

ACCT 371 – Introduction to Accounting Systems

Course Syllabus Spring Semester 2020

Location: – ACC 303
Class Sessions – Tu & Th: 12:00 pm to 1:50 pm (Sec # 14040; 4 units)
 – Tu & Th: 2:00 pm to 3:50 pm (Sec # 14041; 4 units)
 – Tu & Th: 4:00 pm to 5:50 pm (Sec # 14042; 4 units)

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Office Hours: Tu & Th: 11am – 12pm; 6 – 6:30pm; and by appointment

Course Description

The purpose of this course is to provide undergraduate accounting students with a working understanding of: 1) accounting system concepts and their practical execution; 2) common end-to-end business processes organizations perform during their operating cycles (e.g., order-to-cash; procure-to-pay; record-to-report); 3) the capture, recording, and analysis of operating cycle data to support management decision making and external reporting; and 4) the technologies and leading practices that help monitor and control operating cycle risks from management and compliance perspectives.

The course methodology leverages three interdependent phases and is executed in a client-based project format as follows:

- In the first phase your role will be that of a business / financial systems analyst (*Los Angeles annual salary range \$76k to \$112k; Salary.com, January 2020*). You will learn a series of concepts that will enable you to: describe what an information system is; recognize the types of systems businesses use to support operations and analysis (e.g., accounting, planning, sales, purchasing, analytics, etc.); and understand how businesses utilize these systems to capture and analyze data to support decision making and reporting.
- In the second phase your role will be that of a solutions architect (*\$115k to \$182k*). You will design leading practice revenue and expenditure cycle solutions for organizations within selected industries (i.e., financial services, healthcare, and product/service distribution). You will accomplish this by choosing an organization from one of the selected industries, performing a data / information analysis of its revenue and expenditure cycles, and developing related future state solution designs that provide both operational support and management oriented analytical understanding.
- In the third phase your role will be that of a systems architect (*\$137k to \$167k*). You will convert your solution designs into a technical solution to support business operations, improved analytics, and regulatory compliance. You will accomplish this by leveraging your solution designs to develop: a supporting data model and data inventory to support operations and related analytical controls; a detailed chart of accounts (COA) based on KPIs and management's analytical requirements; risk and control matrices (RCMs) for significant business processes; and security and access controls to safeguard sensitive data.

After completion of your project at the end of the semester, you will use your newly acquired skills to evaluate another team's project. Your responsibility will be to evaluate their project for adherence to the leading practices presented in class as well as applicability to the project target company. In addition, key review focus areas should include the solution's efficiency, effectiveness, planned controls, data quality, information security, supporting data analytics, and designed KPIs value to management.

In addition, during the course you will work with a cross-team group to facilitate a discussion on a technology oriented research topic important to accounting executives. Topics for these presentations are:

Robotic Process Automation (RPA)	(February 6 th)
Process Mining & Monitoring (Process Analytics)	(February 20 th)
Machine Learning (Artificial Intelligence)	(February 27 th)
Blockchain (Data Security and Quality)	(March 31 st)
Business Intelligence (Data Analytics)	(April 7 th)
Cybersecurity (Process Security and Privacy)	(April 14 th)

As a minimum, each presentation will be expected to include: a description of the technology; an explanation of what the technology does and its limitations (or what it does not do); how long it typically takes to for an organization to implement the technology; and, how much the technology typically costs to adopt. In addition, the presenting team will be expected to provide a minimum of three business-based “Use Cases” that demonstrate the applicability of the technology to a modern business enterprise.

Please note this is not a traditional ‘read’, ‘lecture’, ‘practice problems’ and ‘test’ class as this is not the way accomplished people in our profession conduct their work. Our profession is too dynamic and requires too much adaptability, resourcefulness and judgement for that learning method to result in the skills required for long-term career success. During your client-based project engagements, you will be continuously learning just to keep up. If you decide to focus on a career involving accounting / information systems, you will be paid for your ability to: 1) gather information; 2) analyze situations; 3) develop a variety of potential solutions; 4) come up with a great answer; and 5) make it work! 😊

Learning Objectives

Upon completion of this course, you should be able to:

- Identify and document the kind of data captured, created, stored, transformed and transmitted by accounting and business functions as part of an organization’s revenue and expenditure cycles by creating data flows using leading practice documentation techniques. (*Leventhal Learning Goal(s) 1,5, 6*)
- Describe the activities, tasks and systems utilized by organizations to support the execution, recording and reporting of revenue transactions by generating business process maps. (*Leventhal Learning Goal(s) 2, 5, 6*)
- Describe the activities, tasks and systems utilized by organizations to support the execution, recording and reporting of expenditure transactions by generating business process maps. (*Leventhal Learning Goal(s) 2, 5, 6*)
- Identify and describe the database structures necessary to support the recording and reporting of accounting transactions for an organization’s revenue and expenditure cycles by creating an enterprise database design using leading practice data modeling techniques. (*Leventhal Learning Goal(s) 1, 2, 5, 6*)
- Identify and describe the detailed data objects necessary to support the recording and reporting of accounting transactions for an organization’s revenue and expenditure cycles by developing a data inventory detailing the data captured, stored and transmitted within an organization’s enterprise database design. (*Leventhal Learning Goal(s) 1, 2, 5, 6*)
- Identify and explain the security and privacy requirements associated with an organization’s revenue and expenditure cycles by producing a sensitive access based security access matrix for documented revenue and expenditure processes. (*Leventhal Learning Goal(s) 2, 3, 5*)
- Identify and explain the business risks and mitigating controls associated with an organization’s revenue and expenditure cycles by producing a risk and control matrix for documented revenue and expenditure processes. (*Leventhal Learning Goal(s) 2, 5, 6*)
- Explain the efficiency and effectiveness of revenue and expenditure process designs by auditing another team’s project documentation and producing a management report that identifies significant risk areas and contains actionable recommendations for process, data and / or system improvement. (*Leventhal Learning Goal(s) 4, 5*)

To achieve these learning objectives, a combination of background reading, interactive discussion / lecture and practice cases will be utilized. Please note the most important word in the sentence above is “interactive.” The reason is that research on learning indicates it is very difficult to gain anything more than a superficial understanding of material without practice and feedback. Therefore, you should expect our class sessions to incorporate a substantial amount of both.

To demonstrate your achievement of the learning objectives stated above: 1) you will be required to demonstrate your knowledge by individually answering questions and working problems during exams; and 2) you will be required to participate in completing team and group assignments and project deliverables throughout the semester.

Required & Supplemental Materials

The following books and support materials are available in the bookstore and online:

- Romney, M.B.; Steinbart, P.J., (2016) *Accounting Information Systems, 14th Ed.* New York: Pearson (978-0134474021)
- Microsoft Corporation's *Project, Access and Visio* (Other tools may be substituted with instructor approval such as *MySQL* and *Lucidchart*.)
- *KnowledgeLeader* is a subscription-based website that provides audit programs, checklists, tools, and training to help risk management professionals save time, manage risk, and add value. A link to sign up for access will be provided via Blackboard during the first week of class.

Feel free to purchase the required text online as this can result in some cost savings. However, if you choose to obtain the book or supporting materials online, please be aware that you are responsible for making alternative arrangements for completing all readings and advance preparation until the books arrive.

Prerequisites and Recommended Preparation

The formal prerequisites for this course are:

- BUAD 281 or BUAD 285b or BUAD 286b or BUAD 305
- A minimum grade point average of 2.7 must have been earned in previous accounting courses. (See LSOA Grading and Academic Standards for further information.)

A working knowledge of personal computers is expected. If at any time you would like a refresher on basic computer concepts, specific software functionality, or other topics that come up during the course, you can access <https://itservices.usc.edu/lynda/> for helpful information.

In addition to the formal and informal prerequisites above, regularly reading a general business periodical or newspaper's business section will aid in your accounting education. To this end, the Wall Street Journal can be purchased at a discounted student rate at www.wsjstudent.com.

Lastly, as a junior level class, my expectation is you will incorporate the knowledge you have acquired in other business classes (e.g., accounting, communications, organizational behavior, finance, marketing, operations management, etc.) or through work / life experience (e.g., internship, volunteer, job) in any answer you provide during class sessions and in competition of your course projects.

Course Notes

Distributed materials and other class information will be available through your Blackboard account.

Grading Policies

Your grade in this class will be determined by your relative performance on a pair of exams, a project acceptance presentation, project design documentation, a peer project evaluation, and class participation. The total class score will be weighted as follows:

	Points	Weight	
Exam I	100	25%	(Individual)
Exam II	100	25%	(Individual)
Preparation Documentation	TBD	10%	(Individual)
Status Reports & Attachments	30	5%	(Project Team)
Technical Presentation	10	5%	(Technical Group)
Project Presentation & Documentation	10	20%	(Project Team)
Peer Project Documentation Review	10	10%	(Project Team / Individual)

After each student's weighted total points are determined for the semester, letter grades will be assigned on a curve according to Leventhal School of Accounting grading guidelines.

Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Historically, the average grade for this class is about a 3.3 (i.e., B+). Three items are considered when assigning final grades:

1. Your score for each of the items above weighted by the appropriate factor and summed.
2. Your overall percentage score for the course.
3. Your ranking among all students in the same course(s) taught by your instructor during the current semester.

The grade of "W" is allowed only if a student withdraws after the official add period and before the end of the drop period during the semester. The grade of incomplete (IN) can be assigned only if there is work not completed because of a documented illness or unforeseen emergency occurring after the drop period of the semester that prevents the student from completing the semester. An "emergency" is defined as a serious documented illness, or an unforeseen situation that is beyond the student's control, that prevents a student from completing the semester. Prior to the end of the drop period, the student still has the option of dropping the class so incompletes will not be considered. Arrangements for completing an IN must be initiated by the student and agreed to by the instructor prior to the final examination. All work required to replace the IN with a final grade must be completed within one calendar year from the date the IN was assigned. If the student does not complete the work within the year, the IN will automatically be converted to a grade of F.

Assignments and Grading Detail

Expectations regarding your performance on exams, class preparation, status reports, technical presentations, project presentation and documentation and peer project review are as follows:

Exams

Exams may include: multiple-choice questions, short answer / brief essay questions, problems, and cases. Preparing for exams involves dedication and ends only when you can: 1) identify the relevant issues in a given business situation; 2) describe the data and transform it into information to be used in a comprehensive answer; and 3) explain what you did using techniques demonstrated in class. The best bet for success involves a number of steps. First, is making sure you do the advanced preparation for each class session. Second is reworking problems / cases done in class and trying other / additional problems. Third is making sure you ask questions in a real-time manner to solidify your understanding of the material as we go, rather than trying to 'get it' right before an exam. Remember, on exams you will be required to perform all work (e.g., problem setup, solution generation, and answer presentation) on your own.

The exam and critical deliverable dates for this semester are as follows:

Exam I	Thursday	March 5 th
Exam II	Thursday	April 23 rd
Final Deliverable	Thursday	May 7 th

During the semester, each exam will be returned no more than one week after it has been given. After each test is returned there is a one-week reflection period and then you will have one week to discuss your grade. Please be aware this discussion may result in an increase, decrease or no change to your score. After this time, grades on tests become final. All other grades are final once given.

The Leventhal School of Accounting policy is exams should not be missed unless there is a very serious emergency AND it can be properly documented. Also, to the extent possible, you must inform the instructor of the emergency prior to the exam (it is understood this is not always possible). If you miss an exam for something other than a serious emergency and / or you cannot provide documentation, you will receive a zero grade for the exam. If there is a serious emergency, you can provide proper documentation and (when possible) have notified me before the exam, a substitute grade will be calculated based on the normalized average of your remaining future exams. Any final exam must be taken at the scheduled time unless an incomplete contract has previously been approved according to Leventhal School of Accounting guidelines.

Preparation Documentation

At various points during the semester, up to six preparation problems identified within the “Schedule of Classes – Preparation” column will be randomly collected. The problems should be handwritten individually by each student to ensure authenticity, but can be completed in collaboration with others. Points are earned by student’s good faith effort in completing the exercise prior to the class session. No make-ups or alternative assignments will be accepted.

Project Team Forming (for Team Assignments)

To ensure your accounting systems knowledge is comprehensive, the class structured around a series of interrelated team-based project deliverables. To provide you the opportunity to gain experience producing high-quality deliverables, the class is divided into project teams with each team targeted to have six members. You may select your own teams. However, people who are not on a team by the end of the fourth class will be required to interview with existing teams that wish to acquire additional members. Like any employment situation, these teams should not be considered permanent. If a team finds it cannot be productive, the team may “fire” people not performing by providing one-week written notice (i.e., email) to the person and copying me on the “personnel action”. People who are fired will not be able to change teams, but instead will be required to complete all remaining course and project work on their own. All team work (i.e., deliverables and supporting materials) completed up to the time of termination will be shared as of the time of separation.

To ensure your accounting systems knowledge is relevant, the class is structured around projects focused on a variety of industries. To provide you the opportunity to gain multiple-industry experience, each team will be assigned to work within a specific industry and present their final results to the rest of the class. To help determine the industry assignments, on the fourth day of class each student will deliver an “Industry Pitch” to the class. It will be performed on an individual basis and consist of no more than a timed two-minute introduction to a real (not just in development) enterprise-based business technology impacting one of the industries identified and explained by your instructor on the first day of class (e.g., financial services, healthcare, product / services distribution). The students with the ‘most qualified’ pitches in the opinion of the class ‘get the job’ and will be offered first choice of industry for the semester projects. Once industries are determined, teams will be allowed to pick their ‘clients’ on a first come, first served basis by sending an email to your instructor with the client name and project team members properly identified (i.e., name and email address).

Status Reports & Attachments

As part of the class, your team will be expected to plan and conduct three project status meetings with the instructor. The meetings are outlined as follows:

Use Case Documentation Review	(February 11 th)
Functional Solution Design Documentation Review	(March 12 th or 13 th)
Technical Design Documentation Review	(April 16 th or 17 th)

For each meeting, teams will be expected to set an appointment with the instructor via a professional quality MS Outlook invitation no more than one week before the meeting date. The invitation should include at a minimum: all participants (on the “To” line), meeting subject the includes the client’s name (use the description provided above with your clients name at the beginning); meeting location (i.e., our classroom for meetings during class times, my office for Friday meetings), the meeting start date (provided above) and time (“Use Case” meetings will be 15 minutes and start at the beginning of class, other meetings will be half an hour starting at the beginning of class with overflow done on Fridays), and a brief agenda (no more than three discussion items). Meetings will be accepted on a first-come, first-served basis and early or incomplete invitations will automatically be declined.

Points will be earned by delivering: a timely / professional agenda, appropriate supporting materials for review

during and after the meeting, thoughtful answers to instructor questions, a professionally prepared team (and not a series of individuals who worked independently and haven't reviewed each other's materials).

Technical Presentation

The Technical Presentation is an inter-team deliverable meaning that you will work with students from each of the other project teams to complete the requirements. The topics, in order, are: Robotic Process Automation, Process Mining and Monitoring, Machine Learning, Blockchain, Business Intelligence, and Cybersecurity. For each topic the following key areas should be covered at a minimum: a business / management oriented definition of what it is; a working technically ordinated description of how it functions (examples are extremely useful and will improve the overall grade); the business objectives behind its importance; and a minimum of three specific business use cases that demonstrate its advantages / positive impacts for an organization.

The presentation should be fifteen minutes with an opportunity for audience questions at the end. Once the presentation is complete, each team should email the instructor a soft-copy of the presentation along with a separate set of three multiple choice questions (with five possible answers each) based on their presentation. A selection of these questions will form the basis of questions that will be included on the next exam. Please take a look at http://thelearningcoach.com/elearning_design/rules-for-multiple-choice-questions/ for some helpful tips on designing multiple choice questions.

Points will be earned by delivering: a thought-provoking professional introduction, well-organized material, informative and appropriate coverage of the topic (e.g., the minimal coverage indicated above is expected for an average grade), appealing visuals, relevant and impactful use cases, an interesting and involving question and answer session, high-quality multiple choice questions.

Project Presentation & Documentation

The Project Presentation is a twelve-minute presentation highlighting important and unique deliverables that are part of your project. It is performed at the end of the semester and is an opportunity for each team to walk the class through their documentation (i.e., all the client deliverables created over the course of the semester) and answer questions from the class related to process and technical design choices that were made.

Points will be earned by delivering: a professional introduction, well-organized material, impactful content, high-quality deliverables that adhere to discussed leading practices, appropriate design choices and controls, and a facilitated Q&A session.

The Team Project will require students work in teams to leverage the material learned during the semester to:

- Analyze selected business processes
- Create leading-practice based business process solution designs
- Develop technical designs to support recommended solution designs
- Design appropriate policies, procedures, controls and protocols to safeguard IT assets and regulatory compliance

In each of these efforts, your focus will be on producing reliable accounting information using efficient and effective business processes that maintain data confidentiality, integrity, and availability within an appropriate compliance framework. To this end, based on methodologies and techniques discussed throughout the semester, your team will produce the following deliverables:

- Semester Project Plan
- Use Cases (P2P – 3 use cases, and O2C – 3 use cases)
- Context Data Flow (client overview)
- Level 0 Data Flow (client overview)
- Level 1 Data Flow (client's expenditure cycle (i.e., procure-to-pay, P2P))
- Level 1 Data Flow (client's revenue cycle (i.e., order-to-cash, O2C))
- Business Process Diagram (recommended client's future state P2P process)
- Business Process Diagram (recommended client's future state O2C process)
- Integrated Data Model (to support the P2P and O2C future state processes)
- Organization Structure / Chart of Accounts Design (to support client analytical requirements)
- Data Inventory and Input Controls (descriptions of all data sources, transmissions, translations, and sinks executed in MS Access)
- Data Quality and Translation Analytics (results of the example P2P data quality review executed in ACL)
- Data Quality and Translation Analytics (results of the example O2C data quality review executed in ACL)
- Risk and Control Matrix (based on recommended client's future state P2P process)
- Risk and Control Matrix (based on recommended client's future state O2C process)
- Security Design (based on recommended client's future state P2P process)
- Security Design (based on recommended client's future state O2C process)

- Data Analytics and KPIs (results of the example P2P analytics and visualizations executed in Tableau)
- Data Analytics and KPIs (results of the example O2C analytics and visualizations executed in Tableau)

The Project Documentation deliverable, due on the last day of class, includes all client-ready documentation and appropriate narratives for the deliverables above. As part of the documentation process, your team is required to produce these deliverables on a schedule (see Schedule of Classes below) and will receive extensive feedback on your work as it progresses. The feedback should be considered and your deliverables modified for inclusion in the final design documentation binder due at the beginning of the last day of class. In addition to the above, you will provide an executive summary and supplementary narrative for each deliverable that explain the choices you made and describe the value the deliverable provides the organization. In short, the final documentation should explain what you did, why you did it, and how it improves / transforms your client. The result should be a comprehensive set of analysis and design documentation that demonstrates competent use of the techniques you practiced throughout the semester.

Points will be earned by delivering: a professional executive summary, high-quality deliverables as discussed in class, complete / integrated documentation as discussed in class, and actionable / impactful recommendations for your client.

Peer Project Documentation Review

The Peer Project Review is the final exam for this course. Your team will be expected to prepare a formal evaluation of another team's project at the end of the semester. This evaluation is a project review / audit that should provide actionable suggestions, or review notes, to the team whose project is being reviewed.

Points will be earned by delivering: a professional executive summary, high-quality deliverables as discussed in class, complete / integrated documentation as discussed in class, and actionable / impactful recommendations for the project team whose deliverables you have reviewed and evaluated. "Individual" points are earned as the team's score is 'factored' by the instructor's assessment of your team contributions at the end of the semester. The assessment will be informed by information obtained from peer evaluation forms that will be requested after the last day of class and before the final. The outcome is your score can be significantly different from the general team score depending upon the evaluation of your contributions throughout the semester.

Important Notes:

1. All deliverables will be assessed / graded based on professional standards. This includes grammar, spelling, organization, neatness, and presentation. Under all circumstances your goal is to treat everything you do in this class as management oriented. This means that all deliverables should be prepared in a manner that would facilitate management review and acceptance (not just as a class assignment for your professor). You are closer than you think from doing this professionally, so you may as well get used to producing professional results. 😊
2. Deliverables are due at the end of the class period indicated in the attached schedule; no late deliverables will be accepted. All deliverables will be returned during class within a calendar week. Those materials not picked up in class will be available for pickup in the instructor's office, during normal office hours, until the end of the semester. Any materials not picked up by the end of the semester will be discarded after the last class session of the semester.
3. The instructor will retain all exams, team projects and peer evaluations for at least one semester following submission of the final course grade.
4. All work turned in or discussed during this class should be the work of the individual or team representing the work. In general, collaboration with students outside your team will be considered a violation of the student code of conduct unless the instructor gives prior approval. On the other hand, consultation with appropriate professionals outside the university is encouraged.

Participation

Although not a formal part of the grade, in our profession it is impossible to describe the importance of clear communication. On the other hand, signs of poor communication are easy to see: team members fail to speak up; team deliverables fail to meet management expectations; project milestones fail to be achieved; careers fail to continue... note the common theme. In short, active participation from each team member is essential. It is not enough to "make" every meeting and "help" with each deliverable. It is necessary for you to make things happen and for each team / group member to positively impact the overall result.

To help to facilitate participation, the first ten to fifteen minutes of each class will be set aside to discuss accounting issues, business strategies and general business processes. These discussions can arise from current events or as off-shoots of topics discussed during the normal class flow. Students are expected to take the initiative and lead a number of these discussions throughout the semester. Note, these are not meant to be formal presentations but rather a matter of simply raising questions and being prepared to discuss any related

issues as part of the overall class learning experience.

Overall Comment

Keep in mind this is an intermediate level accounting class. At a minimum, I expect you to bring the skills you have learned, in both your accounting and business core classes, with you. In this class we are going to use those skills to aid in producing and understanding accounting information's uses and implications.

Remember that accounting is a profession that requires both knowledge and judgement. There are times when you will not be told exactly what to do, but will be asked to make a choice and support it. That said, with your solid input we can work through some interesting problems and create good solutions to real business problems. All in all, the main responsibility for the quantity and quality of your knowledge upon leaving this program rests squarely on your shoulders.

Key Consideration

Your motto for this class should be something like "Hard work may indeed be a virtue, but it is excellence that gets rewarded." In other words, we all know that a great deal of work and time will be necessary to complete this class, but it is the quality of the final output on exams and course deliverables that will earn you your grade. Manage your time accordingly and never forget to produce high quality results.

Learning Objectives

In this class, emphasis will be placed on the USC Leventhal School of Accounting learning objectives as follows:

Objective	Title	Description	Course Emphasis
1	Technical Knowledge	Students will demonstrate technical proficiency in the accounting discipline, including the use of technical accounting knowledge to help solve problems and make decisions.	Medium
2	Research, Analysis & Critical Thinking	Students will demonstrate the ability to critically analyze, synthesize, and evaluate information for decision making in the local, regional and global business environment.	High
3	Ethical Decision Making	Students will demonstrate an understanding of ethics, ethical behavior and ethical decision making.	Low
4	Communication	Students will demonstrate the ability to communicate ideas both orally and in writing in a clear, organized and persuasive manner.	Medium
5	Leadership, Collaboration & Professionalism	Students will demonstrate leadership skills and the ability to work cooperatively and productively to accomplish established goals.	High
6	Technology	Students will demonstrate an understanding of technology issues and utilize relevant technology tools and applications to gather and evaluate information, analyze and solve problems, work interactively with other people, and develop and present conclusions.	High

ADDITIONAL INFORMATION

Add / Drop Process

Most Leventhal classes can be added through the add deadline. If you wish to add an ACCT class, you can make an appointment with a Leventhal counselor to discuss your options. Students who do not attend the first two class sessions (for classes that meet twice per week) or the first class meeting (for classes that meet once per week) may be dropped from the course. There are no formal wait lists for Leventhal undergraduate courses, and professors cannot add students or increase the course capacity.

Dates to Remember:

Last day to add classes or drop with refund	Friday – January 31 st
Last day to drop without "W" or change to P/NP	Friday – January 31 st
Last day to drop with "W"	Friday – April 10 th

Retention of Graded Coursework

Graded work that has not been returned to you will be retained for one year after the end of the semester. Any other materials not picked up by the end of the semester will be discarded after final grades have been submitted.

Technology Policy

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the professor. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. Upon request, all electronic devices in your possession (e.g., cell / smart phones, tablets, laptops, etc.) must be completely turned off and / or put face down on the desk in front of you. In addition, at certain times (i.e., during exams), you might also be asked to deposit your devices in a designated area in the classroom.

Recordings

Video recording of faculty lectures is not permitted due to copyright infringement regulations. Audio recording is only permitted if approved in advance by the professor in writing. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class. Exceptions to this policy may be granted to individual students with appropriate documentation on a case-by-case basis.

To be clear, no student may record any lecture, class discussion or meeting with the professor without the professor's prior express written permission. The word "record" or the act of recording includes, but is not limited to, any and all means by which sound or visual images can be stored, duplicated or retransmitted whether by an electro-mechanical, analog, digital, wire, electronic or other device or any other means of signal encoding. The professor reserves all rights, including copyright, to lectures, course syllabi and related materials, including summaries, PowerPoints, prior exams, answer keys, and all supplementary course materials available to the students enrolled in this class whether posted on Blackboard or otherwise. They may not be reproduced, distributed, copied, or disseminated in any media or in any form, including but not limited to all course note-sharing websites. Exceptions are made only for students who have made prior arrangements with DSP and the professor.

USC Statement on Academic Conduct and Support Systems

Academic Conduct

Students are expected to make themselves aware of and abide by the University community's standards of behavior as articulated in the [Student Conduct Code](#). Plagiarism – presenting some-one else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" <https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems

Counseling and Mental Health – (213) 740-9355 – 24/7 on call
studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline – 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) – (213) 740-9355(WELL), press “0” after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Campus Support & Intervention (CSI) - (213) 740-0411

<https://campussupport.usc.edu/>

A team of professionals here to assist students, faculty, and staff in navigating complex issues. Whether you are here seeking support for yourself or someone else, we are available to help you problem solve, understand options, and connect with resources. Please note that we are not an emergency resource and are not available 24/7.

Office of Equity and Diversity (OED) – (213) 740-5086 | Title IX – (213) 821-8298

equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault, non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment – (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs – (213) 740-0776

dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/note takers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy – (213) 821-4710

uscsa.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC – (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency – UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety – UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Statement for Students with Disabilities

USC is committed to making reasonable accommodations to assist individuals with disabilities in reaching their

academic potential. If you have a disability which may impact your performance, attendance, or grades in this course and require accommodations, you must first register with the Office of Disability Services and Programs (www.usc.edu/disability). DSP provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me at least 2 weeks in advance of any exam date where accommodation is requested. DSP is located in GFS (Grace Ford Salvatore Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: ability@usc.edu.

Emergency Preparedness / Course Continuity

In case of a declared emergency if travel to campus is not feasible, the USC Emergency Information web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of USC's Blackboard learning management system (<https://blackboard.usc.edu/webapps/login/>), teleconferencing, and other technologies.

For additional information, you may use any of the following:

USC Emergency UPC Phone – (213) 740-4321

Download LiveSafe Mobile Safety App – <https://dps.usc.edu/services/safety-app/>

Sign up for TrojansAlert – <https://member.everbridge.net/index/892807736725448#/login>

Schedule of Classes

Session	Date	Topic	Session Objectives	Reading	Preparation	Deliverable
1	1/14	Course Kick-off	Describe the course objectives, format, and expectations. Conduct interviews to begin identifying prospective team members.		Bring "A" Game	
2	1/16	Information System Fundamentals	Develop a definition / mission statement for the course that describes: <ul style="list-style-type: none"> - What an Information System is - Who uses it - Why they use it - How accounting systems are unique 	Ch1	P1.3 Parts a-d	
3	1/23	Enterprise System (ERP) Components	Identify ERP system components and describe how the individual components support organizational strategies, tactics and operations.	Ch2	P2.7 Bullet points only for: Revenue and Expenditure Cycles	
4	1/28	Industry Presentations / Client Selection	Identify and explain a "hot" technology making a difference in one of the following industries: <ul style="list-style-type: none"> - Financial services - Healthcare - Product / service distribution 		Industry Research	Industry Pitch
5	1/30	Analysis & Design Overview / Project Planning	Describe how professional program and project management leverages the System Development Life Cycle (SDLC) as part of IT General Controls (ITGCs) and execute a project plan in MS Project and related budget in Excel.	Ch20	P20.7	
6	2/4	Leading Practices I – Procure-to-Pay (P2P)	Identify and explain leading practices for procure-to-pay (i.e., Expenditure Cycle) processes in modern world class organizations.	Ch13	P13.1	Semester Project Plan
7	2/6	Leading Practices II – Order-to-Cash (O2C)	Identify and explain leading practices for order-to-cash (i.e., Revenue Cycle) processes in modern world class organizations.	Ch12	P12.2	Technical Presentation Robotic Process Automation
8	2/11	Use Cases Documentation Review	Arrange, plan and facilitate a professional meeting with the professor to quickly review the Use Cases your team has developed for your client related to the P2P (3 use cases) and O2C (3 use cases) processes.		Finalize Use Case Write-ups	Status Report & Use Case Write-ups (P2P & O2C Use Cases)
9	2/13	Data Analysis I – P2P	Describe and execute methodologies for analyzing / documenting the future state conceptual capture, storage, and analyzing of data for the P2P function.	Ch3 p52-58	P3.6 Part a	
10	2/20	Data Analysis II – O2C	Describe and execute methodologies for analyzing / documenting the future state conceptual capture, storage, and analyzing of data for the O2C function.		P3.7 Part a	Technical Presentation Process Mining & Monitoring
11	2/25	Process Design I – P2P	Identify and describe business transformation opportunities and execute methodologies for designing / documenting the detailed future state capturing, storing, transforming, transmitting, analyzing, and reporting of data for the O2C function.	Ch3 P58-65	P13.11 Part b	Context Data Flow Level 0
12	2/27	Process Design II – O2C	Identify and describe business transformation opportunities and execute methodologies for designing / documenting the detailed future state capturing, storing, transforming, transmitting, analyzing, and reporting of data for the O2C function.		P12.8 Part b	Technical Presentation Machine Learning
Friday	2/28 10:30am – 4:30pm	Rams Offices & Inglewood Stadium	Understand accountants' roles within a professional sports franchise and tour new stadium! ☺ ☺ ☺			
13	3/3	Process Design III – Record to Report (R2R)	Identify and describe business transformation opportunities and execute methodologies for designing / documenting the detailed future state capturing, storing, transforming, transmitting, analyzing, and reporting of data for the R2R function.	Ch16	P16.3	Data Flow Level 1s (P2P & O2C)
14	3/5		Exam I			

Session	Date	Topic	Session Objectives	Reading	Preparation	Deliverable
15	3/10	Business Case Review	Analyze, evaluate and improve your results!			
16	3/12 & Friday 3/13	Functional Design Documentation Review	Arrange, plan and facilitate a professional meeting with the professor to quickly review your data flows and business process designs for your client related to the P2P and O2C processes.		Project Status Report	Status Report & Solution Design Documentation (P2P and O2C Process Maps)
17	3/24	Data Design I – Modeling	Develop and document an integrated data model to support the data storage and data analysis requirements documented as part of the P2P and O2C solution design developed for your client. As part of the exercise, you will be required to document a leading practices organizational structure and Chart of Accounts (COA) for your client.	Ch17	17.9	
18	3/26	Data Design II – Detailed Inventory	Execute a prototype database in MS Access that supports the data integrated model developed for your client's P2P and O2C solution.	Ch4 & Appendix	P4.3 Parts a-c	
19	3/31	Data Design III – Forms & Reports	Create data capture forms to support the MS Access prototype you are developing and the related management reports required to support the analytical analysis requirements identified as part of the future state P2P and O2C solution designs.	Ch10 Ch18	P10.7 P18.9	Technical Presentation Blockchain COA Design Integrated Data Model
20	4/2	Data Analytics I – Data Quality	Leverage ACL to import, transform, and evaluate provided example P2P and O2C data for anomalies and completeness. Work to correct data inconsistencies and export data for use within the Business Intelligence / Data Analytics reporting environment.	Ch19	P19.4	
21	4/7	Data Analytics II – Controls	Review P2P and O2C solution designs and data quality evaluation findings to identify key risks associated with the designed future state business processes. Document these findings and mitigation recommendations in a leading practice Risk and Control Matrix for P2P and O2C separately.	Ch7	P7.8	Technical Presentation Business Intelligence / Data Analytics
22	4/9	Data Analytics III – Information Security & Master Data Management	Review P2P and O2C RCMs to identify and document security requirements and access controls by producing security matrices for both the P2P and O2C processes. In addition, execute data quality input controls (i.e., integrity and formatting) within the MS Access prototype to improve master data across the integrated data model.	Ch8 Ch9	P8.3	ACL – Data Quality Analytics (P2P & O2C)
23	4/14	Data Analytics IIII – KPIs & Visualization	Leverage Tableau to transform and load clean P2P and O2C data resulting from the data quality process and improvements to the MS Access prototype to develop and execute KPIs to support management evaluation of business performance and decision making.	Ch22	P22.5	Technical Presentation Cybersecurity RCMs (P2P & O2C)
24	4/16 & Friday 4/17	Technical Design Documentation Review	Arrange, plan and facilitate a professional meeting with the professor to quickly review your COA design, data model, system prototype, and RCMs for your client related to the P2P and O2C processes.		Technical Solution Design	Status Report & MS Access based Data Inventory
25	4/21	IT Audit & Finalize Technical Design	Describe audit objectives and behaviors related to internal controls and operations and introduce the role of SOX in the preparation and certification of public financial statements.	Ch11	P11.11	Sensitive Access / Security Matrix (P2P & O2C)
26	4/23		Exam II			

Session	Date	Topic	Session Objectives	Reading	Preparation	Deliverable
27	4/28	Project Presentations – Option 1	Develop a short (i.e., no more than 15 minutes) client focused / executive level presentation that includes, at high-level, the following: <ul style="list-style-type: none"> - Executive summary of your project background and overall results - Review of your leading practice based data flows - Explanation of your proposed P2P and O2C future state business processes - Integrated data model and data quality controls - Example data quality analytical review results - Example proposed KPIs and supporting data analytics - Recommended project roadmap and next steps 		Project Presentation	Tableau – Data Analytics & KPIs (P2P & O2C)
28	4/30	Project Presentations – Option 2	See above		Project Presentation	Project Documentation
Final	5/7 By 10am	Peer Reviews and all project materials should be turned into ACC 121 no later than Thursday, May 7 th by 10 am	Provide a review memo and actionable recommendations for the project you peer reviewing.	Peer Project Review & Evaluated Project Materials		

Deliverable Descriptions

Industry Pitch is a two-minute pitch performed on an individual basis. You are to give no more than two-minutes to talk about an existing (i.e., one that will be broadly available in the next 3 months) technology that relates to one of the following industries: financial services, healthcare, or product / service distribution. Hint, the idea is to pick the industry you are interested in and find out something about how technology is used to help organizations in that industry. The “best” presentations will be given first choice of industry for the semester team projects.

Project Deliverables will be developed throughout the semester and incorporated into the “Project Presentation & Documentation” final deliverable. The individual components include the following:

- Semester Project Plan
- Use Cases – Organization (3 each for Procure-to-Pay & Order-to-Cash cycles)
- Context Data Flow – Organization
- Level 0 Data Flow – Organization
- Level 1 Data Flow – P2P
- Level 1 Data Flow – O2C
- Business Process Diagram – P2P
- Business Process Diagram – O2C
- Integrated Data Model – Organization
- Organization Structure / Chart of Accounts – Organization
- Data Inventory – Organization
- Data Quality Analytics (ACL) – P2P
- Data Quality Analytics (ACL) – O2C
- Risk and Control Matrix (RCM) – P2P
- Risk and Control Matrix (RCM) – O2C
- Sensitive Access / Security Matrix – P2P
- Sensitive Access / Security Matrix – O2C
- Data Analytics (Tableau) – P2P KPIs
- Data Analytics (Tableau) – O2C KPIs

Technical Presentation is a cross-team (*i.e., each project team is expected to provide at least one person to support the development and delivery of the presentation*) deliverable covering a technical topic CFO's have identified as important to their organizations success over the next five years. The topics and delivery dates are as follows:

Robotic Process Automation (RPA)	(February 6 th)
Process Mining & Monitoring (Process Analytics)	(February 20 th)
Machine Learning (Artificial Intelligence)	(February 27 th)
Blockchain (Data Security and Quality)	(March 31 st)
Business Intelligence (Data Analytics)	(April 7 th)
Cybersecurity (Process Security and Privacy)	(April 14 th)

The presentation should be fifteen minutes and include: a business / management oriented definition of what it is; a working technically ordinated description of how it functions (examples are extremely useful and will improve the overall grade); the business objectives behind its importance; and a minimum of three specific business use cases that demonstrate its advantages / positive impacts for an organization. In addition, it will be helpful from a management perspective if you can provide estimates for how long it typically takes organization's to implement the technology; and, how much the technology typically costs to adopt.

Once complete, please email a copy of the presentation and suggested multiple choice questions to the professor. Before creating your questions, please review http://thelearningcoach.com/elearning_design/rules-for-multiple-choice-questions/ for some helpful tips on designing multiple choice questions.

Project Presentation & Documentation starts with a short Project Presentation that provides the class with an overview of your project background, objectives, key deliverables, overall results, and recommendations. The Project Documentation includes all client ready documentation related to the "Project Deliverables" above.

You will receive extensive feedback on your work throughout the semester. This feedback should be considered and your deliverables modified for inclusion in the final design documentation binder. In addition to the above, you will provide an executive summary and supplementary narratives that both explain the choices you made throughout the project and describe the anticipated benefits to the organization. In short, the final documentation should explain not only what you did, but why you did it and how will it help. The result should be a comprehensive set of analysis and design documentation that demonstrates competent use of the techniques you practiced throughout the semester.

Peer Project Review is the final exam. You will be required to thoroughly evaluate another team's project and provide a professional set of actionable review notes and executive report / memo.

**LEVENTHAL SCHOOL OF ACCOUNTING
GRADING AND ACADEMIC STANDARDS**

ACCT 370, 371, 372, 373, 374, 377, 416, 418x, 420, 430, 462, 470, 472, 473, 474, 478

The Leventhal School of Accounting adheres strictly to the grading standards of the University and the School of Business Administration. Additionally, the Leventhal School of Accounting has supplemented those standards with certain others. For students' convenience, and to prevent misunderstanding, these additional standards are summarized below.

GRADING STANDARDS

The following grades are used: A - excellent; B - good; C - fair; D - minimum passing; F - failure. The grade of F is awarded for failing work at the end of the semester. The assignment of minuses and pluses when earned is required.

The grade of W (Withdraw) is assigned if the student officially withdraws after the third week but before the end of the twelfth week of the semester. No withdrawals will be permitted after the end of the twelfth week except by student petition to the University's Committee on Academic Policies and Procedures.

Students may elect to audit courses during the first three weeks of the semester. A course taken for audit (V) will be assessed at the current tuition rate. A course taken for audit (V) will not receive credit and will not appear on the USC transcript or grade report. Under no circumstances will the University allow a change in the registration status of a course from letter grade or credit to audit (V) or vice versa after the third week of a given semester.

The grade of IN (Incomplete, i.e., work not completed because of documented illness or some other emergency occurring after the twelfth week of the semester) is reserved for those highly unusual cases where, due to circumstances judged fit by the Dean of the Leventhal School of Accounting, the student is unable to complete a specified single item of the course requirements by the time final grades are submitted.

IN grades can be removed only by the student completing the missing requirements of the course to the satisfaction of the instructor.

Marks of IN in courses numbered below 500 must be removed by the end of the semester following the one in which the mark of IN was assigned. If not removed within the specified time limit, marks of IN automatically become marks of IX (expired incomplete), with the exception of thesis and dissertation, and compute in the GPA as an F. A student may remove the IN only by completing the work not finished as a result of illness or emergency. It is not possible to remove an incomplete by re-registering for the course. Previously graded work may not be repeated for credit.

**LEVENTHAL SCHOOL OF ACCOUNTING
GRADING AND ACADEMIC STANDARDS**

ACCT 370, 371, 372, 373, 374, 377, 416, 418x, 420, 430, 462, 470, 472, 473, 474, 478

G.P.A. PREREQUISITES FOR UNDERGRADUATE ACCOUNTING COURSES

The following are grade point average prerequisites for any undergraduate student enrolled in any accounting course. Individual instructors may not waive these standards: (1) an average grade of B or better in BUAD 285ab or BUAD 286ab or BUAD 280/281 with neither grade lower than a B-; or (2) if applicable, transfer students are required to meet an average grade of B in the two transferred accounting courses and BUAD 305x (with neither grade lower than a B-).

In meeting the B (3.0) average required for admission to the Leventhal School of Accounting, only one of the courses may be repeated. If the repeated course grade is higher, that grade will be considered in determining whether the student meets the B average for admission, and the original course grade will be disregarded by the Leventhal School. See Repeated Course Work at USC, USC Catalogue, for further restrictions on including grades in repeated classes in the overall grade point average computation.

In computing grade point average prerequisites, BUAD 285ab or BUAD 286ab or BUAD 280/281, BUAD 302T and BUAD 305x will be considered accounting courses.

Grades in accounting courses taken at other institutions will not be included in the computation of the cumulative accounting grade point average. **Exception:** transfer students taking BUAD 305x and seeking admission to the School of Accounting.

When a student's cumulative accounting grade point average falls below 2.7, the student is placed on probation. If a student on probation does not regain a minimum accounting cumulative GPA of 2.7 after completing the next 12 semester hours in all courses (including accounting courses) attempted within the University, that student will not be permitted to continue as an accounting major in the Leventhal School of Accounting. Exceptions to this policy may be granted only in unusual circumstances by the Academic Standards Committee of the Leventhal School of Accounting. Decisions of the Academic Standards Committee are final.

To be removed from probationary status, a student may elect either to take another accounting course or courses for which prerequisites are met or to repeat an accounting course or courses in an attempt to earn a higher grade. Regardless of the course of action taken, all courses completed will be counted in computing the cumulative accounting grade point average.

The grade of "W" in an accounting course taken while a student is on probation will not extend probation. The probation period ends at the end of that semester during which the student completes a cumulative total of 12 semester hours of courses in any subject(s) at the university. Under no conditions will the student be permitted more than two successive semesters, including the summer semester, to complete the 12 semester hours of courses.

Students must attain a minimum 2.7 cumulative accounting grade point average to graduate with a Bachelor of Science in Accounting degree.

**LEVENTHAL SCHOOL OF ACCOUNTING
GRADING AND ACADEMIC STANDARDS**

ACCT 370, 371, 372, 373, 374, 377, 416, 418x, 420, 430, 462, 470, 472, 473, 474, 478

OTHER ACADEMIC STANDARDS

1. Students enrolled in any class offered by the Leventhal School of Accounting are expected to uphold and adhere to the standards of academic integrity established by the Office of Student Judicial Affairs and Community Standards. Students are responsible for reading and understanding the Student Conduct Code and Policies. Students who are found to have violated the Code and Policies will be subject to disciplinary action as described in the USC Judicial process. For more specific information, please refer to

<https://sjacs.usc.edu/students/scampus/>.

2. The ability of students to write clearly and concisely is a necessary prerequisite to success in accounting work. Accordingly, students will be required to demonstrate writing capability in all accounting courses. This may be accomplished primarily through the inclusion of essay-type questions on course examinations.

Important Dates for Spring 2020

First Day of Class	Monday, January 13
Accounting Orientation – ACCT-370 lab time	Friday, January 17, 10am
Martin Luther King Day, University Holiday	Monday, January 30
USC Career Fest	Monday, January 27 - Friday, January 31
USC Career Day	Thursday, February 6
Meet the Firms	Thursday, February 13, 6:30-9pm
Presidents' Day, University Holiday	Monday, February 17
Last Day to Add or Drop without a "W"	Friday, January 31
Meet the Firms – Alumni Park	Friday, September 27 (11am-2pm)
Last Day to change P/NP to letter grade	Friday, February 28
Spring Recess	Monday, March 16 - Friday, March 20
Last Day to Drop with a "W"	Friday, April 10
Last Class Meeting	Friday, May 1
Study Days	Saturday, May 2 - Tuesday, May 5
Final Examinations	Wednesday, May 6 - Wednesday, May 13
Commencement	Friday, May 15