Course Title: Information Risk Management

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With many participants of the AIS Group at Rutgers

Course Number: 22:10:627:95

Sponsored by Ernst and Young

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Introduction

For reasons that are well known, there is a renewed focus on audit quality in the CPA profession. The PCAOB regulatory regime, the formation of the Center for Audit Quality (CAQ), initiatives at major firms, and other indicators attest to this. The profession is more focused on more effective audit methodologies than it has been for decades.

The development of new methodologies needs to be preceded by basic and applied research that establishes a sound theoretical foundation and demonstrates that they will work. The need for such research represents an opportunity for universities to work with audit firms, software vendors and others.

The following are examples, in no particular order, of the types of areas that are likely to prove fruitful in the field of analytical auditing: Analytical procedures, Other data Analytics, Continuous Auditing Integration, Audit Risk/Assurance Model, Elicitation, quantification and expression of professional judgment, Audit optimization, Fraud detection processes, Systems analysis and internal control evaluation and Smart navigation of GAAP.

Course Description and Objectives:

The goal of this course is to introduce the advance concepts underlying auditing and information risk management. This course is designed to build on the basic principles of auditing / information risk management to help students gain an in depth understanding of the audit process / risk management and develop knowledge needed to understand how accounting information systems work in order to assess their reliability and the reliability of the information captured and disseminated as well as the threats and risks unique to computer information security. When you have successfully completed this course you will be able to:

1. Explain what information risk management is and its applications in practice;
2. Recognize the relationship between risk management and auditing;
3. Describe the risk management process;

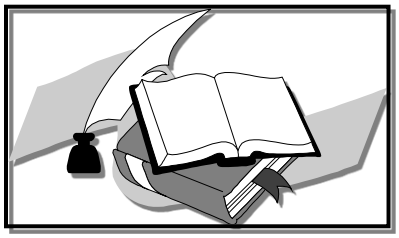
4. Demonstrate how to use major risk management frameworks;
5. Apply risk management tools;
6. Identify how the future of audit / risk management will be;
7. Understand the concept of continuous auditing and reporting and how can they be used in the real cases;
8. Explain how an internal control system and an enterprise risk management system works;
9. Recognize the risk of fraud and the motives and techniques used to perpetrate and prevent or detect fraud in an information systems environment.

Course Structure

This course is an online course, so there is not specific class hour for this course. Classes will be organized by weeks. Course materials as well as discussion topics will be posted online each week on Monday. You can study the course materials and participate in the discussion at any time during the week. You can access the course materials under your individual student accounts at Canvas https://tlt.rutgers.edu/canvas.

NOTE: Most lectures will have a set of slides associated to it. I will post materials on Canvas. However, you must realize that based on how the course progresses I may change those slides somewhat. Furthermore, content evolves rapidly and I may add or subtract content out of the course based on class progress.

Background Textbook References:



We don't assign any specific textbook to this course. All the lectures will have a set of slides associated to it and some of them have corresponding videos. You will be able to see the slides and videos gradually on Monday of each week on Canvas.

Materials will be drawn from many sources including the Internet, professional articles, academic articles, and books. The WWW is the Universal Library. Part of the learning of this course should be to understand how to mine this resource and join it to more traditional sources. Make sure that you reference the materials you draw from the Internet or from other sources.

Grading: A module evaluation will be performed based on:

Class participation	20%
Assignments	25%
Course Project	25%
Final exam	30%

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Class Participation

Online chat room is the primary way for the students to communicate with instructor and each other. Class participation will be evaluated according to students' participation in each week's discussion. Students can participate in the discussion by answering instructor's questions, posting their own questions, and answering the other students' questions in the chat rooms in Canvas. Both the quality and quantity of the questions and answers will be assessed.

Assignments

There will be two individual assignments throughout the semester. The assignments will require you to read some cases related to information risk management and then answer some questions. They should be uploaded to Canvas prior to the deadline.

Class Project (Group Project):

The final project can be of the group's choice but ideally it would be related to this course. It would be something like "Information risk management implications of xxx (my project)". The groups of class project can be gathered voluntarily, and each group should include 1-4 people. As the course is very compact you should start now choosing your group and deciding on the topic. The group has wide latitude to choose but I have to approve the topic. Each group should e-mail me the topic by **March 8th.** The class project should be prepared in the form of a project report as well as PowerPoint slides, and should be uploaded to Canvas before presentations.

Final Exam:

The final exam will be a remote exam and last for three hours: the exam will be sent to students via email, and students need to send back their exams in three hours. For exams you will be responsible for the material covered in the lecture slides and projects. All the students are expected to take the final exam at the same time. If a student has valid excuse which complies with University regulations for missing an examination, the student must inform me and obtain permission to miss the examination before the examination. Failure to obtain the necessary permission will result in a zero grade.

Honor Code and Academic Dishonesty

"I pledge, on my honor, that I have neither received nor given any unauthorized assistance on this examination (assignment)." Students are expected to demonstrate ethical behavior. Students, who raise their GPA by cheating, place honest students at a competitive disadvantage in the job market. Unethical individuals are a cost and an embarrassment to the companies that hire them, to their families, and to the schools from which they graduate. If a school's reputation is damaged because of the unethical behavior of its graduates, potential negative ramifications include reduced employment

opportunities for past and future graduates, reduced quality of future applicants to the school, and reduced financial contributions from alumni and businesses.
Depending on the seriousness, a violation of these policies will result in a failing grade on the assignment, failure in the course, and/or report of the incident to the dean. A link to the Rutgers University policy and guidance on academic integrity can be found at http://academicintegrity.rutgers.edu/integrity.shtml

	Date	Topic	Presenters
1	1/21-1/26	• Introduction – syllabus • Introduction of Information risk management	• Qi Liu
2	1/27-2/2	• Auditing and Risk Management	• Qi Liu
3	2/3-2/9	• Risk Management Framework --- COSO	• Qi Liu
4	2/10-2/16	• Risk Management Process	• Qi Liu
5	2/17-2/23	• Risk Management - Information Security Risk • **Assignment 1 due on 02/23**	• Qi Liu
6	2/24-3/1	• Risk Management – Confidentiality and Privacy Risk	• Qi Liu
7	3/2-3/8	• Risk Management – Processing Integrity and Availability Risk • **Class Project Topic due on 03/8**	• Qi Liu
8	3/9-3/15	• Thoughts on Future of the audit / risk management	• Gerard Brennan
9	3/16-3/22	**SPRING BREAK**	
10	3/23-3/29	• Continuous Auditing &Reporting in public accounting • **Assignment 2 due on 03/29**	• Shiva Goundar-Advisory Services, EY
11	3/30-4/5	• Internal control system (ICS)– Siemens best practice	• Gerard Brennan

12	4/6-4/12	• Key Risk Indicators (KRI's) (IBM Risk Mgmt.)	• Jim Sanders / Fang Yuan
13	4/13-4/19	• Fraud risks and controls the use of automation for investigation, detection & prevention	• Ariel Ramirez – Univ MD Prof, CFE
14	4/20-4/26	• Enterprise Risk Management --- Best Practice in Siemens	Gerard Brennan
15	4/27-5/3	Course project presentation	
16	TBD	Remote Final Exam	