KENNESAW STATE UNIVERSITY

SYLLABUS
IT 4713: BUSINESS INTELLIGENCE SYSTEMS
Fall 2022
COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING
DEPARTMENT OF INFORMATION TECHNOLOGY

Note
This syllabus provides a general guideline for the conduct of this course. However, deviations may be necessary and will be notified during the semester.

Course Information

Class meeting time: T 5pm-5:15pm; J157

Instructor

Name: **Dr. Jack Zheng**, Associate Professor, IT Department
E-mail: gzheng@kennesaw.edu (**preferred**)
Office Location: J-383
Office Phone: 470-578-5036
Office Hours: MTW 12pm-3pm, R - Virtual (1pm-2pm)
Course Communication:
- Email is the best way to reach the instructor. Avoid D2L email if possible.
- Students' emails will be replied by the end of the next day during the weekday. Weekend and holidays don't apply.
- 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: C or better grade in IT 3703 Intro to Data Analytics and Tech
Credit Hours: 3-0-3
Required Texts: *N/A*
**Recommended Texts*: None*
Course Description:
This course introduces the concepts, practices, technologies and systems of business intelligence, which supports enterprise level data management, analytical processing, and reporting.

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: http://uits.kennesaw.edu/support/d2ltraining.php .

- Refer to this website for all official teaching and learning materials and activities.
- It's important to know how to use this learning management system for: following learning modules, submitting assignments, checking grades and feedback, downloading files, participating discussion boards, etc.
- Please check the course site regularly for important announcements and other issues.
- 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.

Student Learning Outcomes

By the end of this course, a student should be able to:
1. Explain major capabilities and components of a general business intelligence process and system.
2. Design and implement data models for data storage and analysis.
3. Describe and implement data ETL approaches.
4. Conduct data query and analysis.
5. Design data presentation and visual reporting solutions.

Course Requirements and Assignment, Evaluation and Grading Policies

Item	Points
Quizzes (5)	50
Project milestones (5)	50
Total	*100*

Total Points	Grade
=>90	A
=>80	B
=>70	C
=>60	D
<60	F

Guides and more details about all items will be provided in the content section in D2L Brightspace. Generally, all grades should be available within 10 days from the due date.

Course Schedule

The course schedule is tentative and is subject to change. Please use D2L course calendar as accurate due dates. *Academic calendar can be found at: https://registrar.kennesaw.edu/academic-calendars/index.php*

The course content is basically organized by learning modules. The following table is only a tentative overview of the course content and schedule. The more detailed and most updated schedule will be provided in a separate file in D2L.

Week	Learning Module #	Module	Topics/Activities	Work Due and Other Reminders*
1		Orientation	Getting started	
2	1	Introduction	BI overview	
3	2	MS BI	Microsoft BI, SQL Server	M0, Q0
4	3	Data Model	Dimensional modeling basics	
5	4	Data Storage	Data warehouse, data mart	
6			*Work on project milestone*	M1, Q1
7	5	ETL	ETL Overview, SSDT/SSIS Basics	
8	6	Transformation	SSDT/SSIS data transformation	Midpoint
9			*Work on project milestone*	M2, Q2

10	7	OLAP	OLAP Overview, OLAP Server, Cube Design	
11	8	MDX	MDX query language	
12			*Work on project milestone*	M3, Q3
13			*Spring Break*	
14	9	Excel Pivot	Reporting overview, Excel Pivot Table	
15	10	Excel Dashboard	Data Visualization with Excel	
16	11	Power BI	Create Power BI Reports	
17			*Work on project milestone*	M4, Q4

Each module provides a study guide which detailed learning objectives, readings, and tasks. It's critical to follow these study guides. The time to complete each module varies. Generally, modules are designed on an average of 8 to 12 hours to complete (for most of the people who have met the prerequisites), depending on individual background and prior experiences. Generally, all module tasks should be completed within one week from the corresponding class date, however, some **required readings/research tasks** must be completed **by the planned class date**. Please follow the study guides closely.

Course Policies

Course Attendance Policy
- For on campus/hybrid section, students are expected to come to each class on time. Stay during the whole class period.
- For both campus/hybrid and online section, students' attendance is also measured by how often a student login in D2L course website, participation of online discussion, as well as on-time completion of homework.

Grading Items Turnaround Time *[Below are recommended turnaround time, you may make adjustment as needed]*
- 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 *[Below are recommended policies, feel free to make adjustments as needed]*

- All assignments **MUST** be submitted through D2L (https://kennesaw.view.usg.edu/) 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: https://apps.kennesaw.edu/files/pr_app_uni_cdoc/doc/D2L_Brightspace_Quizzes_LockDown_Browser_Dashboard_Faculty_Guide.pdf
Please contact the instructor if you have any questions.
[if you are using LockedDown browser, I suggest creating a LockedDown browser practice quiz which contain 1 dummy question and unlimited attempts. The idea is let students get familiar with LockedDown browser]

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.

Institutional Policies

- [Federal, BOR, & KSU Course Syllabus Policies](#)
- [Academic Integrity Statement](#)
    - 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.

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: [KSU Student Resources for Course Syllabus](#)