

MIS 5201 IT Audit Process Syllabus

Fall 2019

About the Instructor:

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Class Location and Time:

Course 5201, Section 001, CRN 39567

In Classroom (ALTER, 0A404)

5:30 pm – 8:30 pm, Every Tuesday, Starting **9/3**. (Ref. to Schedule Section below for details)

Course Description

In this course, students will learn the IT auditing life cycle, from information gathering, planning, testing, reporting and issue tracking, etc. Students will also learn the overall IT audit framework and methodology and how IT audit fits into the overall internal audit function. Students will also learn how to develop and implement risk-based IT audit strategies and objectives in compliance with generally accepted audit standards to ensure that the organization's IT assets are adequately controlled, monitored, and assessed, and are aligned with its business objectives. Students will be introduced to basic audit techniques such as sampling methodology and approach, testing procedure developing, evidence gathers, finding analysis and write-ups, communication and escalation.

Course Objectives

1. Develop and implement a risk-based approach in compliance with IT audit standards ensuring that key areas of IT are included.
2. Design specific IT audits to verify whether information systems are protected, controlled and provide value to the organization.
3. Obtain and assess audit evidence that is sufficient, competent, relevant and useful in achieving audit objectives.
4. Analyze the information gathered to identify reportable conditions.
5. Report the results of the audit to key stakeholders and make recommendations; effect change when necessary.
6. Conduct follow-ups and prepare status reports to ensure that appropriate and timely actions have been taken by management.

Required Text Book and Materials

The materials for this course are drawn from multiple sources. Please see below:

- ISACA: Certified Information Systems Auditor, CISA Review Manual 27th Edition, ISBN: 978-1-60420-767-5
- ITAF 3rd Edition (available online for free downloading)
- Global Technology Audit Guide (GTAG) 3 – Continuous Auditing (available online for free downloading)
- Global Technology Audit Guide (GTAG) 4 – Management of IT Auditing (available online for free downloading)
- Global Technology Audit Guide (GTAG) 11 – Developing the IT Audit Plan (available online for free downloading)
- Articles – mostly from the ISACA® Journal and Gartner, Inc.

ISACA Links:

Audit Programs: <https://www.isaca.org/knowledge-center/research/pages/audit-assurance-programs.aspx?cid=1003563&appeal=pr>

ITAF 3rd Edition: <http://www.isaca.org/Knowledge-Center/Research/ResearchDeliverables/Pages/ITAF-3rd-Edition.aspx>

IT Audit Basics: <http://www.isaca.org/knowledge-center/itaf-is-assurance-audit-/pages/is-audit-basics.aspx>

ISACA Whitepapers: <http://www.isaca.org/Knowledge-Center/Research/Pages/White-Papers.aspx>

**Details about the reading assignment will be provided in the class.*

Canvas Site and Announcements

Class materials (notes, presentations, projects, in-class exercises and examples) will be uploaded to the Canvas Site. The URL for the course is:

<https://templeu.instructure.com/courses/63633>

You are responsible for checking the site daily for updates and announcements. You should check the announcements area several times a week.

Evaluation and Grading

Item	% of Total Points
Class Participation	15%
Group Assignments	20%
Case Study	10%
Presentation	20%
Quizzes	15%
Final Exam	20%
Total	100%

Grade Scale

94 – 100	A	73 - 76	C
90 – 93	A-	70 - 72	C-
87 – 89	B+	67 - 69	D+
83 – 86	B	63 – 66	D
80 – 82	B-	60 – 62	D-
77 – 79	C+	Below 60	F

Participation between and during class

Student is expected to attend all classes for this course. It will be the students' responsibility to catch up in case he or she misses a class. To make up the missed class, students should reach out to classmates, check the class blog, find out the homework and team project, etc.

Soft skill sets such as written and oral communication skill is imperative to auditors. Therefore, students are strongly encouraged to participate the classroom discussion and to post thoughts and comments on the class blog for related topics each week.

Reading materials, projects and assignments are selected by instructors to bring the real-world IT audit scenario into the classroom to facilitate the instruction and illustrate the core concepts.

Class Participation

Fifteen percent of the course grade is allocated to the participation. Students will be evaluated based on class attendance, level of preparation, understanding of the core concepts, case study preparation, professionalism and team work. To be specific, students are expected to (a) preview the class materials before the class, familiar with the topics that will be discussed during the class every week. (b) participate the class discussion; demonstrate the understanding of the material and key concepts; show respect by paying attention while other students present their work (c) use the class blog to post your thoughts and comments regarding the assignments and reading material between the class. You are also required to comments on other students' blog entries.

Classroom Ground Rules:

- Arrive on time and stay till the end of the class
- No cell phone calls and texting in the class room
- Respect your classmates using commonsense
- Preview the reading assignment before attending the class
- Bring in questions and make contribution to your team

Group Assignments

Students will form groups to conduct a mock IT Operation audit and present the audit report to the Senior Management and the Board. Details of this project will be provided in the class. Students will also be evaluated how effectively contribute to group assignments. Students are expected to actively participate the group assignments, complete the assigned portion of the write-ups and comments on others deliverables. **Twenty percent** of the grade will be allocated to the group or team project and its presentation.

Case Study

We will study a few cases related to IT service and delivery in real world. Details will be provided during the class. **Ten percent** of the course grade will be assigned to your participation and responses to questions related to case studies.

Presentation(s)

Students will be asked to present specific topics either individually or in group during the class. Detail requirements will be provided during the class. The most important presentation is at the end of the semester, which each group will select an emerging technology and assess the risks and controls associated with this technology while implementing it. **Twenty percent** of the grade will be allocated to those presentations.

Quizzes

To facilitate the CISA examination review, students will take a short quiz using CISA examination preparation questions on weekly basis except for a few weeks during the semester. Students are allowed to miss or drop one quiz during the semester. Additional missed quiz will receive a grade of zero. The average quiz score over the semester will be the grade for quizzes and weighted **Fifteen percent** of the total grade.

Final Exam

The final exam will use all multiple-choice CISA practice examination questions. The exam will be comprehensive and cover everything during the semester. **Twenty percent** of the grade will be allocated to the final exam. Missed finals are in principle not allowed to have make-ups.

Late Assignment Policy

An assignment is considered late if it is turned in after the assignment deadlines stated above. No late assignments will be accepted without penalty.

- The project management simulation and individual report will be assessed a 20% penalty each day they are late. No credit is given for assignments turned in over five calendar days past the due date.
- Case analyses cannot be submitted late under any circumstances. If you miss the deadline, you'll need to choose another case study to submit.
- You must submit all assignments, even if no credit is given. If you skip an assignment, an additional 10 points will be subtracted from your final grade in the course.
- Plan ahead and backup your work. Equipment failure is not an acceptable reason for turning in an assignment late.

Plagiarism, Academic Dishonesty and Citation Guidelines

If you use text, figures, and data in reports that was created by others you must identify the source and clearly differentiate your work from the material that you are referencing. If you fail to do so you are plagiarizing. There are many different acceptable formats that you can use to cite the work of others (see some of the resources below). The formats are not as important as the intent. You must clearly show the reader what is your work and what is a reference to somebody else's work.

Plagiarism is a serious offence and could lead to reduced or failing grades and/or expulsion from the university. The Temple University Student Code of Conduct specifically prohibits plagiarism

Ref. to: <http://www.temple.edu/assistance/udc/coc.htm>

The following excerpt defines plagiarism:

Plagiarism is the unacknowledged use of another person's labor, ideas, words, or assistance. Normally, all work done for courses — papers, examinations, homework exercises, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work. There are many forms of plagiarism: repeating another person's sentence as your own, adopting a particularly apt phrase as your own, paraphrasing someone else's argument as your own, or even presenting someone else's line of thinking in the development of a thesis as though it were your own. All these forms of plagiarism are prohibited both by the traditional principles of academic honesty and by the regulations of Temple University. Our education and our research encourage us to explore and use the ideas of others, and as writers we will frequently want to use the ideas and even the words of others. It is perfectly acceptable to do so; but we must never submit someone else's work as if it were our own, rather we must give appropriate credit to the originator.

Source: Temple University Graduate Bulletin, 2000-2001. University Regulations, Other Policies, Academic Honesty. Available online at:

<http://www.temple.edu/gradbulletin/>

For a more detailed description of plagiarism:

- Princeton University Writing Center on Plagiarism:
http://web.princeton.edu/sites/writing/Writing_Center/WCWritingRes.htm
- How to successfully quote and reference material: University of Wisconsin Writers Handbook
<http://www.wisc.edu/writing/Handbook/QuotingSources.html>
- How to cite electronic sources: Electronic Reference Formats Recommended by the American Psychological Association
<http://www.apastyle.org/electmedia.html>

Student and Faculty Academic Rights and Responsibilities

The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link:

http://policies.temple.edu/getdoc.asp?policy_no=03.70.02

Grading Criteria

The following are the criteria used for evaluating assignments. You can roughly translate a letter grade as the midpoint in the scale (for example, an A- equates to a 91.5).

Grading	Criteria
A or A-	The assignment consistently exceeds expectations. It demonstrates originality of thought and creativity throughout. Beyond completing all of the required elements, new concepts and ideas are detailed that transcend general discussions along similar topic areas. There are few mechanical, grammatical or organizational issues that detract from the presented ideas.
B+, B & B-	The assignment consistently meets expectations. It contains all the information prescribed for the assignment and demonstrates a command of the subject matter. There is sufficient detail to cover the subject completely but not too much as to be distracting. There may be some procedural issues, such as grammar or organizational challenges, but these do not significantly detract from the intended assignment goals.

C+, C & C-	The assignment fails to consistently meet expectations. That is, the assignment is complete but contains problems that detract from the intended goals. These issues may be relating to content detail, be grammatical, or be a general lack of clarity. Other problems might include not fully following assignment directions.
Below C	The assignment constantly fails to meet expectations. It is incomplete or in some other way consistently fails to demonstrate a firm grasp of the assigned material.

MIS5201 IT Audit Process Schedule

	ISACA Topics	Coverage	Notes/Reading/Assignment
Week 1 (9/3)	Introduce to Audit	<ul style="list-style-type: none"> • Class Introduction • Explain Syllabus • Internal & External Audit Overview • Ethic Matters: Arthur Anderson Case Discussion 	<p><i>CISA Review Manual</i></p> <p><i>1.1 IS Audit Standards, Guidance and Code of Ethics</i></p> <ul style="list-style-type: none"> • <i>ISACA Audit and Assurance Standards</i> • <i>ISACA Audit and Assurance Guidance</i> • <i>ISACA Code of Professional Ethics</i> • <i>ITAF</i> <p><i>1.2 Business Process</i></p> <ul style="list-style-type: none"> • <i>1.2.1 IS Internal Audit Function</i> • <i>1.2.2 Management of the IS Audit Function</i> <p><i>Additional Reading:</i> <i>Gartner -</i> <i>it_audit_standards_framework_234810</i> <i>IIA_modelcharter.pdf</i> <i>Internal audit charter.pdf</i></p>
Week 2 (9/10)	IT Audit Function Overview	<ul style="list-style-type: none"> • Announce team memberships • Societe Generale lesson learned • IT Organizational Chart • IT Engagements • Audit Methodology Overview 	<p><i>CISA Review Manual</i></p> <p><i>1.2.5 Business Process Applications and Controls (Overview)</i></p> <p><i>1.2.6 Using the Services of Other</i></p>

		<ul style="list-style-type: none"> • IT Audit and C.I.A Triad • ITAF – A Professional Practice Framework for IT Audit • CISA Worldwide • IT Audit responsibilities • IT Audit Proficiencies and Certifications • IT Audit Phases • Effect of Laws and Regulations on IS Audit • Ethic Matters <p>Video: Basic IT Controls:</p> <p>https://youtu.be/XHuPkkIi6HA</p> <p>Quiz#1 – Audit Charter & AC</p>	<p><i>Auditors and Experts</i></p> <p>Additional Reading:</p> <p><i>Why IT audit is so important.doc</i></p>
Week 3 (9/17)	IT Risk Assessment Using Business Processes and Applications as Examples	<ul style="list-style-type: none"> • Types of Risks • IT Risk Category • Risk Rating • Risk Rating Sample • COSO Framework Introduction <p>Quiz# 2 Risk Assessment</p> <p>Assignment:</p> <p><u>Group Project #1:</u> Business Process/Application Risk Assessment (RAM) (Due 10/1)</p>	<p><i>CISA Review Manual</i></p> <p><i>1.4 Risk Based Audit Planning</i></p> <p><i>1.4.1 Audit Risk and Materiality</i></p> <p><i>1.4.2 Risk Assessment</i></p> <p><i>1.4.3 Risk Assessment Techniques</i></p> <p><i>1.4.4 Risk Analysis</i></p>
Week 4 (9/24)	IT Controls and COBIT5	<ul style="list-style-type: none"> • Types of IT Controls • IT Control Samples • Control Implementation • Control Assessment • COBIT Overview <p><u>Group Assignment #1 in class discussion</u></p>	<p><i>CISA Review Manual</i></p> <p><i>1.3 Types of Controls</i></p> <p><i>1.3.1 Control Objectives and Control Measures</i></p> <p><i>1.3.2 Evaluation of the Control Environment</i></p> <p><i>1.3.3 General Controls</i></p> <p><i>1.3.4 IS-Specific Controls</i></p>

		Quiz# 3 Evidence WebEx Remote Session	
Week 5 (10/1)	IT Audit Planning	<ul style="list-style-type: none"> IT Audit Planning Process IT Audit Universe and Entities Audit Annual Planning Process Understanding Audit Cycle Audit Plan Execution IT Audit Team Roles and Responsibilities IT Audit Planning Documentation <p>Quiz #4 Planning</p> <p>Assignment:</p> <p><i>Class Presentation #1</i> – Prepare an audit scope presentation to Internal Audit Senior Managers for challenge and approval (leverage Group Assignment #1RAM) – Due 10/8</p>	<p><i>CISA Review Manual</i></p> <p><i>1.2.2 Management of the Audit Function</i></p> <p><i>1.2.3 Audit Planning</i></p> <p><i>1.2.4 Effect of Laws and Regulations on IS Audit Planning</i></p> <p><i>1.4.2 Internal Controls</i></p> <p><i>1.4.3 IS Control Objectives</i></p> <p><i>1.4.5 General Controls</i></p> <p><i>1.4.6 IS Specific Controls</i></p> <p><i>1..5 Types of Audits and Assessment</i></p> <p><i>1.6 Audit Project Management</i></p> <p><i>1.6.1 Audit Objectives</i></p> <p><i>1.6.2 Audit Phases</i></p> <p><i>1.6.3 Audit Programs</i></p> <p>Additional Reading:</p> <p><i>IS-Auditing-Tools-and-Techniques-Creating-Audit-Programs.pdf</i></p> <p><i>GTAG 11_Developing IT Audit Plan</i></p> <p><i>GTAG 4 - Managing IT Audit</i></p>
Week 6 (10/8)	Class Presentation I	<p><i>Class Presentation #1: Prepare an audit scope presentation to Internal Audit Senior Managers for challenge and approval</i></p> <p>Guests Panel Challenging</p>	
Week 7 (10/15)		No Class Teaching in BNAI	
Week 8 (10/22)	Control Testing	<ul style="list-style-type: none"> IT Audit Fieldwork Overview IIA and ITAF Performance Standards Use PII in Conducting Engagement IT Control Testing Techniques 	<p><i>CISA Review Manual</i></p> <p><i>1.6.4 Audit Workpaper</i></p> <p><i>1.6.5 Fraud, Irregularities and Illegal Acts</i></p> <p><i>1.7 Sampling Methodology</i></p>

		<ul style="list-style-type: none"> Leadsheets Walkthrough Sample Approach and Sample Methodology <p>Quiz# 5 Evidence (2)</p> <p>Assignment:</p> <p><i>Group Project # 2</i> Prepare flow chart for a business cycle and identify key controls (business and IT) – due 10/29</p>	<p><i>1.7.1 Compliance vs. Sustentative Testing</i></p> <p><i>1.7.2 Sampling</i></p> <p><i>1.8 Audit Evidence Collection Techniques</i></p> <p><i>1.8.1 Interview and Observation Personnel in Performance of Their Duties</i></p>
Week 9 (10/29)	IT Controls and Business Processes	<p>In class room case illustration (Group Assignment #2): Business Process and IT controls (purchasing, payroll, A/P and A/R, wire transfer...etc.)</p> <p>Guest Speaker – Life at public accounting firm</p> <p><i>In Classroom Case Study #1:</i> - The Compliance Journey at Trinity Industries (HBP)</p> <p>Quiz# 6 Sampling</p>	
Week 10 (11/5)	Audit Reporting and Issue Tracking	<ul style="list-style-type: none"> IIA & ITAF Reporting Standards Key Reporting Contents Audit Committee Reporting Common Audit Report Issues Issue Development Issue Tracking Procedures and Approach <p>Quiz# 7 Findings</p>	<p><i>CISA Review Manual</i></p> <p><i>1.10 Reporting and Communication Techniques</i></p> <p><i>1.10.1 Communicating Audit Results</i></p> <p><i>1.10.2 Audit Report Objectives</i></p> <p><i>1.10.3 Audit Report Structure and Contents</i></p> <p><i>1.10.4 Audit Documentation</i></p> <p><i>1.10.5 Follow up Activities</i></p> <p><i>1.10.6 Types of IS Audit Reports</i></p>
Week 11 (11/12)	QA/QC and Control Self-assessment	<ul style="list-style-type: none"> Audit Quality Assurance and Quality Control Control Self-Assessment Objectives CSA Pros. And Cons. Auditors’ Role in CSA process <p><i>In classroom Case Study #2:</i> Liberty Bell Hospital: A Case Study In</p>	<p><i>CISA Review Manual</i></p> <p><i>1.11 Quality Assurance and Improvement of the Audit Process</i></p> <p><i>1.11.1 Control Self-Assessment</i></p> <p><i>1.11.2 Integrated Auditing</i></p> <p><i>1.7 Control Self-assessment</i></p>

		<i>Employee Information Systems Fraud</i>	
		Quiz# 8 Reporting	
Week 12 (11/19)	Continue Auditing & CAATs	<ul style="list-style-type: none"> • What is CAATs? • Why use CAATs? • CAATs Capabilities • CAATs and Data Analytics • Precaution of using CAATs • Sample Data Source for CAATs • CAATs tool and IT audit • CAATs Sample – ACL • Continuous Monitoring and Auditing <p>Quiz #9 CAATs_QA</p> <p>Assignment:</p> <p><i>Class Presentation #2 Present IT Audit Findings to Auditees (12/3)</i></p>	<p><i>CISA Review Manual</i></p> <p><i>1.9 Data Analytics</i></p> <p><i>1.9.1 Computer-Assisted Audit Techniques</i></p> <p><i>1.9.2 Continuous Auditing and Monitoring</i></p> <p><i>1.9.3 Continuous Auditing Techniques</i></p> <p><i>Additional Reading</i></p> <p><i>GTAG 16 Data Analysis Technologies</i></p> <p><i>GTAG 3 - Continuous Auditing Implications for Assurance_ Monitoring_ and Risk Assessment</i></p>
Week 13 (11/26)		<ul style="list-style-type: none"> • Fall Break – No Class 	
Week 14 (12/3)	Class Presentation II	<i>Class Presentation #2 Present IT Audit Findings to Auditees with panel challenging</i>	
Week 15 (12/10)		Study Week or Final on 12/10	
Week 16 (12/17)		Final Exam (optional)	