**IE 5345 Syllabus**

**Spring 2016**

**APPLIED KNOWLEDGE ENGINEERING and DATA ANALYTIC APPLICATIONS.**

 **3 Hours.**

**Name:** John W. Priest Ph.D. P.E.

**Office Number:** 404 Woolf Hall **Office Telephone Number:** 817-272-3092

**Email Address:** jpriest@uta.edu (best method for communication)

**Office Hours:**  Due to the level of research I do in the field with industry and in 2 labs, I am never in my office! Email if you have any questions or want to schedule a meeting. I will meet your at any mutually agreed upon time and place.

**Book:**

Decision Analysis for Management Judgment, 5th edition, by Goodwin and Wright, Wiley books, 2014

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**Time and Place of Class Meetings:** Tuesday and Thursday at 12:30 PM and 2:30 class PM

**Test Dates:**

1. February 18
2. March 29 Tuesday
3. Final as schedule by univeristy

**Distance Student Requirements:**     Distance testing must follow all the College of Engineering rules including use of approved proctors.

For problems viewing ClassRev (Echo360) recordings:   contact classroomsupport@uta.edu.

**Description of Course Content:**

Why important

1. Understand the issues, ramifications and parameters of complex decision making
2. Learn how to analyze complex decisions using proven techniques
3. Document system design decisions to provide explanations for others to review and understand and impress your boss
4. Provide decision documentation that could allow future automation (smart software to be implemented)
5. Learn some of the most advanced model building techniques

2 part class

1.decision analysis and

2. advanced methods of applied artificial intelligence (intelligent systems, expert/smart systems, neural networks, genetic algorithms, fuzzy logic, etc.)

Learn how to analyze and document decisions which provide the outline/specifications for incorporating into smart systems/products/processes/services/apps etc.

Why this is important

* One of the fastest growing areas of technology with job opportunities
* Decision support, intelligent systems and data analytics are becoming an integral part of our work and life. (Who is not using software and wireless technologies every day to communicate and solve problems?) – smart phones, apps, NFC, etc.
* Applicable to any industry or organization

**Requirements:**

*Self learning or active learning for enabling life-long learning is a goal of this class. This means that you will be given reading assignments that you will have to take an active role in learning the material on your own in order to complete the assignment. You will be asked to perform assignments that I have not previously completed or might not be able to do myself. As in industry and the “real world”, assignments may be vague and change throughout the class.*

In addition, this is a “reading intensive and survey class” covering many new and state-of-the-art topics in decision support systems, knowledge management, knowledge engineering, intelligent systems, expert systems, data mining, etc. As a result, the book, ectures and notes are an integral part of this course. *The student is responsible for studying and learning the lectures and handout materials whether or not the particular topic is discussed in class. All tests will contain questions on reading/studying the materials that were not discussed in class.*

Attend class, take good class notes of lectures, stay current, read and study the handouts and textbook, do homework and you will have no trouble.

Computers used in class must only be used to take notes. This includes any open windows.

The syllabus can be viewed as a 'blueprint' for the course; changes in the syllabus can be made as needed. Students will be informed of any substantive changes in class lectures concerning examination, the grading or attendance policies and changes in project assignments.

**Grading Policy**:

Your final grade is based on exams and surprise or attendance quizzes nothing else. There are no extra credit projects, papers, lab work, etc. No exceptions, If you do poorly on the early exam(s), please drop the course; especially graduate students on probation.

I expect that we will have 3 exams (1/3 each) and 2 to 5 attendance quizzes providing extra points Computation of the final average may vary from the original syllabus. Final grades will depend as modified during the course including any pop/surprise attendance quizzes and whether the final is comprehensive. Remember, final grade is based on exams and quizzes; nothing else

After further discussion with Dr Componation, there will no longer be grade changes except for students whose final grade average was very close to the curve cut point for the higher grade and showed good test grades with maybe one test that was poor.

Under no circumstances will grade changes be made if the student has consistent poor grades on multiple tests and lack of attendance. Going through graduation ceremonies is not a consideration.

You are welcome to meet with Dr. Componation to plead your case or go through the UTA formal grade appeal process.

Tests and quizzes

All Students will be using online Blackboard administered tests. You will need access to a laptop and the ability to download a program called Redondus. You should review the Test Taking Tips information at [http://www.uta.edu/blackboard/students/test-taking-tips.php](https://owa.uta.edu/owa/jpriest%40exchange.uta.edu/redir.aspx?SURL=N1Vvlrwr8_IPEtEV1fUhWtRPh03eAIllDfX38TLtqounmiTNE-jRCGgAdAB0AHAAOgAvAC8AdwB3AHcALgB1AHQAYQAuAGUAZAB1AC8AYgBsAGEAYwBrAGIAbwBhAHIAZAAvAHMAdAB1AGQAZQBuAHQAcwAvAHQAZQBzAHQALQB0AGEAawBpAG4AZwAtAHQAaQBwAHMALgBwAGgAcAA.&URL=http%3a%2f%2fwww.uta.edu%2fblackboard%2fstudents%2ftest-taking-tips.php).

All questions are true/false or multiple choice, closed book and online computer graded using web based blackboard..

**No cell phones on desk or answered during exams. This will be considered cheating**

No Whine Policy Concerning Test and Final Grades

*Tests will not be reviewed nor questions taken*

*An individual’s test questions are not answered, reviewed or regraded while the student is in my presence.*

**Attendance Policy: (Undergraduate and Graduate Students)**

Class attendance is strongly encouraged; so you do not miss critical attendance quizzes. Attendance starts from the first day of class regardless of the circumstances. Late registration, just arriving from overseas, visa problems, graduate school, staying in your country for medical/dental/wedding/birthday issues or any other circumstances does not change your responsibility to catch up on your own and any surprise quizzes.This does not include approved absences.

**Make-up Exam Policy**:

*For classroom students* there are no make-up exams/quizzes or project due dates. The only acceptable excuses for missing exams/quizzes or project due dates is a signed medical doctor's note that specifically states that you are unable to attend the exam/quiz/project, a traffic report showing that you were in a wreck, death etc. Not arriving for the first few classes due to travel schedules is not an excused absence. **In summary, no excuses for missing the scheduled exams i.e wanting to leave school early to go home, job interview, or attend some function.**

For unexcused situations, penalties for missing an exam/quiz/project are at the discretion of Dr. Priest but will be at least one letter grade for the final grade.

**Grade Grievance Policy**: Refer to catalog on web site

**Drop Policy:** I use the university 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://wweb.uta.edu/aao/fao/>).

**Americans with Disabilities Act:**

**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](http://www.uta.edu/disability) or calling 817-272-3364.

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

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Title IX:** *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*](http://www.uta.edu/hr/eos/index.php)*. For information regarding Title IX, visit* [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

**Academic Integrity:**

Students enrolled all UT Arlington courses 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.*

UT Arlington faculty members 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.

UTA expects all students, whether in class or online, to abide by its Honor Code. The code is posted at [http://www.uta.edu/engineering/current-students/academic-honesty.php](https://owa.uta.edu/owa/jpriest%40exchange.uta.edu/redir.aspx?SURL=9_uwmDBbJX6VZTPNnL-t9LoVGskQA7df30Khi39_K3mnmiTNE-jRCGgAdAB0AHAAOgAvAC8AdwB3AHcALgB1AHQAYQAuAGUAZAB1AC8AZQBuAGcAaQBuAGUAZQByAGkAbgBnAC8AYwB1AHIAcgBlAG4AdAAtAHMAdAB1AGQAZQBuAHQAcwAvAGEAYwBhAGQAZQBtAGkAYwAtAGgAbwBuAGUAcwB0AHkALgBwAGgAcAA.&URL=http%3a%2f%2fwww.uta.edu%2fengineering%2fcurrent-students%2facademic-honesty.php).

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents’ Rules and Regulations, Series 50101, Section 2.2)

*Copying any written or web based materials for a project without proper referencing will not be tolerated.*

*Xerox copies of the book that infringe on copyright laws will not be allowed in class.*

**Copyright Information:** Copyright 2016 J.W. Priest as to this syllabus, handouts and all lectures. Students are prohibited from selling (or being paid for taking) notes during this course to (or by) any person or commercial firm without the express permission of the professor teaching this course

**Student Support Services Available:**
The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

**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.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” can complete an online 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>

**Librarian to Contact:**  Librarian located in the basement of Nedderman Hall

**E-Culture Policy:**

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at [www.uta.edu/email](http://www.uta.edu/email). New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

*It is the classroom and distance students’ responsibility for all communications with Dr. Priest and the school administration****.*** *All emails should start with the class name* ***“5345”*** *in the subject.*

**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. 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 individuals with disabilities.

**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 http://www.uta.edu/universitycollege/resources/index.php

**The English Writing Center (411LIBR)**: Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In ***Quick Hits*** sessions during all open hours Mon-Thurs. Register and make appointments online at [http://uta.mywconline.com](http://uta.mywconline.com/). Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see [www.uta.edu/owl](http://www.uta.edu/owl) for detailed information.