# MIS 5202 – IT Governance Spring 2015

| Instructor   | Rich Flanagan  |  |
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| Information  | Richard.Flanagan@Temple.edu  |  |
| Office       | 209C Speakman Hall   |  |
| Information  | (215) 204-3077 (O)   |  |
|              | (910) 880 1254 (M)   |  |
| Office Hours | Tuesdays 10:30 – 12:00, Wednesday 1:30-3:00                            |  |
|              | In office or on Webex https://foxsbm.webex.com/meet/ryflanagtemple.edu |  |

#### **Course Objectives**

In this course you will learn how to audit an organization's use of its information technology assets. Key topics are:

- 1. Is the organization using IT to further its business objectives?
- 2. How does the organization align its IT investments to its business strategy?
- 3. Does the organization have a strong control environment?
- 4. Does the organization have an information architecture and a technical direction?
- 5. Is the organization assessing and managing its IT risks in a controlled way?
- 6. Is the IT team optimized to deliver the services the organization is expecting?
- 7. Is the organization getting the value it expects?

By examining how an organization makes IT investment decisions, implements new assets, delivers services, assesses risk and measures its own performance, the IT auditor can assure the organization is meeting its fiduciary, compliance and security responsibilities.

#### Grading

| ltem               | Percent of Total<br>Points |
|--------------------|----------------------------|
| Participation      | 20%                        |
| Policy Project     | 20%                        |
| Audit Plan Project | 20%                        |
| Quizzes            | 20%                        |
| Exam               | 20%                        |
| Total              | 100%                       |

## Weekly Rhythm

This class will operate on a weekly cycle from Friday to Thursday for 14 weeks.

| Friday    | Case & discussion questions for the coming week's readings will be posted @ 6:00 AM          |
|-----------|--|
| Saturday  | <ul> <li>Discussion posts on the coming week's topic &amp; case<br/>analysis open</li> </ul> |
|           | Quiz for last week's topic posted on Blackboard @ 6:00 AM                                    |
| Sunday    | Discussion posts welcome   |
|           | <ul> <li>Quiz for last week's topic closes on Blackboard @ 11:59<br/>PM</li> </ul>           |
| Monday    | Discussion posts welcome   |
| Tuesday   | Discussion posts welcome   |
|           | Class with case discussion   |
| Wednesday | Discussion posts on this week's topic close @ 11:59 PM                                       |
| Thursday  | Discussion wrap up for last class' topic posted  |

# 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:

#### **Weekly Discussion 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 of the discussion questions on the week's readings by **Wednesday** @11:59 PM. 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 three other comments each week to the general discussion.

#### Weekly Case Analysis

Most of your weekly assignments will be case analyses. Instructions for each week's assignment will be included in the Friday post. Typically, I will post several questions about the case or instruction for the assignment. You must come to class prepared to discuss all of these questions in detail. Please feel free to ask questions of each other about the case online before class.

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 decision-makers 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).

## **Policy Project**

For our discussion of IT policies, your team will write a specific IT security policy on one of the topics listed below. Using what you have learned from the readings and your own research, you will:

 Write an appropriate policy for a hypothetical firm that does \$50MM of sales with 100 employees and 10 IT people.

- Identify the controls that will need to be put in place to ensure the policy is followed.
- Create a short (maximum 5 minute) video that explains the policy and why it is vital to the employees of your hypothetical company.

Your team will post both the video and your policy document on the class blog. **Everyone is expected** to read and comment on a minimum of four different policies.

You must choose to work on one of the following policies:

- Acceptable Use Policy
- Social Security Number Policy
- Security Response Policy
- Remote Access Policy
- Web Application Security Policy
- Work Station Encryption Policy

#### Audit Plan Project

One of the learning goals of this class is to prepare you to audit a company's IT governance capabilities. Your team will prepare an audit program for the same security policy you wrote in Week 7. You will be auditing the same hypothetical firm that does \$50MM of sales with 100 employees and 10 IT people. Since you are already an expert on one of the following policies, you will need to prepare your audit program to audit the controls (for both sufficiency and effectiveness) you suggested in week 7.

- Acceptable Use Policy
- Social Security Number Policy
- Security Response Policy
- Remote Access Policy
- Web Application Security Policy
- Work Station Encryption Policy

You will create:

- 1. An outline (Excel or Word, max 3 pages) that covers all the goals of your audit, the areas you need to consider in your audit program and how you will gather evidence for each to justify your conclusion on each area.
- 2. A similar short video that you would use to sell the company's audit committee on the soundness of your audit plan.

Your team will post its audit program and video on the class blog for others to consider. **Everyone is** expected to read and comment on a minimum of four different audit programs.

#### Quizzes

For eleven weeks of the semester you will have a quiz to complete each weekend on the previous week's material. These quizzes are on <u>Blackboard</u> and have a combination of five CISA exam practice questions and/or short answer questions. You can take the quiz anytime between Saturday at 6:00 AM and Sunday at 11:59 PM. Once you start the quiz you will have 15 minutes to complete it. You will not be able to stop, go back or otherwise

extend the time. Be sure you are ready to go and have the time available before you start the quiz. Late work will not be accepted

# Final Exam

The final exam will also be on <u>Blackboard</u> and will use all multiple-choice CISA practice examination questions. The exam will be comprehensive. Everything we cover during the semester could appear on the final. The final exam consists of 75 questions and you will have 90 minutes to complete it (this is the same pace as the CISA exam). The exam will be available at 12:01 AM on Friday and must be completed by 11:59 PM Sunday.

#### **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 of the required elements, new concepts and ideas are detailed that transcend general discussions along similar topic areas. There are few mechanical, grammatical, or organization issues that detract from the ideas.  | A- or A   |
| 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-  |

#### Plagiarism, Academic Dishonesty and Citation Guidelines

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

Plagiarism is a serious offence and could lead to reduced or failing grades and/or expulsion from the university. The Temple University Student Code of Conduct specifically prohibits plagiarism (see http://www.temple.edu/assistance/udc/coc.htm).

The following excerpt defines plagiarism:

*Plagiarism is the unacknowledged use of another person's labor, ideas, words, or assistance. Normally, all work done for courses — papers, examinations, homework exercises, laboratory* 

# MIS 5202 – IT Governance - Syllabus

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

Source: Temple University Graduate Bulletin, 2000-2001. University Regulations, Other Policies, Academic Honesty. Available online at: http://www.temple.edu/gradbulletin/

- For a more detailed description of plagiarism:
- Princeton University Writing Center on Plagiarism:
- o http://web.princeton.edu/sites/writing/Writing\_Center/WCWritingRes.htm
- How to successfully quote and reference material:
- University of Wisconsin Writers Handbook
- o http://www.wisc.edu/writing/Handbook/QuotingSources.html
- How to cite electronic sources:
- Electronic Reference Formats Recommended by the American Psychological Association
- http://www.apastyle.org/elecmedia.html

# MIS 5202 – IT Governance - Syllabus

| ISACA   | ISACS materials other than Journal articles are available at:   |
|---------|---|
|         | https://drive.google.com/a/temple.edu/folderview?id=0B8S2SZTC04Vidk1wRnpPaTIELTg&usp=sh   |
|         | aring eid#  |
|         | CISA Review Manual 2012, ISACA.org Hardcopy given to all IT Audit students  |
|         | COBIT 5: Enabling Processes, ISACA.org  |
|         | The IT Risk Framework, ISACA.org  |
|         | COBIT 5: Self Assessment Guide, ISACA.org   |
|         |   |
|         | "What Every IT Auditor Should Know About Proper Segregation of Incompatible IT Activities",<br>Tommie W. Singleton, Isaca Journal |
|         | "Audit of Outsourcing", S. Anantha Sayana, <b>Isaca Journal</b>   |
|         |   |
|         | "The IT Balanced Scorecard Revisited", Alec Cram, , Isaca Journal   |
|         | "What is Your Risk Appetite?", Shirley Booker, <b>Isaca Journal</b>   |
|         | "DoS Attacks—A Cyberthreat and Possible Solutions," Ajay Kumar, Isaca Journal   |
|         | "Auditing Business Continuity", S. Anantha Sayana Isaca Journal   |
| Other   | Text:   |
|         | IT Strategic and Operational Controls, by John Kyriazoglou, can be found in ISACA's eLibrary                                      |
|         |   |
|         | STARS Air Ambulance: An Information Systems Challenge, Malcolm Munro & Sid L. Huff,<br>Product Number: 908E04-PDF-ENG             |
|         | "Boards of Directors, Corporate Governance and Cyber Risks: Sharpening the Focus",  |
|         | AguilarBoards   |
|         | Background reading: "Information Technology Management Framework Roles and  |
|         | <b>Responsibilities,</b> " US Department of Housing and Urban Development,  |
|         | portal.hud.gov/hudportal/documents/huddoc?id=itm_roles.pdf  |
|         | "Enterprise Architecture: Don't be a Fool with a Tool", Jason Bloomburg,  |
|         | http://www.forbes.com/sites/jasonbloomberg/2014/08/07/enterprise-architecture-dont-be-a-fool-<br>with-a-tool/                     |
|         | "What is Enterprise Architecture?" Daniel Manoli  |
|         | http://www.ittoday.info/Articles/What_Is_Enterprise_Architecture.htm  |
|         | "How to Write an Information Security Policy", Jennifer Bayuk,  |
|         | http://www.csoonline.com/article/2124114/strategic-planning-erm/how-to-write-an-information-                                      |
|         | security-policy.html  |
|         | "Policy and Policy Making" Edmund R. Gray,  |
|         | http://www.referenceforbusiness.com/encyclopedia/Per-Pro/Policies-and-Policy-Making.html  |
|         | "Managing Quality for Information Technology",  |
|         | http://www.qualitydigest.com/mar99/html/body_itech.html   |
|         | "Total Quality Management, Chapter 5" Reid <u>http://www.wiley.com/college/sc/reid/chap5.pdf</u>                                  |
|         |   |
|         | "Incident Response: Six Steps for Managing Cyber Breaches", Guidance Software,  |
| Gartner | To get Gartner articles log onto <b>TUPortal</b> , select Gartner Gateway(left hand menu) and search for                          |
|         | the article you want by name  |
|         | "Understanding IT Controls and COBIT"   |
|         | "Outsourcing Contract Terms and Conditions: An Understanding of the 19 Articles in a  |
|         | Master Service Agreement"   |
|         | "Effective Communications: Performance Dashboards"  |
|         | "The Security Processes You Must Get Right"   |
|         | "Foundations of Business Continuity"  |
| Harvard | Harvard publications are available only as a course pack at:  |
| Press   | https://cb.hbsp.harvard.edu/cbmp/access/37715991  |
|         | Strategic IT Transformation at Accenture, Mark Jeffery; Daniel Fisher; Mirron Granot; Anuj  |
|         | Kadyan; Albert Pho; Carlos Vasquez KEL471-PDF-ENG   |
|         | IT Governance Archetypes for Allocating Decision Rights, Peter Weill, Jeanne W. Ross May  |
|         | 13, 2004 Product number: 8087BC-PDF-ENG   |

| Enterprise-Wide Business-IT Engagement, Stijn Viaene; Steven De Hertogh JIT025-PDF-ENG       |
|--|
| MDCM, Inc. (A & B): Strategic IT Portfolio Management, Mark Jeffery, Joseph F. Norton, Derek |
| Yung , Jan 01, 2006, Product number: KEL172-PDF-ENG  |
| Crafting And Executing An Offshore IT Sourcing Strategy: GlobShop's Experience, C.           |
| Ranganathan; Poornima Krishnan; Ron Glickman, Product #: JIT015-PDF-ENG                      |
| iPremier: Denial of Service Attack (Graphic Novel Version A, B, C), Robert D. Austin, Jeremy |
| C. Short, Jun 25, 2009, Product number: 609092-PDF-ENG                                       |