

# ***Course Syllabus***

## ***University of Texas at Dallas***

### ***Information Technology Audit and Risk Management***

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#### **Course Information**

*Course Number/Section*

ACCT 6336

*Course Title*

Information Technology Audit and Risk Management

*Term*

Fall, 2015

*Days & Times*

Thursday 4 PM – 6:45 PM

*Room*

JSOM 12.206

*Professor*

Joseph Mauriello CPA, CIA, CFE, CISA, CMA, CRMA, CFSA

*Office Phone*

972-883-4729

*Email Address*

[Joseph.Mauriello@utdallas.edu](mailto:Joseph.Mauriello@utdallas.edu). Do not send homework to this Email address only post homework to eLearning. Please correspond in eLearning for any class work.

*Office Location*

SOM 3.710

*Office Hours*

By appointment only.

*Other Information*

Course Information is posted on eLearning.

#### **Course Pre-requisites, Co-requisites, and/or Other Restrictions**

- Internal Audit (ACCT 6380) or Auditing (ACCT 6334) or concurrent - If you don't have an audit background read Chapter 2 of IT Auditing Using Controls to Protect Information Assets;
- Introductory Management Information Systems course; or
- Comparable undergraduate course work with an emphasis either in Audit or MIS.

#### **Course Description**

This course covers management's role in controlling information technology and addressing the major risks related to technology. Topics include information security, contingency planning, desktop computer controls, systems development controls, computer center operation controls, assurance of information related to on-line, client-server, web-based, internet, cloud computing, virtualization, and other advanced computer topics. Students will learn approaches to evaluating and addressing technology risk throughout the organization from the perspective of internal and external audit in addition to the view of end users. Topics included in the class will include coverage of all areas to prepare students to take the Certified Information Systems Auditor (CISA) exam. This course also is one of the four courses that are part of the Cybersecurity Certificate that is issued as part of a degree or non-degree program at UTD.

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## Student Learning Objectives/Outcomes

1. Be able to identify key information technology risks and how to mitigate those risks.
2. Be able to develop a control checklist and key audit steps related to technology risks.
3. Be able to distinguish key user technology risks and controls.
4. Be able identify the key content areas and have knowledge of all areas covered by the Certified Information Systems Audit (CISA) exam.
5. Understand the Cobit 5 from ISACA.
6. Identify sources for research of technology risks and apply those techniques to completion of a technology audit project.
7. Learn those areas of technology risks that are currently of most concern to the IIA, AICPA, ISACA and the boardroom.
8. Be able to distinguish and evaluate key application controls along with auditing of application controls.
9. Identify and evaluate risks in an e-business environment.
10. Understand how to adapt audit coverage to areas of advanced and emerging technologies.

## Required Textbooks and Materials

- We will use the Global Technology Audit Guides (GTAG). They are available for free to download or if you prefer you can buy each copy through IIA International for \$25. Soft copies are available from the IIA website and will also be posted on eLearning. Additional GTAG's may be published during the course that will also be used.
- A book available in paperback is also used "IT Auditing Using Controls to Protect Information Assets", McGraw-Hill, Copyright 2011, 2<sup>nd</sup> edition, Chris Davis, Mike Schiller, and Kevin Wheeler. It is available at Off Campus Books or on-line. It should cost around \$40 new from the various sources. This book underwent significant changes from the first to second edition, therefore do not rely on the first edition of the book.
- Student membership of ISACA for \$25 is highly recommended. Information can be obtained from [www.isaca.org](http://www.isaca.org). Local chapter information and schedule of meetings can be obtained at [www.isacantx.org](http://www.isacantx.org). The UTD student organization IIA/ISACA/ACFE meets every Wednesday at 5:30 with a reception. Membership is \$25 per semester with website [www.utdallasisaca.com](http://www.utdallasisaca.com).
- Each student will be given access to the Protiviti knowledge system as part of the class. Information will be used from the website during class and should also be used as a research tool.

## Assignments & Academic Calendar

*Topics, Reading Assignments, Due Dates, Exam Dates*

The class schedule is subject to change, based on the needs of the students. Class will be composed of lectures, discussions, case studies, and discussions of current events.

We will make use of eLearning for class assignments. Also, discussion in class is the best way to learn as many of you bring varied backgrounds to class. We will allow time in class for common questions by the

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group. Also, eLearning to communicate among other students in the class on the discussion board is a very good way for all to learn and get an answer to questions quickly. All class communication should be either in class or through eLearning. Do not send class email to my regular email address other than if it is for advising due to the volume of email.

The course will have numerous handouts which will be posted on eLearning. These will be used to stimulate class discussion. All handouts and discussions are potential exam questions. Numerous presentations will be used to compliment the course with current material.

The tests will include a variety of questions and will most likely be primarily multiple choice. Students will have the opportunity to participate in writing sample test questions prior to the exam. Test questions will be primarily focused on the class discussion.

### **Other Class Learning Opportunities**

Opportunities will arise to attend the North Texas Information Systems Audit and Control Association meetings along with the Dallas Institute of Internal Auditors (IIA) at reduced rates or free to students who are members of the UTD IIA/ISACA/ACFE Student Organization. Meetings are typically on Thursdays for both the IIA and ISACA professional chapter meetings.

#### **North Texas ISACA Meetings and Calendar – [www.isacantx.org](http://www.isacantx.org)**

The North Texas Chapter of ISACA Meetings are recommended. The meetings are free to UTD IIA/ISACA/ACFE Student Organization members, but you still must register at the North Texas Chapter website in advance. The meetings this semester are scheduled on the second Thursday of every month. You need to register ahead of time at [www.isacantx.org](http://www.isacantx.org) to attend these meetings. The local ISACA chapter has over 1,600 members and is very important to attend for those serious about pursuing a career in Information Technology Audit. The national website for ISACA is [www.isaca.org](http://www.isaca.org).

#### **Dallas Chapter of the Institute of Internal Auditors – <http://www.dallasiia.org/>**

You are invited to attend the luncheon meetings of the Dallas Chapter of the IIA for free if you are an IIA International member and a UTD IIA/ISACA/ACFE Student Organization member. These meetings offer you an opportunity to network with audit professionals, hear great speakers, and learn more about what is going on in the Dallas area. The local chapter has more than 2,000 members and is one of the only platinum chapters in the world. Meetings during this semester are on the first Thursday of the month.

### **Other Associations with a Technology Risk Management Focus**

The Information Systems Security Association (ISSA) has a focus on security issues and has a local chapter that also meets monthly. The Association of Contingency Planners (ACP) which has a focus on Disaster Recovery Planning is made up primarily of contingency planners and also meets monthly. Both of these organizations are national in scope and have strong chapters in the Dallas Ft. Worth area.

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### Class Schedule:

The class schedule is subject to change, based on the needs of the students, the availability of guest speakers, and the focus of discussions in class.

	<u><b>Schedule</b></u>		<u><b>IT Auditing Using Controls</b></u>	<u><b>Global Technology Audit Guide (GTAG)</b></u>
<u><b>Week</b></u>	<u><b>Date</b></u>	<u><b>Topic</b></u>	<u><b>Chapter</b></u>	<u><b>Number</b></u>
1	August 27, 2015	<i>-Introduction</i> <i>-Project Discussion</i> <i>-Cybersecurity Certificate Program</i> <i>-Today's IT Environment</i>  <b>GTAG 1 – Information Technology Risk and Controls</b> <i>-IIA and ISACA Model Curriculum</i> <i>-Certifications Overview – CISA, CISSP</i>	Chapter 16 Chapter 17	GTAG 1
2	September 3, 2015	<b>-GTAG 4 - Management of IT Auditing</b> <b>- GTAG 11 – Developing the IT Audit Plan</b>	Chapter 1 Chapter 2	GTAG 4 GTAG 11
3	September 10, 2015	<i>- Auditing Privacy Risks, 2<sup>nd</sup> Edition Practice Guide (formerly GTAG 5)</i>	Chapter 3	<i>Auditing Privacy Risks, 2<sup>nd</sup> Edition Practice Guide (formerly GTAG 5)</i>
4	September 17, 2015	<i>-Information Security</i> <b>-GTAG 9 – Identity and Access Management</b> <b>-GTAG 15 – Information Security Governance</b>	Chapter 18	GTAG 9 GTAG 15
5	September 24, 2015	<i>-Data Centers and Networks</i>	Chapter 5 Chapter 10 Chapter 11 Chapter 12	
6	October 1, 2015	<b>-GTAG 7 – IT Outsourcing</b>	Chapter 14	GTAG 7
7	October 8, 2015	<b>Test #1</b>		
8	October 15, 2015	<b>-GTAG 10 – Business Continuity Management</b>	Chapter 4	GTAG 10
9	October 22, 2015	<b>-GTAG 8- Auditing Application Controls</b> <b>-GTAG 14 – Auditing User Developed Applications</b>	Chapter 8 Chapter 9 Chapter 13	GTAG 8 GTAG 14
10	October 29, 2015	<b>- GTAG 17- Auditing IT Governance</b>		GTAG 17
11	November 5, 2015	<b>-GTAG 2 – Change and Patch Management Controls</b> <b>-GTAG 12 –Auditing IT Projects</b>	Chapter 15	GTAG 2 GTAG 12

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12	November 12, 2015	<b><i>GTAG 3 – Continuous Auditing -GTAG 13 – Fraud Protection and Detection in an Automated World -GTAG 16- Data Analysis Technologies</i></b>		GTAG 3 GTAG 13 GTAG 16
13	November 19, 2015	<b><i>Test #2</i></b>		
n/a	November 26, 2015	<b><i>Thanksgiving Break</i></b>		
14	December 3, 2015	<b><i>Class Project Presentations</i></b>		

### Grading Policy

**Your grade will consist of the following:**

<b><u>Test Number</u></b>	<b><u>GTAG</u></b>	<b><u>IT Audit Book</u></b>	<b><u>Date</u></b>	<b><u>Points</u></b>
1	1, 4, 5, 7, 9, 11, 15,	1, 2, 3, 5, 10, 11, 12, 14, 16, 17, 18	October 8	100
2	2, 3, 8, 10, 12, 13, 14, 16, 17	4, 8, 9, 13, 15	November 19	100
Assignments and Class Discussion				100
Final Project				100
			<b><u>TOTAL POINTS</u></b>	<b>400</b>

You must earn above a 90% for an A, 80% for a B, 70% for a C, and less than 70% is a failing grade. Grades of +’s and –’s will be given.

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## **Course Policies**

### *Make-up exams*

There are no excused absences from the exams without a written excuse from a doctor or the academic dean. If there is a serious scheduling conflict, it is your responsibility to let the instructor know well in advance.

### *Late Work*

All assignments should be completed and turned in on time. A number of assignments will require you to prepare the assignment in PowerPoint and make a short presentation in class. Most of these assignments will be due the Wednesday before class and need to be posted to eLearning. The date and time set for the assignments to be turned into eLearning is by the time on the eLearning server. It is your responsibility to make sure you have submitted it well in advance.

### *Special Assignments*

You will have one large project that should be worked on during the semester. That project should be started very early in the semester and a topic should be chosen as soon as possible in the semester. Every student in class will be presenting the results of that project during the final class period. More details will be provided by the Professor in class.

### *Class Attendance*

Class attendance is highly recommended for you to understand all the topics that are covered in class. This class is taught with a lot of class discussion and the more that students put into the discussion and ideas for class the more everyone will get out of the class.

### *Classroom Citizenship*

Respect your fellow students and keep cell phones off or in manner mode. If you have to talk to someone next to you please share with the whole class or it is not appropriate. Laptop computers are sometimes useful in class and particularly when doing some team exercises. However, be careful of noise from typing on the keyboard.

## **CISA Exam:**

This course will help prepare students for the CISA exam which is given every June, September, and December. All topical areas of the exam are covered at a high level. Students taking this course may be eligible for a reduced rate review class on Saturdays at UTD. The review class is offered by the North Texas ISACA Chapter. The review classes will be held from 9-4:30 on specific Saturdays at UTD (dates to be determined). Study material are available from ISACA and other sources with sample exam questions that is highly recommended.

## **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

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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,

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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 non-disabled peers. Disability Services is located in the Student Services Building 3.200. Office hours are Monday-Thursday, 8:30 a.m. to 6:00 p.m. and Friday, 8:00 a.m. to 5:00 p.m.

The contact information for the Office of Disability Services is:

UT Dallas Student Accessibility  
800 W. Campbell Rd., SSB32  
Richardson, TX 75083  
(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.



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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.

### **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 given below. Additional information is available from the office of the school dean. ([http://www.utdallas.edu/BusinessAffairs/Travel\\_Risk\\_Activities.htm](http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm))

***These descriptions and timelines are subject to change at the discretion of the Professor.***