


THE UNIVERSITY OF TEXAS AT AUSTIN
ACC 380K.12 Computer Audit & Systems Security (02675)
Course Syllabus
FALL 2018

		(Professor) Bob George Department of Accounting	(TA) Florence Sung
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	Office Hours:	M 1:30 – 3:00 pm, by appointment	By appointment
	Class:	(Sept 11 – Dec 11) M 3:30 – 6:30 PM UTC 3.112	

I prefer e-mail as a means of contact outside of class and office hours.

The course TA will assist with grading and, after graded material is returned, schedule office hours for any needed discussions.

“Canvas”

The web-based University of Texas at Austin “Canvas” software will be actively used for this course, including the discussion forums. ***Please check Canvas frequently and before every class*** since it will be used extensively to post announcements and files for downloading. PowerPoint slides for lectures will be available under each class module section on Canvas before class together with required supplemental readings and assignments.

Canvas discussion forums benefit everyone and can be used to post comments, articles of interest, questions and responses to others’ posts. *If you have a question, comment or article of general interest (i.e., not a personal matter), please use the Canvas discussion forums, not e-mail.*

Class Environment

Your active participation in class discussions is encouraged and expected to enhance the learning experience for you and your fellow students. As in any professional situation, courtesy and respect will contribute to a positive, constructive environment. The objective is for us to work together to achieve a relaxed and informal environment that will maximize your enjoyment of this course.

Please let me have your feedback as the course progresses regarding things you like or dislike about the course.

REQUIRED MATERIALS

- (1) ACC 380K.12 (02675), Computer Audit & Systems Security: Readings, Fall 2018. Available from the McCombs copy center located on the third floor.
- (2) Course files. PowerPoint and other files (including required supplemental readings) that will be used in class discussions will be provided on Canvas.

COURSE OBJECTIVES

This course will provide students with a basic understanding of IT:

- Terminology
- Governance
- Control Frameworks
- Audit Process
- Risks and Risk Management
- General Controls
- Application Controls and Segregation of Duties
- Fraud Prevention and Detection
- Outsourcing and Service Organization Controls Reporting
- Computer Audit Assistance Techniques (CAATS)
- Disaster Recovery and Business Continuity
- Data Privacy
- Cloud Computing
- Cybersecurity

These and other topics will be covered through lectures, readings, case studies and presentations by leading industry practitioners.

EXAMINATIONS AND GRADING

POINTS

Exam #1	125
Exam #2 (not cumulative)	125
Assignments	100
Class Participation and Contribution	<u>50</u>
TOTAL POINTS	400

I DO NOT HAVE ANY FIXED POINT OR PERCENTAGE CUT-OFFS IN MIND REGARDING LETTER GRADES. I WILL MAKE THESE DETERMINATIONS AT THE END OF THE COURSE BASED ON BOTH RELATIVE AND ABSOLUTE PERFORMANCE CONSIDERATIONS.

EXAMS. Exams will emphasize concepts and issues discussed in class, although any material from assigned readings is “fair game” for testing. Exams may consist of a mixture of objective, short answer, and problem questions.

Assignments. Assignments will be posted on Canvas in the relevant class module approximately one week before their respective due dates. All assignments **must be completed independently** by each student (i.e., assignments are **not** group projects).

CLASS PARTICIPATION AND CONTRIBUTION. IT IS NOT ONLY IMPORTANT FOR YOU TO ATTEND CLASS, BUT THAT YOU ALSO ACTIVELY PARTICIPATE. ADVANCE PREPARATION IS CRITICAL TO DO THIS SUCCESSFULLY. CONSEQUENTLY, YOU SHOULD CAREFULLY READ, ANALYZE, AND THINK ABOUT ASSIGNED READINGS BEFORE COMING TO CLASS. FIFTY (50) points will be based on my largely subjective assessment of your cumulative participation and contribution (read carefully the grading criteria below).

Additionally, there may be periodic assignments and quizzes to help ensure your understanding of the course material.

Criteria to earn points for class participation and contribution:

- Ask and answer questions and offer insights during class discussions
- Actively participate in discussions led by guest speakers
- Submit written questions to me in advance (**via e-mail NO later than noon on the Saturday before class**) for guest speakers
- Post questions and insights to Canvas discussion forums
- Answer others' posts to Canvas discussion forums
- Post sample test questions to exam discussion forums based on class presentations (**No later than one week prior to the scheduled exams**)

Both classroom and Canvas participation are important. However, **to earn all of the points available, substantive classroom participation is required**. Attendance also will be considered in determining your participation and contribution score.

If at any point you have a concern about your performance in the course, please come by during office hours or make other arrangements to discuss with me. I will be happy to provide suggestions on how you might improve your performance.

Canvas Discussion Forums

You are strongly encouraged to take advantage of the Canvas discussion forums. Postings can relate to class discussions, assignments, exams, or other topics/issues that are relevant to this course. Substantive Canvas discussion forum participation will be part of your class participation and contribution grade.

Canvas discussion forum ground rules:

- For questions or comments of general interest to the class (i.e., non-personal matters), please use the discussion forums, **not** e-mail. I will **not** consider personal e-mails to me in assigning class participation and contribution grades.
- Such electronic forums are commonly used in business environments so this will provide you with an opportunity to practice professional business communication skills. **Be relevant, constructive, respectful and concise.**
- Add your own insights and contributions and be responsive to comments posted by others.
- Access the discussion forums frequently, including before each class, assignment due dates and exams. I will also use the discussion forums to communicate important announcements and clarifications.

– Bob George

- Special Canvas discussion forums will be established for each exam and assignment. Please use such forums for assignment and exam related questions, **not** e-mail.

Student ISACA Memberships

You are encouraged to become student members of the Information Systems Audit and Control Association (ISACA). Joining ISACA provides access to a wealth of resources about the topics we will cover in class. With student membership, you gain access to articles in the *Information Systems Control Journal*, various IT audit & security toolkits, discounts on ISACA certifications (CISA, CISM), events, conferences, etc. Joining ISACA will also enable making connections with professionals around the world who are currently working and hiring for positions ranging from IT security, audit, control, risk, privacy, compliance and advisory services. To learn more, please check out www.isaca.org/student.

Policy on Missed Examinations and Assignments

Medical emergencies, family emergencies and university-sponsored conflicts are the **only** valid reasons for missing an examination or due date of an assignment. In any such instance, supporting documentation will be required, such as a signed note from a physician. At that point, I will decide the best make-up alternative on a case-by-case basis, which could mean a make-up exam or recalculating the semester grade to omit the missed component. Examinations or assignments that are missed for reasons other than emergencies or university-sponsored conflicts will generally receive no credit. In the case of a university-sponsored event, you must notify me as soon as you are aware of the conflict and **before** the examination date or assignment due date. **Interviews, recruiting events and office visits are not valid reasons for missing an examination or turning in an assignment late.**

Religious Holidays

Religious holidays sometime conflict with examination and assignment schedules. If you miss an examination or assignment due date for the observance of a religious holy day, you will be given an opportunity to complete the work missed within a reasonable time **after** the absence. It is the policy of the University that **you must notify me at least fourteen (14) days prior to the exam or assignment due date that you will be absent to observe a religious holiday.**

University Electronic Mail Notification Policy

Students should become familiar with The University's official e-mail student notification policy. It is the student's responsibility to keep The University informed as to changes in his or her e-mail address. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. It is recommended that e-mail be checked daily. The complete text of this policy and instructions for updating your email address are available at: <http://www.utexas.edu/its/policies/emailnotify.html>.

ACADEMIC HONESTY

Accounting Department Policy:

*The Department of Accounting has **no** tolerance for acts of scholastic dishonesty. The responsibility of both students and faculty with respect to scholastic dishonesty are described*

in detail in the department's Policy Statement on Scholastic Dishonesty in the MPA Program. I have agreed to observe all of the faculty responsibilities described in that document. By

enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification.

The student responsibilities embodied in the department's Policy Statement on Scholastic Dishonesty are consistent with the GSB Honor Code and the University's General Information catalog. However, you should obtain and read the department's Policy Statement to ensure that you understand my responsibilities.

Students with Disabilities

The University of Texas at Austin provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students.

Privacy

Password-protected class sites will be available for all accredited courses taught at The University. Syllabi, handouts, assignments and other resources are types of information that may be available within these sites. Site activities could include exchanging e-mail, engaging in class discussions and chats, and exchanging files. In addition, class e-mail rosters will be a component of the sites. Students who do not want their names included in these electronic class rosters must restrict their directory information in the Office of the Registrar. For information on restricting directory information see:

<http://www.utexas.edu/student/registrar/catalogs/gi02-03/app/appc09.html>.

Campus Safety

Please note the following recommendations regarding The University of Texas at Austin Campus Safety and Security, (512) 471-5767, <http://www.utexas.edu/safety/>:

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation should inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors.
- Do not re-enter a building unless given instructions to do so by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention.
- Behavior Concerns Advice Line (BCAL): (512) 232-5050

ACC 380K.12 (02675) Computer Audit & Systems Security Anticipated Course Schedule Fall 2018

The class schedule is subject to change, based on the needs of students. Assigned readings are identified in this syllabus and can be found in 1) ACC 380K.12 Computer Audit & Systems Security Readings (02675), Fall 2018 (available from the McCombs copy center located on the third floor) and 2) on Canvas. **It is important to remember that other required readings and files will supplement this material and be added from time to time.**

IMPORTANT: Please complete each day's assigned reading **before class** so that you will have the understanding to actively participate in classroom discussions so that you can maximize your learning experience and your class participation grade.

M September 10 CLASS 1 – Grant Thornton

TOPIC: Course Overview/introductions; Introduction to Information Technology Audits

READINGS:

1. Course syllabus
2. IIA Global Technology Audit Guide (GTAG) – 11: Developing the IT Audit Plan (pages 1-22)
3. IIA Practice Guide (PG): Integrated Auditing (pages 1-7)

M September 17 CLASS 2 – Deloitte

TOPIC: IT Risks and IT Auditing

READINGS:

1. GTAG-1: Information Technology Risk and Controls (pages 1-25)
2. GTAG-4: Management of IT Auditing (pages 1-14)

ASSIGNMENT: Case Study #1

M September 24 CLASS 3 – PwC

TOPIC: Auditing General Controls

CASE STUDY #1 DUE AT BEGINNING OF CLASS (ONE PAPER COPY)

READINGS:

1. Guide to the Assessment of IT Risk (GAIT) Methodology: A Risk Based Methodology for Assessing the Scope of IT General Controls (pages 1-28)

ASSIGNMENT: Case Study #2

M October 1 CLASS 4 – Deloitte

TOPIC: Auditing Application Controls and Segregation of Duties

Case Study #2 Due AT BEGINNING OF Class (ONE PAPER COPY)

READINGS:

1. GTAG-8: Auditing Application Controls (pages 1-17)
2. GTAG-14: Auditing User-Developed Applications (pages 1-21)

M October 8 CLASS 5 – E&Y

TOPIC: IT Outsourcing and Service Organization Controls Reporting

READINGS:

1. GTAG-7: Information Technology Outsourcing (pages 1-23)
2. AICPA Statement on Standards for Attestation Engagements SSAE No. 16, Reporting on Controls at a Service Organization (AT sec. 801.1 to sec. 801.58, Appendix A sec. 801.A68 and Appendix B sec. 801.A69)

M October 15 CLASS 6

TOPIC: ***Exam 1***

M	October 22	Class 7 – EY
TOPIC: Cybersecurity		
READINGS:		
<ol style="list-style-type: none"> 1. AICPA Overview of Cybersecurity Risk Management Reporting (2 pages) 2. EY: Cybersecurity Considerations for Audit Committees (8 pages) 3. EY: Cybersecurity Reporting (8 pages) 4. EY: GISS Report (28 pages) 		
M	October 29	CLASS 8 – PwC
TOPIC: IT Fraud & Forensics		
READINGS: GTAG-13: Fraud Prevention and Detection in an Automated World (pages 1-18)		
ASSIGNMENT: Case Study #3		
M	November 5	CLASS 9 – Deloitte
TOPIC: Crisis Management and Business Continuity		
CASE STUDY #3 DUE AT BEGINNING OF CLASS (ONE PAPER COPY)		
READINGS: GTAG-10: Business Continuity Management (pages 1-31)		
M	November 12	CLASS 10 – Protiviti
TOPIC: Data Privacy and PCI		
READINGS:		
<ol style="list-style-type: none"> 1. AICPA Generally Accepted Privacy Principles (pages 1-10) 2. Practice Guide: Auditing Privacy Risks (pages 1-24) 3. Case Studies of Using GAIT-R to Scope PCI Compliance (pages 1-3) 		
ASSIGNMENT: Case Study #4		
M	November 19	Class 11 - NO CLASS WORK DAY
TOPIC: Case Study #4 Work Day and Exam 2 Preparation		
M	November 26	CLASS 12 – Weaver
TOPIC: Cloud computing, mobile computing and data analytics		
CASE STUDY #4 DUE AT BEGINNING OF CLASS (ONE PAPER COPY)		
READINGS:		
<ol style="list-style-type: none"> 1. ISACA: "Cloud Computing: Business Benefits With Security, Governance and Assurance Perspectives," An Emerging Technology ISACA White Paper, 2009 (pages 4-10) 2. ISACA: "Risk Landscape of Cloud Computing," <i>ISACA Journal, Volume 1, 2010</i> 3. GTAG-16: Data Analysis Technologies (pages 2-21) 		
M	December 3	CLASS 13 – Husch Blackwell LLP
TOPIC: IT Laws & Regulations		
READINGS: TBD		
	December 10	Class 14
TOPIC: Exam 2 (NOT CUMULATIVE)		