



Course: ITSS 4370.502 – Information Technology Infrastructure
Instructor: John Young
Term: Spring 2023
Meetings: Mondays, 7:00 PM to 9:45 PM CT
Classroom: JSOM 11.210

Contact Information

Email: john.young@utdallas.edu

Office Location: JSOM 3.604 (Adjunct Office) or virtually on Teams

Office Hours: Monday, 6:00 PM to 6:45 PM CT, or by appointment

Course Modality & Expectations

The course will be taught using the traditional in-class modality. Classes will be held in the assigned classroom at the assigned time. The instructor, at his own discretion, may choose to teach the class remotely and will provide students a much notice as practicable of any changes in venue. **You are expected to read this syllabus in its entirety and abide by the rules and guidelines given.** Your signature of the academic integrity form is your assurance that you've read this syllabus in its entirety. Failure to do so will negatively affect your grade and create unnecessary friction. Please follow my rules, or in the words of *South Park's* Thumper, aka Super Cool Ski Instructor, *you're gonna have a bad time.*

COVID-19 Resources

Please see <http://go.utdallas.edu/syllabus-policies>.

Classroom Conduct Related to COVID-19

Masks and Vaccinations: Texas Governor Greg Abbott's Executive Order [GA-38](#) prohibits mandating vaccines and face coverings for UT Dallas employees, students and members of the public on our campus. The University strongly encourages all Comets to get vaccinated and wear face coverings as recommended by the CDC. That said, you are all adults, so I leave the decision to wear masks in class entirely up to you.

Classroom Safety and COVID-19: To help preserve the University's in-person learning environment, UT Dallas recommends the following: Adhere to the University's [CDC Updated Guidelines](#) issued on July 30, 2021. All Comets are strongly encouraged to wear face coverings indoors regardless of vaccination status. Again, my personal policy is that of encouraging personal responsibility.

Accommodations for Students Who Miss Class for Reasons Unrelated to COVID-19: Individual faculty maintain their discretion on whether and how to accommodate student absences unrelated to COVID-19.

Accommodations for Students Who Must Isolate or Quarantine Due to COVID-19: To keep the UT Dallas community as safe as possible, the University requires students who test positive for COVID-19 or who are close contacts as determined by the campus contact tracing program to isolate or quarantine as applicable. Faculty will be notified by the Dean of Students' Office if a student in their class has been required to isolate (positive case) or quarantine (exposed). Faculty must make lectures available for those students during the period the students must isolate or quarantine. Faculty have the discretion to set an attendance policy for their in-person meetings, but the absences due to COVID-19 cannot be counted against an isolated or quarantined student.

Verifying COVID-19 Isolations or Quarantines: Students need to self-report COVID-19 positive results or exposures via an [online form](#) so that university campus tracers can verify, record, and take necessary campus precautions. When faculty are notified by students rather than by the Dean of Students' Office that the students are isolating or quarantining, the faculty should remind students to self-report via the form; students should not attend class until cleared by campus tracers.

Vaccinations are widely available, free and not billed to health insurance. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms in those who are vaccinated. You are encouraged to [get a COVID-19 vaccine](#) and register your vaccination status through the [voluntary vaccine report form](#).

Proactive Community Testing remains an important part of the university's efforts to protect our community. Tests are fast and free. Please check the [Comets United](#) for additional information. [Student Safety](#) remains an important part of the UT Dallas' efforts to protect our community. All students will adhere to the Comet Commitment. Unvaccinated Comets will be expected to complete the mandatory [Required Daily Health Screening](#). Those students who do not comply will be referred to the Office of Community Standards and Conduct for disciplinary action under the [Student Code of Conduct – UTSP5003](#).

Visit [Comets United webpage](#) to obtain the latest information on the University's guidance and resources for campus health and safety.

Prerequisites

ITSS 3300 and ITSS 4330 and (MATH 1326 or MATH 2414 or MATH 2419 or OPRE 3340) and (CS 2305 or MATH 2333 or MATH 2418 or OPRE 3333).

Course Description

ITSS 4370 - Information Technology Infrastructure (3 semester credit hours): Management of the information technology within an organization is a critical activity. Students will be introduced to key issues relating to managing IT resources and IT projects. Topics include IT infrastructure, IT investment, management of IT, and planning and management of projects related to IT infrastructure.

Text & Technical Resources

The following texts are required for this class. However, these texts are available to view online for free through the McDermott Library, with a link Library Resources in e-Learning under Course Homepage:

- Scott D. Lowe, James Green, and David Davis (2016). *Building a Modern Data Center: Principles and Strategies of Design*. Available at: <https://www.actualtechmedia.com/wp-content/uploads/2016/05/Building-a-Modern-Data-Center-ebook.pdf>. For the purposes of the syllabus, this text will be referred to as **LGD**.
- Schiesser, Rich (2010). *IT Systems Management (2nd ed)*. Upper Saddle River, N.J. : Prentice Hall. ISBN: 9780137025060, ISBN: 0137025068, ISBN: 9780136123521; ISBN: 013612352X. For the purposes of the syllabus, this text will be referred to as **ITSM**.
- Vanderburg, Eric. (2021). *CompTIA Cloud+ Certification All-in-One Exam Guide (Exam CV0-003)*, 1st Edition. McGraw-Hill Education. ISBN: 978-1264264872. For the purposes of the syllabus, this text will be referred to as **CLOUD+**.

Other reading handouts will be made available on eLearning and listed in the syllabus as **HO**.

Lecture Preparation

Students should prepare for lectures by reading the assigned material and completing homework assignments **prior** to class. Thus, all reading assignments in the class calendar are supposed to be read before the lecture on the given topic.

Lecture Guidelines

Students are encouraged to think of class like a job. You're expected to show up on time, which means showing up five to ten minutes early in the "real world," so you should show up five to ten minutes before class starts so you can be seated, logged in on your device, and ready to start work. In the "real world" of business, you're expected to participate in meetings and take notes, so you should participate in class and take notes. In the "real world" of business, you're expected to let your boss know if you're going to be late or miss work, so you should let the instructor know if you're going to be late or miss class. In the "real world" of business, if you show up late to a meeting, you're expected to enter as quietly as possible and take the first available seat so as to cause the least distraction; if you show up to class late, please enter as quietly as possible and take the first available seat. In the "real world" of business, it's considered rude to take calls or text while you're in a meeting, so set your phone to silent or turn it off before class starts, and please step out quietly if you need to take a phone call. In fact, **all phones will be placed face down on the desk before the start of class, and you should only be using your laptop to take notes. If it becomes apparent students aren't paying attention, students will not be permitted to use their laptops in class and will have to hand-write their notes—so bring pen and paper.** In the "real world" of business, violating these norms can lead to attracting undesirable attention from your boss, poor performance reviews, or even lead to dismissal; likewise, violating these guidelines will attract undesirable attention from the instructor and may lead to being asked to give up your phone during the class period, dismissal from the remainder of the class period, and grade point deductions. **Also, if attending via Teams, please mute yourself during lecture;** if I have to mute you, *you're gonna have a bad time.*

Attendance, Assignments, Grading & Participation

Attendance: As Woody Allen once said, "eighty percent of success is showing up." In the case of this class, it's worth 25% of your total grade. As mentioned earlier in the syllabus, accommodation with regard to attendance will be given to students who are isolated or quarantined due to COVID or other illness. **However, in order to excuse an absence for illness, you must present a COVID test result or doctor's note.** Unless you're Doogie Howser and earned your medical degree at the age of 14, and you just happen to be picking up this business degree for giggles, your assessment of whether you're infectious and thus unable to attend class is insufficient to meet the burden of proof—bring a note. Likewise, accommodation *may* be given, solely at the instructor's discretion, for other absences if advance notice is provided. **Late arrival or early departure without prior consultation with the instructor may result in the deduction of attendance points.** There are 13 class periods this semester, two of which are tests. Therefore, there are 11 graded class periods **each class period counts for 9.09 points.** Because things come up where you have a flat tire, or you're running late, or sometimes you're sick enough to stay home, but not sick enough to go to the doctor, one (1) "grace day" will be offered for attendance, meaning you'll get credit for attendance on a grace day. You must declare a "grace day" before taking it; otherwise, it's an *unexcused* absence. **One or more unexcused absences beyond your one "grace day" will result in loss of bonus points and eliminate the ability to earn them. You may NOT attend class via Teams without prior permission of the instructor; Teams is not for your convenience.** Therefore, you should really avoid skipping at all costs and communicate with me if you're going to miss class so I can excuse the absence if I believe the excuse is legitimate. **Note that we will never cancel class for weather or do class via Teams due to weather unless the university closes.** If I can drive in the rain, so can you.

Assignments: There will be one graded assignments worth 100 points, although the instructor retains the right to add graded assignments as he sees fit. **Note that the assignment is due by the start of specified class period. Again, you must email your assignment from your UT Dallas email address to john.young@utdallas.edu. Do not submit your assignment on or to e-Learning, or from**

your personal email address, as I won't see your assignment or grade it. Following directions and attention to detail are essential for success in real life, and in doing these assignments. All assignment files (if applicable) must be named using the format of section, first initial, last name, and assignment; e.g. 501jyoungbpm or 501jyoungtab. Note: Please don't send me your assignments literally labelled "501JYoung...." "E.g. means *example given*; use your own first initial and last name. Seems silly that I have to say that, but every semester there's that one kid. **Failure to follow the naming convention and/or sending files in a format other than what was given (i.e. no PDFs, please) instead of the actual assignment files will result in an automatic 3-point deduction.**

Grading: There will be two tests, each worth 100 points. Thus, to achieve 100% in the class, you must earn 400 points. Bonus points will be applied to the overall total, so it's possible to earn 420 points.

Grade Component	Grade Points	Percentage of Grade
Attendance	100 (7.69 points x 13)	25.0%
AWS Project	100	25.0%
Exam 1	100	25.0%
Exam 2	100	25.0%
Total	400	100.0%

Letter grade scoring is as follows:

Final Point Total	Letter Grade
97.00 to 100.00	A+
93.00 to 96.99	A
90.00 to 92.99	A-
87.00 to 89.99	B+
83.00 to 86.99	B
80.00 to 82.99	B-
77.00 to 79.99	C+
73.00 to 76.99	C
70.00 to 72.99	C-
67.00 to 69.99	D+
63.00 to 66.99	D
60.00 to 62.99	D-
< 60.00	F

Note the grading is done to two decimal places, so please don't ask me to round your grade up unless you're sitting at a X.95 or better. Note that students with majors in the SOM need a C- (70%) or better to pass.

Participation: Participation and performance go hand-in-hand, and in the “real world” of business, performance is often rewarded by a bonus. Students have the opportunity to earn bonus points by answering questions in class. Bonus points may also be awarded based on performance. **Bonus points are capped at 20**, will be given at the discretion of the instructor, and may be applied to any test, assignment, or combination thereof. **Bonus points may be deducted or eliminated entirely in cases of excessive unexcused absence (1 or more beyond your grace day), failing to turn in your academic integrity form, or academic dishonesty.**

Miscellaneous Course & Instructor Policies

The following policies describe how the course will be managed. Situations and issues not covered will be resolved at the discretion of the instructor. Changes to policies will be posted in syllabus updates on e-Learning under the assignments section. Students will be notified via e-Learning announcements when syllabus changes occur.

Late Work & Make-Up Assignments: All assignments are due on the date and time specified by the instructor, **regardless of what is marked in the syllabus** (so you actually need to pay attention in class). Due dates are typically one week after the assignment is made, but dates may vary at the instructor's discretion. **Assignments are due by 7:00 PM CT on the date they're due. If the timestamp of your assignment submission email is later than 7:00 PM on the date it's due, you will automatically lose four (4) points**; thus, the maximum score you may achieve on a late assignment is 16/20, or 80%. Students will be assessed an additional 2-point penalty per day for every day (including weekends) the assignment is late after the assignment due date. *Wow, that sounds pretty harsh! Why?* Deadlines in the “real world” of business are not a moving target. Missed deadlines affect product delivery, professional reputations, and revenue. Therefore, don't wait until the last minute to submit your assignments. After all, email is a “best effort” delivery mechanism and delivery isn't guaranteed. Make-up assignments may be given at the discretion of the instructor, but consider the option highly unlikely. Factors considered in allowing for make-up work include attendance, participation, and the circumstances behind the absence or missing work.

Tests: As alluded to in grading, there are two exams given during the semester, each worth 100 points. These will either be given in class or through e-Learning, at the instructor's discretion. They are closed-book, closed-note, and no internet or outside sources allowed. If allowed to take the exam outside of class, Honorlock may be used. **If you miss taking the exam during the assigned period, the instructor reserves the right to deny you an opportunity to take the exam and you will receive a zero. If the instructor allows you to take the exam, you will be assessed a 20-point penalty per day.** *Example 1:* You're supposed to take the exam on Tuesday, but forget and ask the professor the next morning, Wednesday, whether you can take the exam that day. If allowed, the highest score you can receive is an 80. *Example 2:* You're supposed to take the exam on Tuesday, but forget and ask the professor on Thursday whether you can take the exam. If allowed, the highest score you can receive is a 60.

Late Work Grading Examples: An assignment with five questions, each equally weighted, is due via email to the instructor on Apr 1 at 4:00 PM. According to the timestamp, Jill's emailed assignment arrives in the instructor's inbox on Apr 1 at 4:05 PM—Jill's maximum possible score is now $20 - 4 = 16/20$. Jill missed two questions worth four points each; Jill's grade is $16 - (4 \times 2) = 8/20$, or 40%.

On the same assignment, Jack emailed his assignment on Apr 2—Jack's maximum possible score is now $20 - 4 - 2 = 14/20$.

On the same assignment, Jordan emailed the assignment on Apr 9—Jordan's maximum possible score is now $20 - 4 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 = 0/20$. Why bother?

e-Learning: e-Learning will be used for class content (e.g. lecture preparation resources, lecture slides, assignment descriptions and submissions, exams) and the recording of scores and grades. Lecture slides will be posted within six hours after class. Lecture recordings, if recorded at the sole discretion of the instructor, will be posted to Microsoft Stream or under Files in Teams typically within an hour, depending on processing time. Class announcements (e.g. change in assignment dates) will also be posted on e-Learning. We will also make use of Microsoft Teams for attending class remotely, at the instructor's sole discretion, as well as the chat function for class coordination. Note that announcements will appear in the announcements section, assignments, lecture slides and syllabus updates will appear in the assignments section, and grades will appear in the grade center.

Instructor Response Policy: For any questions for which you are expecting a formal (actionable) response, you must submit the question in writing from your UT Dallas email to the instructor's or TA's UT Dallas email. Neither the instructor nor the TA bears any responsibility for questions submitted orally (e.g. after class or in the hallway). The instructor/TA will typically respond to all student emails within 48 hours or less (excluding holidays and weekends).

Requests for Grade Review: Occasionally errors are made in grading or there's a difference of opinion when it comes to whether an answer is correct. In those instances, you may request a grade review from the instructor. Grade reviews will only be entertained if they are made in writing via UTD email to the instructor (not the TA) **within one week of receiving the graded assignment back from the instructor or TA**; those requests made beyond the one-week deadline will be denied. If the assignment was graded by the TA, you must present the graded assignment in your request or the grade will not be reviewed. The instructor is under no obligation to accept amended assignments even if submitted before the deadline, so take care in ensuring your assignment is complete and accurate before turning it in to be graded. Also, please exercise good judgment when requesting a grade review; unless you're on the edge of passing/failing, quibbling over a point is, well, pointless.

General UT Dallas Policies

For information regarding general University policies and procedures, please go to <https://provost.utdallas.edu/syllabus-policies/>. These policies include the following:

- Technical Support
- Field Trip Policies, Off-Campus Instruction and Course Activities
- Student Conduct and Discipline, Academic Integrity, Avoiding Plagiarism
- Copyright Notice
- Email Use
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days

Academic Integrity

The University is committed to academic excellence, expects academic honesty from all members of the University community and believes that it is essential for academic excellence and integrity. Academic honesty includes adherence to guidelines established by the instructor in a particular course. I want you to succeed, and I encourage you to *study* together. However, at no point should you share your work with others or copy the work of others.

SHARING, COPYING, OR OTHERWISE REPRESENTING THE WORK OF OTHERS TO BE ONE'S OWN, IS PLAGIARISM AND/OR COLLUSION. RECEIVING UNAUTHORIZED AID ON AN ASSIGNMENT OR TEST, OR USING SIMILAR PAPERS OR OTHER WORK PRODUCTS TO FULFILL OBLIGATIONS OF THIS CLASS OR OTHER CLASSES WITHOUT THE INSTRUCTOR'S PERMISSION IS CHEATING.

PENALTIES FOR ACADEMIC DISHONESTY MAY INCLUDE RECEIVING A SCORE OF ZERO FOR THE WORK IN QUESTION, FAILING THE CLASS, AND/OR DISMISSAL FROM THE UNIVERSITY.

ANY STUDENT ENGAGED IN ACADEMIC DISHONESTY WILL BE REFERRED TO THE OFFICE OF COMMUNITY STANDARDS AND CONDUCT, AND WILL BE SUBJECT TO DISCIPLINARY ACTION.

Please refer to the General Policies website (see above) for detailed information pertaining to academic dishonesty, including procedures for determining disciplinary action. The Student Code of Conduct can be found at <https://policy.utdallas.edu/utdsp5003>. Your signature below indicates that you have been advised of and understand the consequences for academic dishonesty. **FAILING TO TURN IN A SIGNED ACADEMIC INTEGRITY FORM BY THE DEADLINE WILL RESULT IN YOUR FORFEIT OF ALL BONUS POINTS FOR THE SEMESTER AS WELL AS AN AUTOMATIC 15% PENALTY APPLIED TO EACH ASSIGNMENT.** So, do yourself a favor and turn in this form.

Printed Name

Date

Signature

Class Calendar, Assignments & Key Dates

Class	Dates	Material Covered	Assignment	Notes
1	Jan 23	Course Introduction		
2	Jan 30	Introduction to IT Infrastructure <ul style="list-style-type: none"> • Trends in IT Management • Data Centers 	<ul style="list-style-type: none"> • LGD 1-3 & 11 • ITSM 18 	
3	Feb 6	IT Management & Governance <ul style="list-style-type: none"> • IT Capability Maturity Framework (IT-CMF) • IT-CMF Critical Capabilities in Macro Capabilities 	<ul style="list-style-type: none"> • LGD 4 & 5 • ITSM 3, 4 & 15 • HO 1 	
4	Feb 13	IT Management & Governance (continued) <ul style="list-style-type: none"> • Process Framework Overview • ITIL – IT Systems Management Governance 	<ul style="list-style-type: none"> • ITSM 6 • HO 2 	
5	Feb 20	Managing IT Infrastructure (continued) AWS Demo	<ul style="list-style-type: none"> • LGD 7 & 8 • CLOUD+ 7 • HO 4 	AWS due Apr 10
6	Feb 27	Security, Privacy & Compliance Midterm Exam Review	<ul style="list-style-type: none"> • CLOUD+ 11 & 12 • ITSM 7 & 16 	
7	Mar 6	Midterm		
	Mar 13	Spring Break		
8	Apr 3	Managing IT Infrastructure <ul style="list-style-type: none"> • Cloud Concepts and Models • Virtualization 	<ul style="list-style-type: none"> • LGD 6 • CLOUD+ 1 • ITSM 22 • HO 3 	
9	Apr 10	Resource Management	<ul style="list-style-type: none"> • LGD 9 • CLOUD+ 5 & 6 • ITSM 12 	
10	Apr 17	Systems Management <ul style="list-style-type: none"> • Change Management • Production Acceptance • Agile 	<ul style="list-style-type: none"> • LGD 10 • CLOUD+ 8 • ITSM 9 & 10 	
11	Apr 13	Systems Management (continued) <ul style="list-style-type: none"> • DevOps • Availability • Reliability 	<ul style="list-style-type: none"> • CLOUD+ 9 & 10 • ITSM 8 • HO 5 	
12	Apr 24	Business Continuity & Disaster Recovery Final Exam Review	<ul style="list-style-type: none"> • CLOUD+ 13 • ITSM 17 	
13	May 1	Final		