



**DEPARTMENT OF ACCOUNTING
INTERNAL CONTROLS AND ACCOUNTING INFORMATION SYSTEMS
ACCT-GB.6415
Summer 2015**

Instructor: Prof. Joel Lanz, MBA, CPA/CGMA/CFF/CITP, CFE, CISSP, CISA, CISM

Email: jlanz@stern.nyu.edu or jlanz@joellanzcpa.com (quickest)

Office Hours: Before and after class and by appointment/telephone

Phone: 516-933-3662 (please leave message with alternate times to get back to you – weekend telephone appointments can also be arranged).

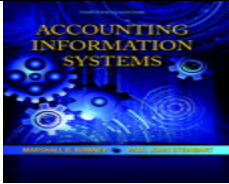

Class Sections of Internal Controls and Accounting Information Systems:

DATES	ACCT-GB.6215 Section #	DAY	TIME	LOCATION
7/6-8/12	70	MW	9:00-11:55	T-UC21
7/6-8/12	71	MW	1:00-3:55	T-UC21



Note: Subject to space limitations and prior instructor and your “homework team” approval, students may attend either section’s lecture. Students may only submit exams in the section that they are registered for.

Course Materials:

The following course materials **are required:**

	(R) “Accounting Information Systems” by Romney and Steinbart, - 13 th ed, Prentice Hall, ISBN-13: 9780133428537.
	(A) “Computerized Auditing Using ACL Data Analytics,” by Arens, Elder and Borsum 3rd Edition (2013), Armond Dalton Publishing, ISBN# 978-0-912503-43-1. NOTE: BE CAREFUL IN BUYING USED AS YOU NEED A UNIQUE CODE TO USE THE SOFTWARE (e.g., Need New Copy).

The following course materials **ARE NOT REQUIRED**. These references can be used by those students who are pursuing the CPA exam and would like to supplement this course with relevant CPA exam review study aids. Please note that I am not endorsing any particular study guide but am referring to it as a general reference that is easily obtained in the market. Should you use a different study guide, I would welcome the opportunity to meet with you and map out the applicable study sections of your guide with the course requirements. PLEASE REFER TO CPA EXAM SECTION BELOW.

	<p>Unfortunately course material is included in two sections of the CPA Exam – AUD and BEC. As a result you would need to get either the comprehensive editions (where summaries and questions are sold separately) or individual sections (where summaries and questions sold together in one book). Try to get the most current versions especially for AUD.</p>
	<p>Primarily geared to the AUD section, this “less expensive” alternative provides questions and solutions to MOST but not all of the CPA exam-related issues covered in this course.</p>

COURSE OBJECTIVES/GOALS:

The purpose of this course is to help prepare you for a successful career in public practice, industry, or government by understanding how to audit, use and participate in the design of accounting information systems. The course will also help students learn how to assess and consider the impact of IT governance, risk and compliance on business and service deliver operations, focusing on how IT affects business process and controls and their impact on financial reporting. The course will enable students to understand issues and developments in Accounting Information Systems (“AIS”) and IT Auditing (“ITA”) so that as practitioners, they can properly determine how to assess accounting system controls to effectively address the adequacy of controls in audited systems or for those systems that they have management responsibility for. Students should also be able to leverage this understanding in contributing to various aspects in acquisition and merger due diligence assignments. Recent regulatory and financial reporting developments will also be discussed. An increasingly competitive global marketplace has organizations clamoring for better information assurance and the additional business development facilitation and performance insight enabled by technology. While IT professionals have the technical expertise necessary to ensure that IT hardware is secure or technology solutions are properly deployed, they lack the Certified Public Accountant (CPA) or financial manager’s perspective and ability to understand the complicated business implications, governance challenges and risks associated with technology.

Information technologies impact every aspect of accounting, including financial reporting, managerial accounting, auditing and tax. The nature of the work done by CPAs and financial managers continues to evolve as these technologies advance. In a number of organizations, the technology function now reports to the Chief Financial Officer (“CFO”) or their designee. The storage of business assets and financial information has led to recent professional pronouncements requiring that accounting professionals understand the technology controls used to process and record this information. As information increasingly becomes digitalized, significant opportunities exist for accounting professionals and their firms to leverage technology tools to become more efficient in performing traditional services and open opportunities for new client services.

Responding to the above opportunities, the AICPA has recently introduced a variety of new assurance services enabling professionals to provide assurance in technology-related environments including Trust Services, Privacy Framework and Risk Advisory. The AICPA has also introduced a specialty credential – Certified Information Technology Professional (CITP) and an Information Technology section.

The course is composed of the following topics and their approximate percentage of course time:

- Conceptual foundations of Accounting Information Systems and flowcharting (20%)
- Control and audit of Accounting Information Systems including Information Security and System Reliability (25%)
- Corporate Governance (including COSO) and Technology Risk Management (20%)
- System Development Process and IT Vendor Management Oversight including System Implementation, Change Control and Operations (10%)
- Application Controls emphasizing the Revenue Cycle (25%)

COURSE REQUIREMENTS AND GRADING:

SEGMENT	% OF GRADE
Professional Behavior and Individual “Value-Add” to Class	5%
Class Participation and Homework (Mostly Team Score)	10%
ACL Exercises (Team Score)	10%
Exam #1 – Foundations and Intro To Fraud	5%
Exam #2 – Pervasive Controls, IT Governance (incl. COSO) and Technology Risk Management	40%
Exam #3 – Application Controls	30%

Grades are determined following the Undergraduate College Grading Guidelines:

A’s – awarded for excellent work

B’s – awarded for good or very good work

C’s (or below) – awarded for adequate or below work.

Re-Grading:

In line with Grading Guidelines for NYU Stern, the process of assigning of grades is intended to be one of unbiased evaluation. This means that students are encouraged to respect the integrity and authority of the professor’s grading system and discouraged from pursuing arbitrary challenges to it.

If a student feels that an inadvertent error has been made in the grading of an individual assignment or in assessing the overall course grade, a request to have the grade be re-evaluated may be submitted. Students should submit such requests in writing to the professor within 7 days of receiving the grade, including a brief written statement of why

he or she believes that an error in grading has been made

Professional Behavior and Individual Value Add To Course :

Students will accumulate points by participating in class by asking questions or by successfully responding to questions posed during class. Points in this category can only accumulate by attending and actively participating in class or contributing to the ACL help forum on NYU Classes.

NOTE 1: Depending on time availability in class, there may not be time for everyone to participate in every session. It is important that you proactively manage your participation and not wait to be called on in order to achieve the maximum grade for this category.

NOTE 2: Students are expected to have completed the reading assignment and attempt assigned problems to the best of their ability prior to class. Students will be at a significant disadvantage during lectures if they do not come appropriately prepared.

NOTE 3: The class time will consist of combined lecture/discussion of chapter material, and review of assigned homework. You (and your team) are expected to contribute to the review of homework.

Class Participation and Homework (mostly team score):

Students will form teams of 4-5 students depending on class registration. The team will complete homework assignments PRIOR TO CLASS LECTURE. The team is also required to revisit their responses after the lecture. Score in this category will be primarily a team score. See Team Homework section below.

Exams:

Further information on the exams will be provided during the semester. Make-up exams will only be given for extremely highly unusual and extraordinary cases of **MEDICALLY DOCUMENTED** emergencies. (NOTE: Under no circumstances will a job conflict qualify for a reason to take a make-up exam without 2 weeks warning). **Any decisions or exceptions to make up exams are at the sole and final discretion of the Professor.**

Exam content and difficulty will be distributed based on the following course and topic distribution:

	EXAM 1	EXAM 2	EXAM 3
DELIVERY METHOD	Online thru NYU Classes	In-person	In-person
DIFFICULTY	Easier – textbook based multiple choice and open book.	Challenging – professional exam level multiple choice	Moderate – professional exam level multiple choice
TOPICS COVERED	Conceptual Foundations, DBMS & Computer Fraud	Pervasive (General) Controls and SDLC	Business Process (Application) Controls
CPA EXAM RELEVANCY	Indirect – Primarily Background. Review of foundations covered in prereqs.	IT and Corporate Governance Topics included in the CPA BEC Exam	IT-related Topics included in the CPA AUD EXAM.

% of GRADE	5%	40%	30%
COMMENTS	Focuses on review of key IT/MIS topics and fraud issues that may have been addressed previously depending on student background.	Focuses on very technical issues relating to cybersecurity, technology operations and system development.	Leverages previous coursework in Auditing focusing on application technology-related risks and mitigating controls.

ACL (Team Submission):

ACL is used by thousands of internal and external auditors to solve audit problems by performing a wide variety of data verification and analysis of data files and to create reports on the analysis. (e.g., Used by more than 250,000 professionals, thousands of organizations, all of the Big Four firms, hundreds of CPA firms, approximately 98% of Fortune 100 firms, many government and not-for-profit organizations).

ACL is suitable for financial auditing by CPA firms, internal auditors, or government auditors, or for operational auditing by internal or other auditors. Both types of uses are extensive in practice. The assigned materials focus heavily on using ACL for financial auditing. The materials are intended to teach ACL, but also to teach and reinforce selected financial auditing concepts. The textbook contains a self-study tutorial on the critical concepts. A few questions in the materials include operational auditing issues.

Students will work thru (primarily self or team study) using the ACL data analysis and Computer Assisted Audit Software. Students will complete required assignments and selected features of the software will be discussed in class as time permits. Further information related to tutorial and assignment requirements will be provided during the semester. Completion of all project materials is expected to take approximately 25-35 hours of out of class effort – FOR THE REQUIRED PROJECT SUBMISSIONS.

Estimate of Time Requirements – ONLY CHAPTERS 1-8 REQUIRED

Chapter	Topic	Approximate Time Required
1	Introduction and software installation	0.5 hour
2	Familiarization	1.5–2.5 hours
3	Practice using filters, computed fields, and key verification commands	2–3 hours
4	Practice using investigative commands	2.5–3.5 hours
5	Practice using Sample command and other commands to manipulate data	2.5–3.5 hours

6	Creating a new ACL project and creating ACL tables to access client data files	2–3 hours
7	Using ACL for Audit Planning (ASSIGNMENT #5 Only)	2–4 hours
8	Using ACL for Tests of Controls and Substantive Tests of Transactions (ASSIGNMENT #3 ONLY)	2–5 hours

Please note that the software is not compatible with MAC computers. Previous students have told me that they used a virtual tool such as Parallels, to complete assignments, but I can not guarantee its compatibility.

TEAM HOMEWORK:

Using the “FORUMS” section of NYU classes, teams will discuss and provide answers to their assigned homework problems. As there are 4-5 members per team, it is expected that team members will be able to “self-check” their answers. Discussions and answers will be available to all section students to facilitate review of chapter and prepare for exams.

In naming the forum, the following naming standard should be used:
Ch #/Assigned Problem/Team Name

So if the course outline reads P1-3 (a-d) (Team A), the forum name assigned should be:

#1/ P1-3 (a-d)/Team A

Thru discussion posts (e.g., Topics) Team A would then contribute its discussions and suggested answers. When a final reviewed and team approved answer is determined, the final answer should be placed in a separate post within the forum with the following topic name:

Final Answer P1-3 (a-d)

GENERAL COURSE NOTICES

Students are expected to attend class and to be thoroughly prepared to discuss the assigned readings and assignments. Professional standards continually evolve and change. As part of their professional development, students will need to learn how to monitor developments and maintain their competencies.

All participants must engage in appropriate professional behavior. Professional behavior is characterized by the following attributes: prompt arrival to class, courteous behavior in class (i.e., being attentive while others are speaking, dedicating your

attention to this class while the class is in session, leaving class at the designated time, etc.), and professional preparation for class. To prepare for class professionally, you should read the assignments prior to class, prepare assigned problems, engage in class discussion, and actively participate in group activities.

Consider the following additional points as you prepare for class:

- You should be prepared to discuss all readings on the dates assigned. We will not have enough time to cover everything that is important in the class, so you must take the initiative to raise questions on material that you do not understand.
- As clients expect from a licensed professional and their practice, appreciate the effort required to properly prepare for class.
- Leverage group study and automated tools to manage your time. As in the real world, you are encouraged to “network with your peers” as necessary (except for exams which should be done individually only) to prepare for and complete assignments – both in-person and using discussion boards.
- I will not be using powerpoints – but I have arranged for all classes to be recorded. Recorded classes are usually available within 24 hours. If there is a particular aspect of the lecture that you wish to rehear, note the time in your notes as this will facilitate your ability to access that particular aspect of the lecture.
- During the lectures we will walk through and reference the textbook. As a result, please bring the textbook to all classes unless otherwise instructed.
- Since we will not be using powerpoints, I will also provide you with a manual for each chapter that will assist you in following classroom discussions and presentations. The manual will summarize key aspects of the chapter and thus lecture, but not all details of the lecture. At your option, you may use these to facilitate your note taking.

Use of Electronic Devices in Class

While electronic/wireless devices can enhance the teaching and learning experience, they can also be a potential source of distraction to students, instructors, and the classroom setting. In keeping with the opportunistic aspects of technology that serves as the course theme, these devices will be permitted subject to the following terms:

Students are welcome to use electronic devices during class that enhance their performance. However, the use of these resources must be “appropriate” for an academic setting. Examples of appropriate use during class include note taking on laptops or tablets; use of smartphones to calendar events/assignments; use of devices to complete quick internet searches for pertinent information. If students engage in “inappropriate” use of electronics within the class, then their right to use these devices in the future will be removed. Examples of inappropriate use include but are not limited to texting your friends or reading “non-AIS” texts while in class; sending emails/texts (an occasional and very limited “read” is permitted as long as not abused), surfing the net for non-class purposes (e.g., Facebook, LinkedIn and other social media). Additionally, as class lectures will be recorded in accordance with University practices, individual recordings of any type of class lecture (video or audio) is prohibited.

If these are ongoing issues with numerous students, I will remove the privilege from all students to ensure the necessary standards of an academic setting. Lack of compliance with these terms will impact the student's grade.

Academic Integrity:

Integrity is critical to the learning process and to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Stern Student Code of Conduct, which includes a commitment to:

- Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
- Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
- Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

NYU STERN Policies:

- Unless specifically identified in the syllabus, default Stern policies apply to this course.
- The School expects that students will conduct themselves with respect and professionalism toward faculty, students, and others present in class and will follow the rules laid down by the instructor for classroom behavior. Students who fail to do so may be asked to leave the classroom.
- Students are encouraged to work together for homework assignments.
- Course evaluations are important to us and to students who come after you. Please complete them thoughtfully.
- Your class will be recorded for educational purposes.
- The entire Stern Student Code of Conduct applies to all students enrolled in Stern courses and can be found at:
 - Undergraduate College: <http://www.stern.nyu.edu/uc/codeofconduct>
 - Graduate Programs: http://w4.stern.nyu.edu/studentactivities/involved.cfm?doc_id=102505

Student Contact Information:

Student contact information must be kept current in order to receive important notices from the school and from me. Your contact information is **online via your NYU Learns course e-mail**. Please check your local address, local phone number, and emergency

contact information on the school's Web and revise as needed. All important class notices, including class communications, will be sent only to your NYU Classes email address.

STUDENTS WITH DISABILITIES

If you have a qualified disability and will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Students with Disabilities (CSD, 998-4980, www.nyu.edu/csd) verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation.

GENERAL COURSE ADVICE:

Many Accounting majors find the subject matter of this course difficult. Former students (as well as my own observations) have identified and provided the following suggestions to enhance your ability to succeed in this course.

AIS differs from other accounting courses as it is not financial or numerical based. This will require that students adapt a different study process than what might have worked well for them in other accounting courses. Consider leveraging study techniques used in Management, MIS and Economics courses in developing your study plan.

Relating to the proposed CPA Exam revisions (estimated 2017), invitation to comment respondents support the consideration of testing higher-order skills beyond basic content knowledge, i.e., critical thinking, problem solving, analytical ability and professional skepticism. The AICPA is increasing its assessment of these higher-order skills throughout each section of the Exam. As a result, Exams #2 and #3 will reflect these testing considerations. You will need to demonstrate the ability to apply course contents – not just memorize and understand.

Review answers to chapter discussion questions (provided by professor) as well as answers provided to end of chapter problems by the TEAMS. This will help develop your ability to apply what you are learning.

DON'T BE SHY – CONTACT ME IF HELP IS NEEDED. Appointments available before and after class (in-person), weeknights and weekends (yes, weekends!!!) – via telephone. Alternatively, just call my number anytime, and if available I will respond. If leaving a message provide 3 alternative times (and send email – so that I can respond back) so that we can agree on time.

COURSE SCHEDULE

LECT #	TOPIC, ASSIGNMENT, AND NOTES
<p>Mo. Jul 6 (#1)</p>	<p>Topic: Class Introduction Topic: Introduction to AIS Topic: ACL Tutorial</p> <p>Readings: Chapters 1</p> <p>Lecture Notes: Class will begin with a course introduction and review of the syllabus. We will also review the role of the AIS professional in the business community both within CPA firms and corporations. We will discuss relevant professional associations (e.g., AICPA, ISACA and IIA), their websites and a sample of critical websites relating to AIS that AIS practitioners should be aware of (e.g., center for internet security, COSO). The class will also introduce the students to the ACL tutorial. During break, students will register for Homework/ACL teams (approx.. 4-5 per team – max. # of teams for the section is 7).</p>
<p>We. Jul 8 (#2)</p>	<p>Topic: Overview of Transaction Processing & ERP Topic: Computer Fraud Topic: Flowcharting</p> <p>Readings: Chapters 2, 5 and 3.</p> <p>Note: These are background/review chapters reflecting information that depending on the individual’s background, may have been covered in previous coursework. <u>Please “skim” the chapters based on your individual need and background.</u> Further lectures and assignments (as well as Test #1) assume you understand the foundation concepts included in these chapters.</p> <p>Optional - For those seeking an additional foundation in the concepts of fraud, consider reviewing “AU 316: Consideration of Fraud in a Financial Statement Audit.”</p> <p>Optional – A more comprehensive guide to fraud risk assessment including sample guidance and templates to assess fraud risk is contained in – “Managing the Business Risk of Fraud: A Practical Guide,” available at http://www.acfe.com/uploadedfiles/acfe_website/content/documents/managing-business-risk.pdf.</p> <p>Optional – Textbook problem 2-7 invites you to visit the SAP and Oracle websites to learn more about these two significant ERP solutions. Their websites may be a little difficult to navigate, but if you search for videos and whitepapers, you will be able to get a better understanding of the products provided.</p> <p>Lecture Notes: We will start with a VERY fast-paced SUMMARY lecture by chapter, quickly reviewing the most critical, but not all of the concepts that will provide a foundation for the rest of the course. We will VERY briefly review flowcharting and how it is used to document our understanding of business processes. The focus will be on reading rather than developing flowcharts. The primary purpose of today’s lecture will be to review critical MIS/IT and Fraud to better understand future lectures and course content.</p>

	<p>Team Homework: P1-3 (a-d) (Team A); P 2-1 (Team B); P2-3 (Team C); P 2-5 (Team D); P 2-6 (Team E); P 2-8 (Team F); Case 1-1 (Team G); P 5-1 (Team A); P 5-2 (Team B); P 5-3 (Team C); P 5-4 (Team D); P 5-5 (Team E); P 5-6 (Team G); P 5-8 (Team F)</p> <p>Be Prepared to Discuss in Class Problems (Romney): P1-3 (a-d); P2-1; P2-5; P5-8. Case 1-1 (prepare to discuss no report needed).</p> <p>Optional - CPA Exam Review (Gleim): SU 22.1-22.5; SU3.3, 3.6 & 3.7.</p> <p>Optional - CPA Exam Review (Wiley): Module 2A (Fraud Only); Module 41A.</p>
Mo. Jul 13 (#3)	<p>Topic: Relational Databases Topic: Database Design Using the REA Data Model</p> <p>Reading: (R) Chapter 4 and 17 (pp. 502-507 only).</p> <p>Notes: Today's lecture will provide a VERY BRIEF discussion on relational databases providing a foundation for student understanding of how accounting information is stored in today's accounting information system. We will also introduce the use of REA data models.</p> <p>Additional Note: These are two very technical chapters. Students should focus on obtaining a high level appreciation of the concepts presented so that they can better understand the functioning of an AIS and how to more effectively use data analysis tools. Detail understanding of the chapters will not be included on the exams (but high level summary and appreciation of concepts presented in Chapter 4 will).</p> <p>Be Prepared to Discuss in Class Problems (Romney): P4-1(do not test), P4-4, D17-3, D17-8, P-17-1. (Note: All teams to work on these problems – no online submission required).</p> <p>Optional: Microsoft provides a free online tutorial that introduces the fundamentals of the MS-Access software. It is available at http://office.microsoft.com/en-us/training/get-to-know-access-RZ006118141.aspx</p>
Online	<p>Exam #1 taken online (open book and open notes). Forty (40) minutes to complete 33 multiple choice questions. Test scope is lecture 1-3. Due Friday July 17 @ 11:00 PM Eastern Time.</p>
We. Jul 15 (#4)	<p>Topic: Corporate Governance and Technology Risk Management</p> <p>Readings: Chapter 7 and 10. Readings: COSO "Internal Control – Integrated Framework: Executive Summary," COSO, May 2013. Available at http://www.coso.org/documents/990025P_Executive_Summary_final_may20_e.pdf.</p> <p>Readings: The CPA Journal "Conducting Information Technology Risk Assessments," May 2015.</p> <p>Optional – To find out more about CoBIT 5 visit http://www.isaca.org/cobit/pages/default.aspx.</p> <p>Optional – "COSO in the Cyber Age, 2015, available at http://coso.org/documents/COSO%20in%20the%20Cyber%20Age_FULL_r11.pdf.</p> <p>Optional: "Improving Organizational Performance and Governance: How the COSO Frameworks can Help," COSO, February 2014. Available at http://www.coso.org/documents/2014-2-10-COSO%20Thought%20Paper.pdf.</p> <p>Lecture Notes: Today's lecture will introduce students to Corporate Governance and Technology Risk Management. We will then discuss the use of frameworks used to facilitate the design and assessment of corporate governance, including recently updated versions of COSO and CoBIT, and the COSO approach to Risk Management as well as a high level overview of the ISO, ITIL and Octave Standards. A quick summary of the more common IT controls that CPAs are most likely to consider will also be provided.</p>

	<p>Team Homework: P7-1 (Team A); P7-2 (Team B); P 7-3 (Team C); P 7-4 (Team D); P 7-6 (Team E); P 7-8 (Team F); P 7-9(Team G); P 10-1 (Team G); P 10-7 (Team F); P 10-8 (Team E); Case 10-1-Aticle 1 (Team D); Case 10-1-Article 2 (Team C); Case 10-1-Artilce 3 (Team B); Case10-1-Artcle 4 (Team A).</p> <p>Be Prepared to Discuss in Class Problems (Romney): P10-7-3, P7-4, P10-7, P10-8.</p> <p>Optional - CPA Exam Review (Gleim): SU 22.10-12, SU 5.1-5.2, SU 5.4.</p> <p>Optional - CPA Exam Review (Wiley): Module 40, 41D.</p>
<p>Mo. Jul 20 (#5)</p>	<p>Topic: Cybersecurity and Privacy</p> <p>Readings: Chapters 8 and 9.</p> <p>Business Week: ‘Missed Alarms and 40 Million Stolen Credit Card Numbers: How Target Blew It,’ March 13, 2014.</p> <p>The CPA Journal: “Cybersecurity Governance: The Role of the Audit Committee and the CPA,” November 2014.</p> <p>Optional – For those seeking further guidance and reference on the impact of Cybersecurity and Business, please refer to the Harvard Business review Insight Center “Data Under Siege,” at http://hbr.org/special-collections/insight/data-under-siege.</p> <p>Optional – For those seeking practical technology guidance to more effectively design Cybersecurity defenses please refer to “The Critical Security Controls for Effective Cyber Defense – Version 5,” available at http://www.sans.org/critical-security-controls/controls.</p> <p>Optional – The SEC’s OCIE Cybersecurity Initiative available at http://www.sec.gov/ocie/announcement/Cybersecurity+Risk+Alert++%2526+Appendix++4.15.14.pdf.</p> <p>Optional – For those seeking further guidance on future cybersecurity framework and expected baseline practices refer to “Executive Order 13638: Cybersecurity Framework,” available at http://www.nist.gov/cyberframework/.</p> <p>Optional – Problem 8-2 introduces the Secunia tool that can be installed on Windows machines to identify vulnerabilities (patches and updates not applied). It also references sources to harden other operating systems (e.g., MAC).</p> <p>Optional – Although I did not assign Case 8-1, the referenced article provides significant practical guidance on change controls and overall performance. Those of you going into Risk Advisory practices should read the article.</p> <p>Lecture Notes: Today’s lecture will discuss some of the more technical aspects of the course. In addition to learning some of the relevant “jargon” used to describe various hacking techniques, students will gain an appreciation of the risks of Cybersecurity and the mitigation strategies employed. The lecture is designed to inform students about the key risks and challenges in managing critical information security risks. These risks continue to attract the attention of the Board as well as regulators. For example, The Securities and Exchange Commission continues to monitor how the CPA profession and the financial reporting community should address security breaches and the risks of conducting digital commerce to various stakeholders.</p> <p>Team Homework: P 8-1(Team F); P 8-3 (Team G); P8-4 (Team E); P 8-5 (Team D); P 8-7 (Team C); P 8-9 (Team B); P9-1 (Team A).</p> <p>Be Prepared to Discuss in Class Problems (Romney): P8-4.</p> <p>Optional - CPA Exam Review (Gleim): SU 22.6, 22.9 and 22.12.</p> <p>Optional - CPA Exam Review (Wiley): Module 41B.</p>

<p>We. Jul 22 (#6)</p>	<p>Topic: IT Auditing Techniques Topic: Introduction to SDLC</p> <p>Readings: Chapters 11 and 20.</p> <p>Notes: Today’s lecture will consist of two distinct sections. The first section will summarize the IT Audit process and focus on the assessment of general or pervasive controls. A review of how audit software may be used in the audit process will also be discussed. We will also discuss how organizations use application security to enforce segregation of responsibilities. The second section will be to provide students with a “businessperson’s understanding” of the systems development life cycle (SDLC) with specific application to analysis of systems.</p> <p>Optional – Students interested in learning more about the SDLC process should consider reading chapter 21 and those interested in furthering their knowledge of pervasive or general controls read chapter 22.</p> <p>Optional – Those students seeking to further their understanding of IT Auditing should review the IT Audit Basics column published since 2002 by ISACA. These articles are classified by subject area and are available at http://www.isaca.org/Knowledge-Center/ITAF-IS-Assurance-Audit-/IT-Audit-Basics/Pages/IT-Audit-Basics-Articles.aspx.</p> <p>Optional – For a businessperson’s perspective on IT Risk, consider reading “IT Risk: turning Business Threats into Competitive Advantage,” by George Westerman and published by Harvard Business School Press, 2007.</p> <p>Team Homework: P 11-1 (Team A); P 11-2 (Team B); P 11-3 (Team C); P 11-4 (Team D); P 11-5 (Team E); P 11-9 (Team F); P 11-10 (Team G); P11-11 (Team A); P 20-1 (Team B); P 20-2 (Team C); P 20-8 (Team D); P 20-9 (Team E); P 20-10 (Team F); P20-11 (Team G).</p> <p>Be Prepared to Discuss in Class Problems (Romney): P11-5, P11-11, P20-2, P20-9.</p> <p>Optional - CPA Exam Review (Gleim): SU 22.7-8, SU 5.5.</p> <p>Optional - CPA Exam Review (Wiley): Modules 8, 41E and F.</p>
<p>Mo. Jul 27 (#7a)</p>	<p>EXAM #2 – In class exam closed book/notes. Seventy Five Minutes (75) Minutes to complete 50 multiple choice questions.</p>
<p>Mo. Jul 27 (#7b)</p>	<p>Topic: Introduction to Lecture #8. No homework or class preparation due today.</p>
<p>We. Jul. 29 (#8)</p>	<p>Topic: Revenue Cycle Reading: (R) Chapters 12</p> <p>Optional: Although beyond the scope of this course, students should be aware of a significant accounting change relating to revenue recognition. See guidance from the AICPA for additional details. A learning and implementation plan is available at http://www.aicpa.org/interestareas/frc/accountingfinancialreporting/revenuerecognition/downloadabledocuments/2014-09_liplan.pdf.</p> <p>Optional: Students desiring a more comprehensive understanding of how revenue fraud is committed in financial statements should consider reading (book) “Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud In Financial Reports,” by Schilit and Parker, McGraw-Hill 2010.</p> <p>Notes: Today’s lecture will provide a detailed walk-through of one of the most important cycles that students are likely to be involved with early in their professional careers. The lecture will build on</p>

	<p>the non-IT understanding of cycles that students obtained in previous courses (including Auditing). Our emphasis will be on threats and controls that can be implemented to reduce and manage risk to acceptable levels. A high level discussion of how flowcharts can be used to document and communicate internal control understandings will also be discussed. Due to the nature of the material, the lecture will closely follow the illustrations provided in the textbook.</p> <p>Team Homework: P12-1 (Team E); P12-2 (Team F); P12-3 (Team G); P12-7(a) (Team D); P 12-8(a) (Team C); P 12-9 (Team B); P 12-10 (Team A); P12-11 (Team E); P12-14 (Team F). Be Prepared to Discuss in Class Problems (Romney): P12-7(a), 12-8(a), 12-9, 12-10, 12-14 Optional - CPA Exam Review (Gleim): SU 6, SU 11. Optional - CPA Exam Review (Wiley): Modules 3D, 4B and C (revenue cycle only for all three).</p>
Mo. Aug. 3 (#9)	<p>Topic: Expenditure Cycle</p> <p>Reading: (R) Chapters 13</p> <p>Notes: Today's lecture will provide a detailed walk-through of the second most important cycles that students are likely to be involved with early in their professional careers. The lecture will build on the non-IT understanding of cycles that students obtained in previous courses (including Auditing). Our emphasis will be on threats and controls that can be implemented to reduce and manage risk to acceptable levels. A high level discussion of how flowcharts can be used to document and communicate internal control understandings will also be discussed. Due to the nature of the material, the lecture will closely follow the illustrations provided in the textbook.</p> <p>Team Homework: P13-1 (Team G); P13-2 (Team A); P13-4 (Team B); P13-7 (Team C); P13-8 (Team D); P13-10(a, b and c) (Team E); P13-11(a) (Team F); P13-12 (Team G). Be Prepared to Discuss in Class Problems (Romney): P13-7, P13-8, P13-10(a, b and c), P13-11(a), P13-12. Optional - CPA Exam Review (Gleim): SU 7, SU 12. Optional - CPA Exam Review (Wiley): Modules 3D, 4B and C (expenditure cycle only for all three).</p>
We. Aug. 5 (#10)	<p>Topic: Production Cycle Topic: Human Resource Management and Payroll Cycles</p> <p>Reading: (R) Chapters 14 and 15</p> <p>Notes: This lecture will review the manufacturing process and the payroll process. Emphasis will be placed on the accumulation of Direct Labor Costs. The payroll cycle will also address some of the more common frauds likely to be encountered in this area.</p> <p>Team Homework: P14-1 (Team A); P14-2 (Team B); P15-1 (Team C); P15-2 (Team D); P15-4 (a and b) (Team E); P15-9 (Team F). Be Prepared to Discuss in Class Problems (Romney): To be determined Optional - CPA Exam Review (Gleim): SU 7 and SU 12 Optional - CPA Exam Review (Wiley): To be determined</p>
Mo. Aug. 11 (#11)	Topic: Reserved for Guest Speaker
We. Aug. 12 (#12)	EXAM #3 In class exam closed book/notes. Seventy-Five (75) Minutes to complete 50 multiple choice questions.