# Systems and Infrastructure Lifecycle Management 1 Spring 2018

#### About the Instructors

Name	eMail	Telephone	Office Hours
Brian Green	isprof@temple.edu	856.283.2136	By Appointment
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#### Class Location and Time

Days / Time: Thursdays from 5:30 PM to 8:00 PM

**Location:** Alter Hall, Room 231

Online: TBD

Class Blog: <a href="http://community.mis.temple.edu/mis5203sec001sec701sp2018">http://community.mis.temple.edu/mis5203sec001sec701sp2018</a>

### **Course Description**

In this course you will be introduced to how systems are acquired, developed and implemented. At the end of the course you will be able to understand and provide assurance that the practices for the acquisition, development, testing and implementation of information systems meet the enterprise's strategies and objectives.

### Course Objectives

The CISA candidate must understand how an organization evaluates, develops, implements, maintains and disposes its IT systems and related components. S/he must be able to identify which elements may represent the greatest risk and which controls are most effective at mitigating this risk. Key objectives are as follows:

- 1. Evaluate the business case for proposed investments in information systems acquisition, development, maintenance and subsequent retirement to determine whether it meets business objectives.
- Evaluate the project management practices and controls to determine whether business requirements are achieved in a cost-effective manner while managing risk to the enterprise.
- Conduct reviews to determine whether a project is progressing in accordance with project plans, is adequately supported by documentation and status reporting is accurate.
- 4. Evaluate controls for information systems during the requirements, acquisition, development and testing phases for compliance with the enterprise's policies, standards, procedures and applicable external requirements.

- 5. Evaluate the readiness of information systems for implementation and migration into production to determine whether project deliverables, controls and the enterprise's requirements are met.
- 6. Conduct postimplementation reviews of systems to determine whether project deliverables, controls and the enterprise's requirements are met.

### Required Text and Readings

- Valacich, Joseph S., and Joey F. George. Modern Systems Analysis and Design. Pearson Education Limited, 2017. ISBN-13: 978-0-13-420492-5
- ISACA: Certified Information Systems Auditor, CISA Review Manual, 26th Edition 2017, ISBN: 978-1-60420-200-7
- Other material such as articles, case studies and templates will be provided by the instructors

### **Evaluation and Grading**

Item	Weight
Practical Assignments	20%
Written Assignments	20%
Discussion and Class Participation	10%
Quizzes	20%
Final Exam	30%
	100%

# **Grading Criteria**

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

Criteria	Grade
The assignment consistently exceeds expectations. It demonstrates originality of thought and creativity throughout. Beyond completing all the required elements, new concepts and ideas are detailed that transcend general discussions along similar topic areas. There are no	A- or A
mechanical, grammatical, or organization issues that detract from the ideas.	
The assignment consistently meets expectations. It contains all the information prescribed for the assignment and demonstrates a command of the subject matter. There is sufficient detail to cover the subject completely but not too much as to be distracting. There may be some procedural issues, such as grammar or organizational challenges, but these do not significantly detract from the intended assignment goals.	B-, B, B+
The assignment fails to consistently meet expectations. That is, the assignment is complete but contains problems that detract from the intended goals. These issues may be relating to content detail, be grammatical, or be a general lack of clarity. Other problems might include not fully following assignment directions.	C-, C, C+
The assignment constantly fails to meet expectations. It is incomplete or in some other way consistently fails to demonstrate a firm grasp of the assigned material.	Below C-

### Participation

The assignments, cases and readings have been carefully chosen to bring the real world into class discussion while also illustrating fundamental concepts. Your participation in the online and class discussions is critical. Evaluation is based on you consistently demonstrating your engagement with the material. Assessment is based on what you contribute. The frequency and quality of your contributions are equally important.

#### Each week you will need to participate in various ways:

#### 1. Weekly Reading Questions:

Each week on Friday, you will find a post that includes several discussion questions and the case or activity assignment. You will be expected to answer one or all of the discussion questions on the week's readings by Wednesday @11:59 PM. You may also comment on your peer's posts instead of addressing a question directly. A paragraph or two of thoughtful analysis is expected for your initial answer to the question. I also expect that you will contribute at least five answers/comments each week to the general discussion.

#### 2. Weekly Case Analysis:

Most of your weekly assignments will be case analyses. Instructions for each week's assignment will be included in the Weekly post. Typically, we will post several questions about the case or instructions for an assignment. You must come to class prepared to discuss all of these questions in detail.

There is no one particular style for a good case study analysis. But, there are some common elements to excellent contributions.

- Be clear about the questions and your position on them. Take a position.
- Instead of general observations about IT governance or organizations that apply to any problem, draw details from the case study itself. Analyses, observations, and suggestions should be tied directly to those key facts and issues. You can also draw on the other readings in the course to inform and support your arguments.
- After analyzing the details of the case study, think about how its specific issues have broader application. In other words, use your analysis to provide some advice to managerial decisionmakers that can be applied to other situations beyond this case.
- Provide a balanced perspective. For example, when making a recommendation explain the pros and cons, providing both the rationale (the why) as well as its feasibility (the how).

## Quizzes

There will be a quiz at the end of each Section of the course for a total of five (5) quizzes.

- Quiz 1 Introduction and Foundation
- Quiz 2 Plan

- Quiz 3 Analyze
- Quiz 4 Design
- Quiz 5 Implement and Support

Each quiz will be based on the material covered for that section. Together these quizzes are weighted 20% of your final grade. Check the schedule for the dates.

All quizzes will consist of multiple-choice, fill in the blank and short answer questions. Some questions may relate to a short, fictitious but real-world like case. We will publish the case narrative separate from the quiz. This allows you to read the case prior to taking the exam that has a fixed time to complete.

You'll have several days within which you can take each quiz on-line. However, once you start you'll have a fixed time (e.g. 40 minutes) to complete the quiz.

In general, the quizzes will not be cumulative but focused on the course materials since the beginning of last quiz. However, some concepts highlighted in class as a 'Core Principle' or 'This may be on the Final' may appear on any of the quiz.

A missed quiz can only be made up in the case of documented and verifiable extreme emergency situations.

#### Final Exam

The final exam consists of 75 multiple choice questions and is designed to simulate the CISA certification test. You will have approximately 1 hour and 30 minutes to complete the test. Once you begin you must complete the exam in the allotted time. The final exam will be available in Canvas at the beginning of Finals Week (see the semester's schedule for Spring 2018 for specific dates).

The final exam accounts for 30% of your grade.

No make-up is possible for the final exam.

#### Weekly Cycle

At outlined above in the Participation section, much of your learning will occur as you prepare for and participate in discussions about the course content. To facilitate learning the course material, we will discuss course material on the class blog in between classes. Each week this discussion will follow this cycle:

Who	Thu	Fri	Sat	Sun	Mon	Tue	Wed
Professor:		Post new Discussion					
	Class	Summarize old Discussion					
Student:		Respond to Post by Wed. 11:59 PM					

## Late Assignment Policy

An assignment is considered late if it is turned in after the assignment deadlines stated above. No late assignments will be accepted without penalty unless arrangements for validated unusual or unforeseen situations have been made.

- Class Blog contributions cannot be turned in late. If you miss contributing prior to class for that week's discussion / questions you will receive no credit for it.
- The exercise assignments will be assessed a 20% penalty each day they are late. No credit is given for assignments turned in over five calendar days past the due date.
- You must submit all assignments, even if no credit is given. If you skip an assignment, an additional 10 points will be subtracted from your final grade in the course.
- Plan ahead and backup your work. Equipment failure is not an acceptable reason for turning in an assignment late.

#### Citation Guidelines

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

### Plagiarism and Academic Dishonesty

All work done for this course: papers, examinations, homework exercises, blog posts, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work.

Plagiarism and academic dishonesty can take many forms. The most obvious is copying from another student's exam, but the following are also forms of this:

- Copying material directly, word-for-word, from a source (including the Internet)
- Using material from a source without a proper citation
- Turning in an assignment from a previous semester as if it were your own
- Having someone else complete your homework or project and submitting it as if it were your own
- Using material from another student's assignment in your own assignment

Plagiarism and cheating are serious offenses, and behavior like this will not be tolerated in this class. In cases of cheating, both parties will be held equally responsible, i.e. both the student who shares the work and the student who copies the work. Penalties for such actions are given at my discretion, and can range from a failing grade for the individual assignment, to a failing grade for the entire course, to expulsion from the program.

## Student and Faculty Academic Rights and Responsibilities

The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link: http://policies.temple.edu/getdoc.asp?policy\_no=03.70.02

#### Schedule

#### Legend:

- Readings
  - o M-SAD CH.# Modern Systems Analysis and Design, Chapter #
  - M-SAD AP.# Modern Systems Analysis and Design, Appendix # (Chapter appendices can be found at the end of each chapter.
  - o CISA CISA Review Manual
- Assignments
  - o PA Practical Assignment
  - o WA Written Assignment
  - o D Discussion
- Assessments
  - o Q Quiz

Week	Sec.	Topics	Readings	Assignments	Assessments
1		Course Introduction	M-SAD CH.1	WA-1.1	
1/18	_		M-SAD CH.2	D-1.1	
	Intro				
	o a		CISA 3.2		
	and		CISA 3.2.1		
	For		CISA 3.2.2		
	nc		CISA 3.2.3		
2	Foundation	Managing IS Projects	M-SAD CH.3	PA-2.1	Q-1
1/25	on		M-SAD AP.3	WA-2.1	
				D-2.1	
			CISA 3.3		
3		IS Project Identification and	M-SAD CH.5	PA-3.1	
2/1		Selection		• Sc-1	
			CISA 3.2.2	• Sc-2	
			CISA 3.2.3	• Sc-3	
	Plan			WA-3.1	
	n			D-3	
4		IS Project Initiation and Planning	M-SAD CH.4	WA-4.1	Q-2
2/8				D-4.1	
			CISA 3.5		
			CISA 3.5.1		

Week	Sec.	Topics	Readings	Assignments	Assessments
5 2/15		Requirements Analysis	M-SAD CH.6	PA-5.1 WA-5.1	
2,13			CISA 3.12	D-5	
			CISA 3.5.2		
6		Structured Process Analysis	M-SAD CH.7	PA-6.1	
2/22			0,04.0.5.0	WA-6.1	
			CISA 3.5.2		
			<ul><li>Ph 2</li><li>Ph 3A</li></ul>		
			• Ph 4A		
7	7	OO Requirements Analysis	M-SAD	PA-7.1	
3/1	Analyze	OO Requirements Analysis	AP.7a	WA-7.1	
3,1	lyze		M-SAD	D-7	
	(0		AP.7b	5 ,	
			CISA 3.5.2		
			• Ph 3B		
			• Ph 4B		
8		Structured Data Analysis	M-SAD CH.8	PA-8.1	
3/15				WA-8.1	
				D-8	
9		Object Oriented Data Analysis	M-SAD AP.8	PA-9.1	Q-3
3/22				WA-9.1	
10				D-9	
10		Object Oriented Process Analysis	M-SAD	PA-10.1	
3/29			AP.7c M-SAD	WA-10.1 D-10	
			AP.7d	D-10	
11		Database & Persistent Storage	M-SAD CH.9	WA-11.1	
4/5		Database & Fersistent Storage	IVI SAD CIT.S	D-11	
7/3			CISA 3.13	<i>D</i> 11	
12		Human Factors	M-SAD	WA-12.1	Q-4
4/12	Design		CH.10	WA-12.2	~ '
,	sign		M-SAD	D-12	
			CH.11		
			CISA 3.6		
			CISA 3.7		
			CISA 3.7.1		
			CISA 3.7.16		
			CISA 3.9		
4.2		Birth to I Fall	CISA 3.14	DA 42.4	
13	lm ble	Distributed Enterprise Systems	M-SAD	PA-13.1	
4/19			CH.12	WA-13.1	

Week	Sec.	Topics	Readings	Assignments	Assessments
				D-13	
			CISA 3.5.2		
			• Ph		
			5		
14		Implementation	M-SAD	PA-14.1	
4/26			CH.13	WA-14.1	
				D-14	
			CISA 3.10		
15		Maintenance	M-SAD		Q-5
5/3		Review	CH.14		
16 5/10	Final	J	Final Exam		

# For more details see the class blog:

http://community.mis.temple.edu/mis5203sec001sec701sp2018/

## **Additional Information**

Availability of Instructor	<ul> <li>Please feel free to contact either of us via e-mail with any issues related to this class. We will also be available at the end of each session. Please note that these discussions are to address questions/concerns but are NOT for helping students catch up on content they missed because they were absent. Note: We will respond promptly when contacted during the week.</li> </ul>	
	<ul> <li>We are available to meet personally with you:</li> <li>Immediately after class</li> <li>By appointment prior to class</li> <li>By appointment by phone</li> </ul>	
Attendance Policy	Class discussion is intended to be an integral part of the course. Therefore, full attendance is expected by every student.  If you are absent from class, speak with your classmates to catch up on what you have missed.	

#### **Class Etiquette**

- Please be respectful of the class environment.
- Class starts promptly at the start time. Arrive on time and stay until the end of class.
- Turn off and put away cell phones, pagers and alarms during class.
- Limit the use of electronic devices (e.g., laptop, tablet computer) to classrelated usage such as taking notes. Restrict the use of an Internet connection (e.g., checking email, Internet browsing, sending instant messages) to before class, during class breaks, or after class.
- Refrain from personal discussions during class. Please leave the room if you need to speak to another student for more than a few words. If a student cannot refrain from engaging in private conversation and this becomes a pattern, the students will be asked to leave the classroom to allow the remainder of the students to work.
- During class time speak to the entire class (or breakout group) and let each person "take their turn."
- Be fully present and remain present for the entirety of each class meeting.