

Requirements Engineering

CS/SE 4351.001, Fall 2024

Instructor: Lawrence Chung

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Course web page: <http://www.utdallas.edu/~chung/SE4351/syllabus.htm> + eLearning

Office hours: Tuesdays 1:00pm - 3:00pm, or by appointment

Lectures: TR 4:00pm-5:15pm, ECSW 1.355

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Course description: The course will discuss concepts for *systematically* establishing, defining and managing the requirements for a large, complex, *changing* and software-intensive systems, from *technical, organizational and management* perspectives. The course will consider the *past, present and future* paradigms and methodologies in requirements engineering. The course will cover *informal, semi-formal and formal* approaches, while striking a balance between *theory and practice*. The course will involve building models of both requirements engineering *process* and requirements engineering *product*, concerning both *functional and non-functional* goals/requirements/specifications, using a *systematic decision-making* process.

The course will be taught by Dr. Lawrence Chung (CS/SE). The course will be conducted as a mix of lectures and seminar-style discussions. Lectures are expected to be highly dynamic and interactive. Besides active participation during class discussions, students are expected to participate in a team-oriented requirements engineering project.

Learning objectives (evolving): Upon successful completion of this course, students will be able to:

- specify and follow requirements engineering processes.
- identify and collect requirements from various sources, such as safety-, health- and welfare applications with global, social, cultural, economic and environmental concerns, and resolve conflicting requirements
- specify and validate requirements with traceability

- model functional and non-functional requirements, including safety, health and welfare requirements
- model and analyze security requirements
- understand tools for software requirements engineering

[The Principles and Practice of Engineering \(PE\) Software Engineering Exam](#)

Textbook: [Lecture Notes](#) (available on this course web page)

References:

1. Requirements Engineering: From System Goals to UML Models to Software Specifications, Axel van Lamsweerde, John Wiley Sons
2. *Managing Software Requirements: A Use Case Approach*, 2nd edition, Dean Leffingwell, Don Widrig, Addison Wesley: Boston
3. *Non-Functional Requirements in Software Engineering*, L. Chung, B. Nixon, E. Yu and J. Mylopoulos, Kluwer Academic Publishing, 2000 ([An earlier version of a framework book chapter](#))
4. System Requirements Engineering, P. Loucopoulos and V. Karakostas, McGraw-Hill: [\[all.rar\]](#) [\[Preface; Chap1; Chap2; Chap3; Chap5; Chap6\]](#) thanks to [Varshada!](#)
5. *Mastering the Requirements Process: Getting Requirements Right* (3rd Edition) by Suzanne Robertson & James Robertson ISBN-13: 978-0321815743 or ISBN-10: 0321815742
6. *Software Requirements: Objects, Functions, & States*, A. M. Davis, Prentice Hall: Englewood Cliffs, 1993.
7. *System and Software Requirements Engineering: Tutorial*, R. H. Thayer and M. Dortman (Editors), IEEE Computer Society Press
8. *Problem Frames: Analyzing and Structuring Software Development Problems*, M. Jackson, Addison-Wesley Professional; 1st edition (December 15, 2000)
9. *Requirements Engineering: Processes and Techniques*, G. Kotonya and I. Sommerville, John Wiley Sons
10. *Requirements Engineering - A Good Practice Guide*, I. Sommerville and P. Sawyer, Wiley
11. *Scenarios, Stories, Use Cases Through the Systems Development Life-Cycle*, I. Alexander and N. Maiden (eds.), John Wiley & Sons, 2004.
12. *Requirements Engineering: Frameworks for Understanding*, R. Wieringa, Wiley, 1997
13. *Requirements Engineering: Social and Technical Issues*, J. Goguen, and M. Jirotko (Eds.), Academic Press, 1994.
14. *Requirements Engineering*, L. Macaulay, Springer Verlag, 1996
15. *User-Centered Requirements Analysis*, C. F. Martin, Prentice-Hall, 1994

- [16.](#) *Information System Requirements: Determination and Analysis*, D. Flynn, McGraw-Hill, 1992
- [17.](#) *Are Your Lights On?: How to Figure Out What the Problem Really Is*, D. C. Gause and G. M. Weinberg, Dorset House, 1990.
- [18.](#) *Exploring Requirements*, D. Gause and G. Weinberg, Dorset House, 1989
- [19.](#) *Managing Systems Requirements: Methods, Tools, and Cases*, S. J. Andriole, McGraw-Hill, 1996.
- [20.](#) *System Requirements Analysis*, J. O. Grady, McGraw Hill, 1993.
- [21.](#) *Systems Engineering: Coping with Complexity*, R. Stevens, K. Jackson, P. Brook, and S. Arnold, Prentice Hall 1998.
- [22.](#) *Requirements Engineering and Rapid Development: A Rigorous, Object-Oriented Approach*, I. S. Graham, Addison-Wesley, 1998.
- [23.](#) *Practical Software Requirements; A Manual Of Content And Style*, B. L. Kovitz, Manning Publications, 1998
- [24.](#) *User-Centered Requirements: The Scenario-Based Engineering Process*, K. L. McGraw and K. Harbison, Lawrence Erlbaum Associates, 1997.
- [25.](#) *The Complete Systems Analysis*, J. Robertson and S. Robertson, Dorset House, 1998.
- [26.](#) *Applying Use Cases: A Practical Guide*, G. Schneider and J. P. Winters, Addison-Wesley, 1998.
- [27.](#) *Object-Oriented Analysis and Design, with Applications*, G. Booch, Benjamin-Cummings, 1994
- [28.](#) *Object-Oriented Methods: A Foundation*, J. Martin and J. Odell, Prentice-Hall, 1995
- [29.](#) *The Unified Modeling Language Reference Manual*, J. Rumbaugh, I. Jacobson and G. Booch, Addison-Wesley, 1998
- [30.](#) *The Unified Modeling Language User Manual*, G. Booch, J. Rumbaugh and I. Jacobson, Addison-Wesley, 1998.

[A number of important articles are cited in lecture notes.](#)

Prerequisites: knowledge of system/software development.

Computer usage: [A tool you should use during Project phase II. \(download statistics\)](#)

RE Tool usage: ([***A tutorial in Spring 2020;](#) [***A tutorial in Fall 2020;](#) [*M](#))

Project: There will be a **2-phase** project.

Each project phase should be submitted by the expected due date in the beginning of the class that day. **one hardcopy per team and all the softcopies should be available on the team web site.** Project phases should be submitted with project phase #, class/section, team name; team URL; **(rotating) team leader(s)**; and for each member of the team: student name, student ID, student email address, percentage of contribution and signature, written on the first page. There should also be a description of all the meetings

conducted, and for each meeting: date, location, agenda, participants, and summary.

The project will be done by teams of approximately **8 - 10** students (The team size will depend on the number of students in the course, and more on this will be discussed in class). All students in a team will get the same mark for the work they do unless they unanimously agree (in writing) to an unequal division. You are to choose your own team members. Each team should be divided into 2-3 sub-teams. An orphan will be assigned to a team by the instructor.

For each deliverable, there should be at least one team leader, who coordinates communication and deliverable submission, on a rotating basis.

Project I under development should be presented approximately 1 week before the final submission due date; Project II under development should be submitted approximately 1 week before the submission due date.

The first or second page of your deliverable should describe all the meetings your team had, while indicating the participants in each of the meetings. This page should be **signed** by all members of the team.

The last page of your deliverable should describe why you believe your deliverable is at least as good as, or better than, any other team's work, based on your observation on other teams' presentations.

Individual Presentation(s): N/A: Brief presentations on case studies or longer presentations on term papers.

Individual Term Paper: N/A: On a topic chosen by each student.

Tests: Two tests.

Late work: Any assigned work will have 10 points deducted for each week passed, if without pre-approval.

Grading:

Project (approx. 10 + 20):	30 %
Questionnaire (2 x 2.5)	5
Presentation + Deliverable	25
Test 1	25 %
Test 2	40 %
Class-Project Participation	5 %

Class Attendance Policy: Three consecutive absences lead to one letter grade drop. Four consecutive absences lead to an F. The total number of absences should not be above a certain threshold -These will be coupled with "Class/Project Participation" above.

Justifiable absences, per the university policy, should be communicated to the course instructor on time (before, during or immediately after).

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Important Dates: The following dates are agile, and can be adjusted to your own (team's) schedule after a discussion with the course instructor.

1. August 20 (Tuesday) - First day of class for this course

2. August 29 (Thursday) - Preliminary Project Plan (brief Project Description, Team organization/members, Team web site URL; Schedule Deliverable, Due Date, Team leader(s), Tools; etc.)
[Software Project Management Plan Template](#)
<http://www.utdallas.edu/~chung/SP/SoftwareProjectManagementPlanTemplate.htm> (Bruegge's) (<http://www.bruegge.informatik.tu-muenchen.de/twiki/bin/view/OOSE/SoftwareProjectManagementPlanTemplate>) ;
3. September 26 (Thursday)/October 1 (Tuesday) Interim Project I (Preliminary project description: [PDF]; [scenario for Theia](#); A scenario for HOPE [full]) presentation and submission of PPT (and, if any, WRS document and evolving Project Plan) & Include Questionnaire I;
4. October 3 (Thursday) Test 1
5. October 8 (Tuesday) Final Project I submission (WRS-document + Questionnaire + PPT if any change + evolving Project Plan)
 - *Devise your own template, but you could consider [this](#) as a reference [If the link doesn't work, please use <http://www.utdallas.edu/~chung/SE4351/WRS-template.rtf>]
 - o [WRS-Sample](#); [Compact-Forward-Traceability](#); [Full-Forward-Traceability](#)

[Requirements-creeping-rate](#) [<http://www.utdallas.edu/~chung/SE4351/reqs-creeping-rates.docx>]
6. November 14 (Tuesday) Interim project II ([PDF](#)) submission (Product: Vision document + WRS document + evolving Project Plan; Process spec, if any; Questionnaire II)
 *[A tool you should use \[download statistics\]](#) ([***A tutorial in Spring 2020;](#)) ([***A tutorial in Fall 2020](#).)
7. November 21 (Thursday) Test 2

November 25-December 1 Fall Break + Thanksgiving holidays

8. December 3 (Tuesday) / December 5 (Thursday) Final Project II submission, presentation and demo
 At the time of the demo, a hardcopy should be submitted, which should include;

Final project plan

Project I (if any change has been made)

Project II (Product: Vision document + WRS document; Process Spec --- use notations for both the product and process specs; Final Questionnaire)

Any dependency/traceability between Project I and Project II
 all in one document.

Also, please produce a single compressed file that contains everything and send the URL where the compressed file can be found.

9. December 5 (Tuesday) Optional, if any discussions are needed, either individually or group-wise
 **. August 20 (Tuesday) December 5 (Thursday); communications and revisions of the project plan

Guest Lecture: TBA

VIDEO CLIP:08/18/2020, 1st class --- Course Syllabus: Course Organization

VIDEO CLIP:08/20/2020, 2nd class --- Course Syllabus: Course Organization + 1st part of Intro

Course Outline (*subject to evolution, hence it is recommended that you download 1-2 modules at a time on a bi-weekly basis; Some modules won't be covered, due to lack of time*)

- Introduction to Requirements Engineering: [Why, What and How](#) [small-pdf]
 1. [Requirements Engineering Journal and a Swing cartoon](#)
 2. [Examples of requirements defects](#)
 3. <http://techdirt.com/articles/20060818/1613226.shtml>
 4. [The Standish Report; Criticism on the CHAOS report](#)
 5. [Getting requirements right avoiding the top 10 traps](#)
 6. Also see cases 1 and 2 below (patriot missile; TCAS transponder)

[After class on 08/20/2020] Introduction to Requirements Engineering [PPT]

[After class on 08/25/2020] Introduction to Requirements Engineering [PPT]

[After class on 08/27/2020] Introduction to Requirements Engineering [PPT]

VIDEO CLIP:08/25/2020, 3rd class --- 2nd part of Intro

VIDEO CLIP:08/27/2020, 4th class --- 3rd/last part of Intro

- [Requirements Engineering Processes](#) [small-pdf] {RE evolutionary process, RE basic process, RE in software lifecycle, Process vs. product specifications }
 [After class on 09/03/2020] Requirements Engineering Processes [PPT]

VIDEO CLIP:09/01/2020, 5th class --- Course Project Phase I (Please refer to "Important Dates #3" above, and "Presentations Spring 2020" below); 1st part of Requirements Engineering Processes

VIDEO CLIP:09/03/2020, 6th class --- 2nd part of Requirements Engineering Processes

VIDEO CLIP:09/08/2020, 7th class --- last part of Requirements Engineering Processes; the WRS template; Questionnaire

- [Requirements Models](#)
 [After class on 09/15/2020] Requirements Models [PPT]

[VIDEO CLIP:09/10/2020, 8th class --- Revisiting the WRS template and Phase I course project description; Going over a couple of sample presentation slides \(for Interim Phase I\); 1st part of Requirements Models](#)

[VIDEO CLIP:09/15/2020, 9th class --- 2nd part of Requirements Models](#)

[VIDEO CLIP:09/17/2020, 10th class --- 3rd part of Requirements Models](#)

● [Requirements Analysis, Modeling and Specification \[small-pdf\]](#) {Problem analysis, Solution space, Requirements prioritization}

[After class on 09/15/2020] Requirements Analysis, Modeling and Specification [\[PPT\]](#)

[After class on 10/08/2020] Requirements Analysis, Modeling and Specification [\[PPT\]](#)

[VIDEO CLIP:09/22/2020, 11th class --- last part of Requirements Model; 1st part of Requirements Analysis, Modeling and Specification](#)

[VIDEO CLIP:09/24/2020, 12th class --- 6 Presentations on Interim I](#)

[VIDEO CLIP:09/29/2020, 13th class --- Last 6 Presentations on Interim I; A brief review of Test 1 material](#)

[VIDEO CLIP:10/06/2020, 15th class --- Requirements Analysis, Modeling and Specification; \(14th class was for Test 1\)](#)

● Requirements Elicitation: [Essential Concepts \[small-pdf\]](#) {Critical issues, Desirable properties of requirements, Some elicitation techniques}

[After class on 10/08/2020] Requirements Analysis, Modeling and Specification [\[pdf\]](#)

● [Scenario Analysis](#) {Use cases, episodes, scripts, completeness of scenarios, mis-use cases, anti-goals}

[VIDEO CLIP:10/08/2020, 16th class --- last part of Requirements Analysis, Modeling and Specification; 1st part of Requirements Elicitation](#)

[VIDEO CLIP:10/13/2020, 17th class --- 2nd part of Requirements Elicitation](#)

[VIDEO CLIP:10/15/2020, 18th class --- 3rd part of Requirements Elicitation](#)

[VIDEO CLIP:10/20/2020, 19th class --- Description of Course Project Phase II; Examples of requirements defects](#)

● Enterprise Requirements: [Modeling Techniques \[small-pdf\]](#) {Business modeling with UML, Some conventional enterprise modeling techniques}

1. Consider using Modules 1 & 2 for UML on <http://www.utdallas.edu/~chung/OOAD/syllabus.htm>, instead.

[A vision document template](#)

- [A sample vision document 1](#)
- [A sample vision document 2](#)
- [A sample stakeholder requests](#)
- [AS-IS or TO-BE?](#)

[VIDEO CLIP:10/22/2020, 20th class --- 1st part of Enterprise requirements](#)

[VIDEO CLIP:10/27/2020, 21st class --- A brief Tutorial on RE-Tools; 2nd part of Enterprise requirements](#)

[VIDEO CLIP:10/29/2020, 22nd class --- 3rd part of Enterprise requirements](#)

[VIDEO CLIP:11/03/2020, 23rd class --- last part of Enterprise requirements; 1st part of Structured Analysis](#)

- [Structured Analysis](#)
- [IDEF0-Process Spec](#)

[VIDEO CLIP:11/05/2020, 24th class --- 2nd part of Structured Analysis](#)

- [Goal-Oriented Requirements Engineering](#)
- [Classical problem solving technique](#)
- [Non-Functional Requirements: {Why, What definitions and classifications, How product- and process-oriented approaches} \[4-on-1\] \[white-background\]](#)

[VIDEO CLIP:11/10/2020, 25th class --- Non-Functional Requirements](#)

- [KAOS; Agent-Oriented Enterprise Modeling](#)

[VIDEO CLIP:11/12/2020, 26th class --- KAOS](#)

[# Mission impossible](#)

[The Principles and Practice of Engineering \(PE\) Software Engineering Exam](#)

[Other Possible Topics](#)

- [Functional Requirements: Formal Structural Models](#)
- [A Formal OO-RML/Telos {Deficiencies of SA, RML/Telos Essentials, A Formalization}](#)
- [Metamodeling {Models, Metaclass, Metamodels, Metamodels for UML and other notations}](#)
- [Functional Requirements: Behavioral Models {Decision-oriented, State-oriented, Function-oriented behavioral models}](#)
- [Another possible topic: Requirements Verification](#)

- [● Model Checking](#)
 - [● Model Finder](#)
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[Some sample case studies:](#)

- [case 1: patriot missile: clock drift - 28 killed, over 90 injured real cost of software failure Patriot in the Persian Gulf War/Operation Desert Storm \(January-February 1991\)](#)
 - [case 2: TCAS - transponder](#)
 - [case 3: NY subway collision](#)
 - [case 4: U.S. Census Bureau collision](#)
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[Priorities: Class Discussions !!, Lecture Notes !, Primary Reading and References!!!](#)

[Reusable course project material](#)

[Presentations Spring 2020](#)

[Presentations Fall 2018](#)

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[Presentations Fall 2005](#)

[Presentations Summer 2006](#)

[Presentations Fall 2006](#)

[Presentations Spring 2007](#)

[Presentations Fall 2007](#)

[Presentations Fall 2008](#)

[Presentations Spring 2009](#)

[Presentations Summer 2009](#)

[Presentations Fall 2009](#)

[Presentations Spring 2010](#)

[Presentations Fall 2010](#)

[Presentations Spring 2011](#)

[Presentations Spring 2012](#)

[Presentations Fall 2014](#)

[Presentations Summer 2015](#)

[Presentations Fall 2015](#)

[Frequently Asked Questions](#)

[errorPropagation](#)

[IEEE standard \(IEEE standard temporarily broken\)](#)
[Document Templates general IEEE](#)
[SRS sample](#)
<http://www.utdallas.edu/~chung/SP/RequirementsAnalysisDocumentTemplate.htm>
[Other samples and templates](#)
[A Tutorial on Temporal Logic](#)
[Case Studies on Temporal Logic](#)
[A UML Tutorial by Bruegge](#)
[A UML Tutorial by Bruegge \(A copy\).](#)

Sample Project Descriptions

- [Course Project - Part I \[PostScript\] \[PDF\]](#)
[Sample Deliverable](#)
 - [Course Project - Part II \[PostScript\] \[PDF\]](#)
[Sample Deliverable](#)
 - [Course Project - Part III old, to be updated \[PostScript\] \[PDF\]](#)
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Sample Tests - For a sense of the style only

- [Sample Test 1 \[PostScript\] \[PDF\]](#)
 - [Sample Test 2 \[PostScript\] \[PDF\]](#)
 - [Sample Test 3 and Answer \[PostScript\] \[PDF\]](#)
 - [Sample Test 4 \[PostScript\] \[PDF\]](#)
 - [Sample Test 5 \[PostScript\] \[PDF\]](#)
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Cheating/Dishonesty:

The University of Texas System Policy on Academic Honesty (The Regents and Regulations, Part One, Chapter VI, Section 3, Paragraph 3.22):
 Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, 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, any act designed to give unfair advantage to a student or the attempt to commit such acts.

UNIVERSITY POLICIES

Off-campus Instruction and Course Activities- Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm. Additional information is available from the office of the school dean. Below is a description of any travel and/or risk-related activity associated with this course.

Student Conduct & Discipline- The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly

and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year. The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity- The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with

under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.
Email Use- The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class- The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures- Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's Handbook of Operating Procedures. In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called the respondent). Individual faculty members retain primary responsibility for assigning grades and

evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy- As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

Disability Services- The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their nondisabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m. The contact information for the Office of Disability Services is: The University of Texas at Dallas, SU 22, PO Box 830688, Richardson, Texas 75083-0688, (972) 883-2098 (voice or TTY).

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days- The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, and Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar

disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.