations
				(May 9, 2022)

Rubric Detail

ICP

Criteria	Novice	Competent	Proficient
Report (15)	Basic Report. (>=0 to <=5)	Report with the required details. (>5 to <=10)	Report with all details and making it easy to follow and understand. Visually looking good. (>10 to <=15)
Presentation during class (20)	Basic Presentation. (>=0 to <=5)	Presentation with the required details. (>5 to <=15)	Presentation with all details and making it easy to follow and understand. Annotated with the subtitles. (>15 to <=20)
Completeness of given assignment (25)	It is partially solved. (>=0 to <=5)	Completely solved. (>5 to <=20)	It is solved efficiently. (>20 to <=25)
Code Quality (It is relative) (25)	Refer to the <u>best</u> <u>coding practices</u> page. (>=0 to <=5)	Refer to the <u>best</u> <u>coding practices</u> page. (>5 to <=20)	Refer to the <u>best</u> <u>coding practices</u> page. (>20 to <=25)

Commenting the code (10)	Not useful	Slightly appropriate	Appropriate
	comments. (>=0 to	comments. (>5 to	comments. (>8 to
	<=5)	<=8)	<=10)
Time of submission	Submission after the	Submission on the	Submission before
	due date. Check the	deadline. No score	the deadline. No
	'Late Submission	will deduct from the	score will deduct
	Policy on	obtained score.	from the obtained
	Assignments'		score.
	section in the		
	syllabus		
Submission (including	Submission with	Submission with the	Submission with all
feedback) (5)	partial details. (>=0	essential details. (>3	the details. (>4 to
	to <=3)	to <=4)	<=5)
Total	Minimum = 0		Maximum = 100

Quiz

Criteria	Novice	Competent	Proficient
Taking the quiz	The Canvas will grade MCQs based on your submission.	The Canvas will grade MCQs based on your submission.	The Canvas will grade MCQs based on your submission.
Time of taking the quiz	Not taking the quiz at a specified time. (0)	Taking the quiz at a specified time. No score will deduct from the obtained score.	Taking the quiz at a specified time. No score will deduct from the obtained score.

Exam

Criteria	Novice	Competent	Proficient
Wiki page/ Report (15)	The basic wiki page/ report not covering the details of the assignment. (>=0 to <=5)	Wiki page/Report with the required details. (>5 to <=10)	Wiki page/Report with all details and making it easy to follow and understand. Visually looking good. (>10 to <=15)
Video (20)	The basic video not covering the details of the assignment. (>=0 to <=5)	Video with the required details. (>5 to <=15)	Video with all details and making it easy to follow and understand. Annotated with titles. (>15 to <=20)
Report similarity (5)	>30%. (>=0 to <=3)	<=30%. (>3 to <=4)	<=15%. (>4 to <=5)
Completeness of given assignment (15)	It is partially solved. (>=0 to <=5)	Completely solved. (>5 to <=10)	It is solved efficiently. (>10 to <=15)
Code Quality (It is relative) (15)	Refer to the <u>best</u> <u>coding practices</u> page. (>=0 to <=5)	Refer to the <u>best</u> <u>coding practices</u> page. (>5 to <=10)	Refer to the <u>best</u> <u>coding practices</u> page. (>10 to <=15)
Commenting the code (5)	Not useful comments. (>=0 to <=3)	Slightly appropriate comments. (>3 to <=4)	Appropriate comments. (>4 to <=5)
Code similarity (5)	>50%. (>=0 to <=3)	<=50%. (>3 to <=4)	<=30%. (>4 to <=5)
Time of submission	Submission after the due date. Check the 'Late Submission Policy on Assignments' section in the syllabus	Submission on the deadline. No score will deduct from the obtained score.	Submission before the deadline. No score will deduct from the obtained score.
Submission (including feedback) (5)	Submission with partial details. (>=0 to <=3)	Submission with the essential details. (>3 to <=4)	Submission with all the details. (>4 to <=5)
Presentation - Content (5)	Information was valid but not explicitly related to the purpose of the assignment. (>=0 to <=3)	Most information is relevant; some topics needed expansion or shortened. (>3 to <=4)	All information was relevant and appropriate to the requirements of the assignment. (>4 to <=5)

Presentation - Use of technology (5)	Microphone and recording software is used, but too much background noise distracts the audience and limits audio quality. The volume of the speaker is low, making it difficult to hear the presentation. The speaker uses a webcam but may be out of focus or uses a cluttered, distracting background. Alternatively, the speaker fails to use a webcam. (>=0 to <=3)	Microphone and recording software is used, but not effectively. Audio quality is low, making it difficult to hear the speaker. The speaker uses a webcam but may have some distracting elements in the background. (>3 to <=4)	Effectively uses microphone and recording software to produce clear, reliable audio content. The speaker is in focus on the webcam and uses a neutral or uncluttered background. (>4 to <=5)
Presentation - Visual Aids (where appropriate) (5)	Slides, graphics, images, etc., have unclear organization and do not clearly apply to the central topic. Slides include a significant amount of text or too many graphics. Materials contain consistent grammar or spelling errors throughout the presentation. (>=0 to <=3)	Slides, graphics, images, etc., contain appropriate material, but too much text or too many images/graphics distract from conveying information effectively. Materials provide useful information for further consideration but may not directly relate to the central topic. (>3 to <=4)	Slides, graphics, images, etc., are professional and easy to read. Materials enable the speaker to focus on the presentation and provide the audience with important resources for later consideration. The flow is clearly established throughout the presentation from beginning to end. (>4 to <=5)
Total	Minimum = 0		Maximum = 100

Feedback

Criteria	Novice	Competent	Proficient
ICP submission (including feedback)	Submission with partial details. (>=0 to <=6)	Submission with the essential details. (>6 to <=8)	Submission with all the details. (>8 to <=10)
Exam submission (including feedback)	Submission with partial details. (>=0 to <=6)	Submission with the essential details. (>6 to <=8)	Submission with all the details. (>8 to <=10)

School of Computing and Engineering & University Policies

Resources & Policy Statements

https://info.umkc.edu/saem/wp-content/uploads/2016/04/UMKC-Student-Handbook.pdf

Academic Calendar

Students are encouraged to review important add, drop, or withdrawal dates: http://www.umkc.edu/registrar/acal.asp

Academic Honesty

The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism, or sabotage, is adjudicated through the <u>University of Missouri Student Conduct Code</u> and <u>Rules of Procedures in Student Conduct Matters</u>.

Academic Inquiry, Course Discussion, and Privacy

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the University. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may not make any audio or video recordings of course activity (including those recordings prepared by an instructor), except students are permitted to record as an accommodation under Section 240.040 of the Collected Rules. All other students who record and/or distribute audio or video recordings of class activity are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Those students who have written permission from the course instructor to record are not permitted to redistribute any audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded, including those recordings prepared by an instructor. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Campus Safety

Inclement weather, mass notification, and emergency response guide: http://www.umkc.edu/umkcalert/

Counseling and Health Services Available at UMKC

UMKC students may experience many challenges in their lives while attending college – stress, depression, suicidality, trauma, relationship issues, health concerns, etc. As your professor, I care about your success and well-being and want to make you aware of some helpful resources on campus. The UMKC Counseling Center (www.umkc.edu/counselingcenter), located at 4825 Troost in Room 206, offers a wide range of supportive services to students. Appointments can be made by calling 816.235.1635. UMKC Student Health and Wellness (http://info.umkc.edu/studenthealth/), located at 4825 Troost in Room 115, offers a full range of health care and promotion services. Appointments can be scheduled online or by calling 816.235.6133. The MindBody Connection (www.umkc.edu/mindbody) is located in the Atterbury Student Success Center in Room 112 and offers a variety of stress-reduction services.

Disability Support Services

To obtain disability-related accommodations and/or auxiliary aids, students with disabilities must contact the Office of Services for Students with Disabilities (OSSD) as soon as possible. To contact OSSD, call (816) 235-5696. Once verified, OSSD will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. For more information, go to http://www.umkc.edu/disability/

English Proficiency Statement

Students who encounter difficulty in their courses because of their instructors' English proficiency should speak directly with their instructors. If additional assistance is needed, students may contact the UMKC Help Line at 816-235-2222 for assistance.

Privacy Policies

Privacy Policy: https://www.umkc.edu/web-policy/privacy.asp

Webcam Policy: https://www.umsystem.edu/ums/elearning/policies

Grade Appeal Policy

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor.

<u>The University grade appeal procedure</u> is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. Capricious grading, as that term is used here, comprises any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course.
- The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (Note: Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300-and 400-level courses.)

• The assignment of a grade by a substantial departure from the instructor's previously announced standards.

If you have other concerns, you should follow a similar process. The first step is to meet with the course instructor. If there is no satisfactory resolution of the problem, you may bring your concern to the Division chairperson. We recommend that you send the chairperson your concern in writing and request a meeting. If the chairperson is unable to resolve the issue, your next step would be to contact Assistant Dean Christine Timmerman. Once again, we recommend that you send your concern in writing and follow-up with a request for a meeting.

Discrimination Grievance Procedures for Students

Discrimination Grievance Procedures for Students can be found here: http://www.umsystem.edu/ums/rules/collected-rules/grievance/ch390/grievance-390.010

Grievance Procedures (School of Computing and Engineering)

The School of Computing and Engineering has policies in place for assisting students with concerns and grievances. The General Grievance / Complaint Policy can be found here.

Statement of Human Rights:

The Board of Curators and UMKC are committed to the policy of equal opportunity, regardless of race, color, religion, sex, sexual orientation, national origin, age, disability, and status as a Vietnam era veteran. Commitment to the policy is mentored by the Division of <u>Diversity</u>, <u>Access</u>, <u>& Equity</u>, but it is the responsibility of the entire university community to provide equal opportunity through relevant practices, initiatives, and programs.

Title IX

Under the University of Missouri's Title IX policy, discrimination, violence, and harassment based on sex, gender, and gender identity are subject to the same kinds of accountability and support applied to offenses based on other protected characteristics such as race, color, ethnic or national origin, sexual orientation, religion, age, ancestry, disability, military status, and veteran status. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting UMKC's Title IX Office webpage (http://info.umkc.edu/title9/) or contacting UMKC's Title IX Coordinator, Mikah K. Thompson (816.235.6910 or thompsonmikah@umkc.edu). Additionally, you can file a complaint using UMKC's online discrimination complaint form, which is located at http://info.umkc.edu/title9/reporting/report-online/.

While most UMKC employees are required to report any known or suspected violation of Title IX, students may seek confidential guidance from the following campus locations:

Service	Office Location	Phone Number
UMKC Counseling Service	Volker Campus	(816) 235-1635
	4825 Troost Ave, Suite 206	
	Kansas City, MO 64110	
UMKC Counseling Service -	Health Sciences Building	(816) 235-1635
Health Sciences Campus	1418-2464 Charlotte	
_	Kansas City, MO 64108	
Student Health and Wellness	4825 Troost Ave., Suite 115	(816) 235-6133
	Kansas City, MO 64110	

Withdrawal Dates

The University has very specific guidelines on withdrawing from classes. There are important financial and assessment implications of trying to drop a course after the deadline. The Registration and Drop Dates Schedule can be found at

http://www.umkc.edu/registrar/registration/registration-dates.asp.

General Policies for UMKC Courses

Will I be dropped from the class if I do not attend class? What happens if I do not attend class without communicating with my instructor? Accurate Enrollment Records - Administrative Drop	Maintaining accurate enrollment records throughout the term is a partnership between instructors and students. Instructors are responsible for verifying student attendance and participation within the first three weeks (16-week course) through the Attendance Verification Survey (administered through UMKC Connect) as well as maintain records of participation throughout the term so that the last date of attendance for students with recorded "F" or "W" final grades may be submitted. Because student plans for enrollment sometimes change prior to the semester's start, students not engaging in courses through the initial weeks of each course may be administratively dropped. For more detailed information regarding the policy, see: https://catalog.umkc.edu/undergraduate-academic-regulations-information/registration/administrative-drop-policy/
How do I get permission before Recording Class Sessions?	Instructor(s) may record class sessions for the sole purpose of sharing the recording with students who can't attend class. Instructor(s) will take care not to disclose personally identifiable information from the student education records during the recorded lesson. Students are not permitted to record class sessions without written consent from the course instructor.
If I am having difficulty, is there Technical Support that I can contact?	The links below will connect you with answers and information for the most common technical questions and issues students experience. UM System Keep Learning: https://keeplearning.umsystem.edu/students UMKC Instructional Design/Technology: https://idt.umkc.edu/support
What other academic policies should I review?	Additional important information about UMKC's policies and resources can be found at https://online.umkc.edu/support-policies
Exam Proctoring	Some assessments (such as tests and/or quizzes) in this course require the use of the Proctorio Learning Integrity Platform. Proctorio is an online, remote proctoring system that uses advanced machine learning and identity-verification technology to ensure

test integrity.

Taking assessments with Proctorio requires the use of the Google Chrome browser; you cannot use any other browser. You must have a laptop or desktop computer with a webcam and a microphone; you cannot use smartphones or tablets. You must have stable internet to take the assessment. Please review <u>Taking Proctorio</u> Tests.

The University recognizes that not all students may be able to meet the minimum requirements. If you do not have access to the minimum technology requirements or have disabilities that require the use of a screen reader or keyboard navigation shortcuts, please inform your instructor before the quiz or test so that accommodations may be made.

You will have an opportunity to take a practice assessment with Proctorio before you take a graded assessment. If no Proctorio practice assessment is included in this course, please check your campus's Online Student Orientation course for one. (Some of the practice assessment settings may differ from the actual ones in your course.) You should do this ahead of your first real assessment with Proctorio, as required adjustments may take a few minutes and take valuable assessment time.

Please be aware that:

- You, your computer, and your physical test-taking environment may be recorded.
- As you may be recorded, please dress appropriately.
- You may be asked to show a picture ID to the camera.
- You will need a quiet place to take the assessment both for your concentration and as interruptions (voices, another person on camera) may be flagged for potential cheating.

If you have concerns about your privacy or data security, please see Proctorio's statement on Personal Data Protections

See the <u>Taking Proctorio Tests</u> page to learn how to:

- Install the Proctorio extension for Chrome;
- Set up your assessment environment; and
- Complete the pre-assessment checks.

COVID-19 Policies

	UMKC's mask/face-coverings policy is available at https://www.umkc.edu/coronavirus/index.html
Do I need to have a Mask/Face-Coverings while on campus?	Any student requesting an ADA accommodation for the University mask/face covering policy should contact Scott Laurent, the Office of Disability Services, as soon as possible by calling (816) 235-5696 or via email laurentr@umkc.edu .
If I have a disability (including COVID- related disabilities), who can help me get important accommodations on campus?	Any student seeking COVID-related academic accommodations should contact Scott Laurent, the Office of Disability Services, as soon as possible by calling (816) 235-5696 or via email at laurentr@umkc.edu .
If I have questions regarding COVID-19 General Information, where do I go?	Up to date information and FAQs regarding COVID-19 may be found on the UMKC COVID website: https://www.umkc.edu/news/coronavirus.html

Masks

Masks are currently required in all public indoor settings, including classrooms. The policy will be reevaluated for all four UM System campuses prior to its expiration on September 15. We want to call your attention to some specific issues related to the policy:

- Instructors teaching in-person classes may remove their masks while lecturing if they are vaccinated and maintain at least six feet of distance from other individuals in the classroom. This exemption is to help students hear and understand their instructors within their classroom settings.
- Instructors must wear masks before/after class and in all other settings, including individual or small group meetings with students or classroom situations in which the distancing requirement cannot be met.
- Students must remain masked at all times.

Attendance and COVID-related Accommodations for Students

Our campus <u>attendance policy</u> outlines attendance expectations and excused absences. Students should be encouraged to quarantine and get <u>tested</u> if they have even mild COVID-19 symptoms. Faculty do not need to simultaneously offer a face-to-face and remote course but should have contingency plans in place for making course material and assessments available to any student who is unable to attend the class for an extended period of time with an excused absence.

For online course accommodations, the <u>Instructional Design</u> and Technology team can assist you in providing the accommodations needed.

COVID-19 continues to create challenges for all of us in our campus community and beyond. We are grateful to all of you for your dedication to keeping our campus a safe and vibrant home for students, staff, and faculty. Have a great semester ahead!