

IE 2305: Computer Applications in IE

Fall 2017

TR 11:00-12:20, ELB 256

Instructor: Dr. Bonnie Boardman **Office Number:** 325G Woolf Hall **Office Telephone Number:** 817-272-3220

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Section Information: IE 2305-001

Office Hours: Monday: 9:00-11:00; Wednesday: 9:00-12:00

Description of Course Content: An overview of Industrial Engineering concepts and issues important to the design and operation of industrial and service systems. Students will learn the use of software tools developed to enhance the Industrial Engineer's ability such as database management, high level programming languages, electronic spreadsheets, and computer graphics. Prerequisite: IE 1205 or concurrent enrollment.

Student Learning Outcomes:

- Set up and evaluate expressions and equations using variables, constants, operators, and the hierarchy of operations.
- Develop problems using decision logic structure and loop logic structure and arrays.
- Create user forms in VBA
- Create a Microsoft Access database with multiple tables and establish table relationships.
- Design, create and run queries in Microsoft Access.
- Design, create and use forms and reports in Microsoft Access.
- Write procedures using VBA.
- Use VBA and Microsoft Excel and Microsoft Access to solve Industrial Engineering Problems.

Required Textbooks and Other Course Materials:

In this course you will learn best when you are actively working on the course learning objectives rather than passively listening. Both passive listening and active work have their places in the learning process, but since active work is generally harder and requires more assistance than passive listening, we will be spending the bulk of class time working together to problem solve.

To make time and space for this amount of active work in class, you will be preparing for the active work outside of class by watching videos on Lynda.com. **Lynda.com is available, free of charge, to all UTA students and can be accessed through UTA's library webpage.**

Your outside-of-class time will largely be spent watching the lectures and practicing the concepts. Likewise, instead of listening to lectures in class, class time will be focused on discussing your questions and working on problems that will challenge you to apply the basic material to new and interesting situations. In class time will not be productive unless everyone has done the out of class preparation.

An out-of-class preparation schedule for the entire semester along with the class preparation assessment schedule is available on BlackBoard.

Course Schedule

Tuesday		Thursday	
		24-Aug	Syllabus, Lynda Overview
29-Aug	Object-Oriented Programming, VBE	31-Aug	Subroutines and Functions
5-Sep	Data Types, Variables	7-Sep	Arrays
12-Sep	Loops	14-Sep	Loops
19-Sep	Loops	21-Sep	Decision Structure
26-Sep	Debugging Tools	28-Sep	Interacting with a Worksheet
3-Oct	Strings, Worksheet Functions	5-Oct	Review
10-Oct	Midterm Exam	12-Oct	Creating Forms
17-Oct	Writing Form Data	19-Oct	Form Work
24-Oct	Intro to Access	26-Oct	Creating Tables
31-Oct	Relationships and Field Properties	2-Nov	Intro to Queries
7-Nov	Expression Builder	9-Nov	Query Types
14-Nov	Access Forms	16-Nov	Access Reports
21-Nov	Access Macros	23-Nov	No Class – Thanksgiving Holiday
28-Nov	VBA in Access	30-Nov	VBA in Access
5-Dec	Access Objects and Review		
12-Dec	Final Exam – 11:00-12:20		

As the instructor for this course, I reserve the right to adjust this schedule.

Course Requirements

Video Assessments – A flipped classroom approach to learning cannot be successful if students do not thoughtfully watch the videos and practice the content prior to coming to class. Remember, we will not be spending time on lectures in class. You will be expected to have watched the lectures, practiced the skills, and be prepared to use the material you learned during class exercises. There will be graded assessments every class period to help ensure that everyone is doing the out of class work required to make in class work meaningful. The lowest one of these assessments will be dropped at the end of the semester.

There will be no makeups or excused assessments. Websites sometimes go offline. Do not procrastinate. “Lynda.com was down” or “Blackboard was down” are not valid excuses for missed work. Do not procrastinate. Late assessments will not be accepted. Do not procrastinate. An out of class preparation schedule for the entire semester along with the class preparation assessment schedule is available on BlackBoard. Do not procrastinate.

These assessments will count for 20% of your final grade.

In-Class Assignments– There will be many announced and unannounced in-class assignments throughout the semester. The advantage of you watching the videos outside of class is that we will have time inside of class for you to do these assignments. I and the TA will be there to help you if you get stuck or have questions. You must be in class in order to do the in-class assignments. No makeup assignments will be given.

Assignments will count towards 40% of your final grade.

Examinations – There will be two exams given during this course. You must take both exams at their scheduled times. If you miss an exam you must have either a certified medical excuse or prior instructor approval. A makeup test at a designated time during the last week of the semester will be provided for those with excused exam absences. The makeup exam will be fair but comprehensive (covering all the course material) and challenging. Only one missed exam can be made up.

Examinations will count for 40% of your final grade.

Attendance: At the University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. While I will not take attendance, participation in classroom exercises will be part of your assignments grade. If you are not present to complete an in class grade, you will not be allowed to make up that grade.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including watching videos, practicing concepts, preparing for exams, etc.

Grading: Grades in this course will be earned based on the following criteria:

A = 90% and above

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 0% - 59%

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/ses/fao>).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

Non-Discrimination Policy: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.

Title IX Policy: The University of Texas at Arlington (“University”) is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.*

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Inclement Weather Policy: In the event that weather or other conditions are such that normal campus operations could be impeded the following policy will apply for this class. If the University is closed, this class will not meet. Any assignments due or examinations scheduled will be due or rescheduled to the very next class period that the class meets. Local media should announce any closings. You can also get information on UTA's homepage.

The IDEAS Center (2nd Floor of Central Library) offers **free** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

The English Writing Center (411LIBR): The Writing Center Offers free tutoring in 20-, 40-, or 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Our hours are 9 am to 8 pm Mon.-Thurs., 9 am-3 pm Fri. and Noon-6 pm Sat. and Sun. Register and make appointments online at <http://uta.mywconline.com>. Classroom Visits, workshops, and specialized services for graduate students are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. <http://library.uta.edu/academic-plaza>

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, you can find this information posted near the doors in this room. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

<p>Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381.</p>
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