Course Syllabus
T81 PRJM 563-02, IT Governance and Risk Management, Fall 2019
Master of Information Management
The Henry Edwin Sever Institute | James McKelvey School of Engineering
Washington University in St. Louis

COURSE OVERVIEW

Firms with superior IT governance designed to support the organization’s strategy achieve better performance and higher profits than firms with poor (or no) governance. Just as corporate governance aims to ensure quality decisions about all corporate assets, IT governance links IT decisions with company objectives and monitors performance and accountability. This course shows how the design and implementation of an IT governance system can transform IT from an expense to a profitable investment. Essential to IT governance is risk management. In this regard, students will learn key aspects of managing risk including risk identification, risk analysis (including qualitative and quantitative) risk response planning and risk monitoring and control. Particular focus is placed on risk prevention, mitigation and recovery; the role of IT governance, auditing and control of the confidentiality, integrity and availability of data. This fact-filled class will provide student knowledge to master key Risk Management techniques required of leading Project Managers & Team Members.

The first eight classes will deal with the topics of IT Governance. The last eight classes will deal with the topics in Risk Management.

INSTRUCTOR OVERVIEW

Ozzie L. Lomax, PMI-RPM, PMP, MBAPM
lomax@wustl.edu, secondary of olomax@charter.net | 618-570-0396
- Office hours – By appointment
- CEO, Lomax Consulting Group
- PMI Director of Certification, Project Management Professional (PMP) & Risk Management Professional (RMP)
- Ordained Minister & Marriage Enrichment Facilitator
- BS EET 79’MBA in Project Management
- Ameren Energy: Engineer, Supervisor, Manager, Director
- 21 years teaching
- Experiential, Applied Cross-Industry Learning Philosophy

Dr. Don Lang, BS, MS, Ph.D.
donaldlang24@yahoo.com | 314-807-4551
- Office hours – By appointment
- Division Director – Boeing Information Technology – Retired
- Financial Secretary – St. Lucas United Church of Christ
- Capital Campaign Chairman – St. Lucas United Church of Christ
- Co-Chair – Eliot Society - Washington University McKelvey School of Engineering
- Email: donaldlang24@yahoo.com
CLASS MEETING

- **Time:** Monday evening, 6:00PM – 9:00PM
- **Location:** Simone 023

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**Risk Management Part – First 8 classes – O.Lomax PMI-RMP**

**LEARNING OBJECTIVES**

- Provide an understanding to navigate the risk management process.
- Understand the functions and roles of project managers, project sponsors and project team members in addressing project risk.
- Master skills associated with identifying the risk culture, risk tolerance and data/information quality encountered in corporate business environments.
- Develop skills at Risk Identification of key threats and often overlooked opportunities. 10 risk identification tools will be analyzed to provide students a broad identification toolbox for various IT situations.
- Learn techniques to properly analyze risk. Develop competency at predicting the probability and consequence of risk events. Prioritization and Valuation of technology risks; determining project risk scores to aid in portfolio analysis, strategic capital allocation and alignment to business strategies.
- Create understanding of Expected Monetary Value for risk assessment. Use of Monte Carlo analysis and Decision Tree analysis will be covered to support decisions about IT assets.
- Innovation-based risk analysis will be discussed for leading edge technology, product, cyber security and software applications.
- Learn how to develop and control contingency reserve and management reserves to improve project cost, schedule and quality estimates and forecasts.
- Develop techniques and skills to increase probability of project success by having robust and proactive risk response plans to prevent IT failures and accelerate project recovery. This includes how to develop proactive risk triggers indicative of pending risk events. Primary, Secondary and Tertiary Risk Responses for IT projects such as case studies/discussions related to malware, incident response, forensics, business continuity, Patch Management, Data Recovery, etc. are planned.

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**CLASS TEXTS / MATERIALS / TOOLS**

Required:

- **Identifying and Managing Project Risk, Essential Tools for Failure-Proofing Your Project**
  Author: Tom Kendrick, PMP
GRADE COMPOSITION

The student's second half of semester grade will be based on the grading components listed below:

<table>
<thead>
<tr>
<th>Major Coursework Components</th>
<th>Component Proportion</th>
<th>Coursework Sub-component</th>
<th>Sub-component Points</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Assignments</td>
<td>70%</td>
<td>Risk Catalogue</td>
<td>250</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business Risk Article</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Exam</td>
<td>30%</td>
<td>Risk Management Exam</td>
<td>(In class with Reference Sheet to assist)</td>
<td>150</td>
</tr>
</tbody>
</table>

Total Point: 500

Americans with Disabilities: If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please let me know.

The majority portion of class time will be spent in covering the materials in the textbook and slides with extensive in-class practical discussion. Student should come to class fully prepared to discuss textbook assigned chapters and lecture slides and bring up any questions. Student participation and interaction is REQUIRED and is considered to be insightful, quality comments and answering questions. Students should ask questions and provide thoughts from current/previous jobs, military work, self-employment, or general life experiences. The learning process will be enhanced with real world examples, problems and textbook applications.

The reading assignment calendar presents a series of textbook reading assignments. Each student is expected to read all assigned chapters. The instructor will expand in discussions, presentations, and videos.

COURSEWORK COMPONENTS DESCRIPTIONS

250 points – Risk Management Catalogue
Students will build a robust Risk Management Catalogue (RMC) for a technology project. This will be a listing of at least 5 IT Risk Categories, with a minimum of 5 risks per category. Risk Catalogue will be graded on quality of CRE diagram, risk triggers, and Risk Response Plans.

150 points – Exam
One exam that will be a combination of short essay answers, True/False and multiple choice.

100 points – Article & Article Summary
Students will receive points by writing a summary of a newsworthy IT/Business article related to textbook material or in class discussion. A written 2-3 page report on the article will be submitted with a copy of the article. The report on the article must address:
1. Why the article was selected?
2. Threats and Opportunities associated with the articles.
3. A summary of Textbook or lecture concepts (minimum of 3) associated with the article?
4. Effectiveness of risk management concepts used by the stakeholders or concepts that could have been used by the stakeholders.

Discussions contribution may be used to decide final grade in borderline situations.

**IT Governance Part – Final 8 classes – D. E. Lang**

**LEARNING OBJECTIVES**

- Provide an understanding on how to integrate IT strategy with business strategy.
- Examine the business and IT strategic planning cycles and develop a successful execution framework in support of the business
- Overview of IT governance frameworks and industry best practices, strengths and weaknesses.
- Understand critical components of IT governance including program and project management, IT service management, supplier management including strategic sourcing and outsourcing.
- Determine how to institute performance management measures and controls, critical success factors and create a composite checklist of IT governance activities.

**CLASS TEXTS / MATERIALS / TOOLS**

Required:
- Implementing IT Governance – A Practical Guide to Global Best Practices in IT Management
  Author: Dr Gad J Selig PMP COP

**GRADE COMPOSITION – Through Midterm**

The student's first half of semester grade will be based on the grading components listed below:

<table>
<thead>
<tr>
<th>Major Coursework Components</th>
<th>Component Proportion</th>
<th>Coursework Sub-component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>40%</td>
<td>Class homework and participation</td>
<td>200</td>
</tr>
<tr>
<td>Exam</td>
<td>60%</td>
<td>IT Governance Midterm Exam (In class with Reference Sheet to assist)</td>
<td>300</td>
</tr>
</tbody>
</table>

Total Point: 500

**COURSEWORK COMPONENTS DESCRIPTIONS**

200 points – Homework
Each week the student will be assigned homework to be turned in the first part of the next class. Students and professor will then discuss the homework and share the results of their research.

**300 points – Midterm Exam**
One midterm exam that will be a combination of short essay answers, True/False and multiple choice.

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**GRADING POLICIES**

1. Assignments must be completed and submitted by the provided due date. Late assignments will be accepted if pre-approved with late submittal deductions.
2. Missed exams and quizzes may be given for situations outside of student controls such as serious illness and family emergencies
3. Policy for Incomplete grade will follow the SEAS policy.

**Grading Scale:**

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>%</th>
<th>Points Toward GPA</th>
<th>Letter Grade</th>
<th>%</th>
<th>Points Toward GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>≥ 97%</td>
<td>4.0</td>
<td>C+</td>
<td>74% - 76%</td>
<td>2.3</td>
</tr>
<tr>
<td>A</td>
<td>93% - 97%</td>
<td>4.0</td>
<td>C</td>
<td>72% - 73%</td>
<td>2.0</td>
</tr>
<tr>
<td>A-</td>
<td>90% - 92%</td>
<td>3.7</td>
<td>C-</td>
<td>70% - 71%</td>
<td>1.7</td>
</tr>
<tr>
<td>B+</td>
<td>87% - 89%</td>
<td>3.3</td>
<td>D+</td>
<td>67% - 69%</td>
<td>1.3</td>
</tr>
<tr>
<td>B</td>
<td>80% - 86%</td>
<td>3.0</td>
<td>D</td>
<td>65% - 66%</td>
<td>1.0</td>
</tr>
<tr>
<td>B-</td>
<td>77% - 79%</td>
<td>2.7</td>
<td>F</td>
<td>&lt; 65%</td>
<td>0.0</td>
</tr>
</tbody>
</table>
## COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week # Start Date</th>
<th>Theme / Topics</th>
<th>Readings</th>
<th>Submission Required</th>
<th>Student-led Classroom Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Management Part – First 8 classes – O.Lomax PMI-RMP</strong></td>
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<tr>
<td>Week 1 08-26</td>
<td>Risk Management</td>
<td>Chapter 2, 3 &amp; 4</td>
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<tr>
<td>Week 2 09-02</td>
<td>No class, Labor Day Holiday</td>
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<tr>
<td>Week 3 09-09</td>
<td>Risk Identification, Determination &amp; Influences</td>
<td>Chapter 5, 6 &amp; 7</td>
<td></td>
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<tr>
<td>Week 4 09-16</td>
<td>Qualitative Risk Analysis</td>
<td>Chapter 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 5 09-23</td>
<td>Quantitative Risk Analysis</td>
<td>Chapter 9 &amp; 12</td>
<td></td>
<td></td>
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<tr>
<td>Week 6 09-30</td>
<td>Risk Response Planning</td>
<td>Chapter 10</td>
<td></td>
<td></td>
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<tr>
<td>Week 7 10-07</td>
<td>Risk Monitoring &amp; Control Exam on Chapters 2-10, 12</td>
<td>Chapter 11</td>
<td></td>
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<tr>
<td>Week 8 10-14</td>
<td>No class, Fall Break</td>
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<tr>
<td>Week 9 10-21</td>
<td>Mid-term Exam – Risk Management</td>
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<td>Risk Catalogue Due</td>
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<tr>
<td><strong>IT Governance Part – Final 8 classes – D. E. Lang</strong></td>
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<tr>
<td>Week 10 10-28</td>
<td>Introductions and Syllabus Review Intro to IT Governance</td>
<td>Chapter 1</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 11 11-04</td>
<td>IT Governance Framework and Industry Best Practices</td>
<td>Chapter 2</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 12 11-11</td>
<td>Strategic Planning and Portfolio Management</td>
<td>Chapter 3</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 13 11-18</td>
<td>Project Management Excellence – 10 Best Management Practices</td>
<td>Chapter 5</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 14 11-25</td>
<td>Service Management</td>
<td>Chapter 6 &amp; 7</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 15 12-02</td>
<td>IT Governance Performance Management</td>
<td>Chapter 8</td>
<td>Homework</td>
<td>Class room Discussion</td>
</tr>
<tr>
<td>Week 16 12-09</td>
<td>Exam – IT Governance</td>
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<tr>
<td>Week 17 12-16</td>
<td>Final Exam Schedule Date (if required)</td>
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</tbody>
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NOTE: This syllabus is subject to change at the discretion of the instructor to accommodate instructional and/or student needs. All changes will be communicated to students in a timely manner.
I. POLICIES TO BE INCLUDED AT THE INSTRUCTOR’S DISCRETION

Use of Laptop Computers and Electronic Devices in the Classroom
Laptop & tablet computers, smart phones and other electronic devices can be helpful in taking notes, providing tools for course exercises and referencing course related materials. However, they can also be distracting when used for non-course related activities such as emailing & texting, posting on social media, reading news sites, shopping online, or looking at YouTube videos. Some students have even been observed working on class assignments for the same or other courses. As common sense suggests, and a March 2013 study by Faria Sana, Tina Weston and Nicholas J. Cepeda confirmed, students who are multitasking during class have less understanding and recall of what’s being discussed. The study also found that “participants who were in direct view of a multitasking peer scored lower on a test compared with those who were not.”

As mentioned earlier this course is part of a professional, graduate program. Consequently, it is expected that students conduct themselves in a professional manner. This includes being engaged in the class proceedings, by attentive listening, critical thinking, asking appropriate questions and participating in active discussion. Your attendance and participation in class is important for the class and is expected to be more than just physical attendance. Engaging in non-class related activities during class time is not acceptable and disrespectful of the lecturer and other students.

* Reference the Wall Street Journal article: I’m Banning Laptops from My Classroom, July 10, 2016 by Stuart Green
* Reference the WashU Teaching Center Article https://teachingcenter.wustl.edu/resources/course-design/developing-course-policies-on-laptops-mobile-devices/

Privacy and Security
Recording of class sessions either audio or video is prohibited without permission from the instructor and the other class members.

Collaboration:
With the exception of your team projects, all assignments are to be completed on your own. You are encouraged to discuss ideas and techniques broadly with other class members, but all written or presentation work, whether in preliminary or final form, is to be generated by you working alone. If in doubt - ask.

Language Sensitivity
When in the classroom, all students should speak English at all times. While meeting with classmates on a classroom project, speak a language that every student present (in your group) understands, without exception.

Professionalism:
You are part of a professional, graduate program. Consequently, it is expected that students conduct themselves in a professional manner. This includes being on time for classes and meetings, being prepared, and participating in class discussions, group activities, projects, etc. The level of professionalism you exhibit throughout the course will impact your final grade. It directly affects the participation portion of the grade but is also taken into consideration in all other aspects of the course as it reflects the overall quality of professional performance.
II. **SEVER/UNIVERSITY POLICIES**

**Ethics of Academic Integrity (SEAS)**

All students in the School of Engineering & Applied Science are expected to conform to high standards of conduct. This statement on student academic integrity is intended to provide guidelines on academic behaviors which are not acceptable.

Engineering courses typically have many problem sets assigned as homework. You are not allowed to collaborate when solving homework problems, performing lab experiments, writing or documenting computer programs, or writing reports unless the instructor specifically states otherwise.

**It is dishonest and a violation of academic integrity if:**

1. You turn in work which is represented as yours when in fact you have significant outside help. When you turn in work with your name on it, you are in effect stating that the work is yours, and only yours.
2. You use the results of another person’s work (exam, homework, computer code, lab report) and represent it as your own, regardless of the circumstances.
3. You request special consideration from an instructor when the request is based upon false information or deception.
4. You submit the same academic work to two or more courses without the permission of each of the course instructors. This includes submitting the same work if the same course is retaken.
5. You willfully damage the efforts of other students.
6. You use prepared materials in writing an in-class exam except as approved by the instructor.
7. You write on or make erasures on any test material or class assignment being submitted for re-grading.
8. You collaborate with other students planning or engaged in any form of academic dishonesty.
9. You turn in work, which is represented as a cooperative effort, when in fact you did not contribute your fair share of the effort.
10. You do not use proper methods of documentation. For example, you should enclose borrowed information in quotation marks; acknowledge material that you have abstracted, paraphrased or summarized; cite the source of such material by listing the author, title of work, publication, and page reference.
III. WASHINGTON UNIVERSITY IN ST LOUIS SUPPLEMENTAL RESOURCES

1. **Disability Resources**: If you have a disability that requires an accommodation, please speak with instructor and consult the Disability Resource Center at Cornerstone (cornerstone.wustl.edu). Cornerstone staff will determine appropriate accommodations and will work with your instructor to make sure these are available to you.

2. **English writing support**: For additional help on your writing, consult the expert staff of The Writing Center (writingcenter.wustl.edu) in Olin Library (first floor). It can be enormously helpful to ask someone outside a course to read your essays and to provide feedback on strength of argument, clarity, organization, etc. The Engineering Communication Center http://engineering.wustl.edu/current-students/student-services/Pages/default.aspx offers students in the School of Engineering and Applied Sciences help with oral presentations, writing assignments, and other communications projects, as well as job-search documents such as resumes and cover letters.

3. **English competence**: Students are encouraged to check their grammar and spelling before submitting their written works. Although, students are free to choose whatever the tools that best fit their need, some of the common tools for grammar & spelling checking, citation making in different writing styles can be found in the list below.
   d. http://www.citationmachine.net – Citation Machine [Free & Paid Service]

4. **Bias reporting**: The University has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of bias, prejudice or discrimination against a student can report their experiences to the University’s Bias Report and Support System (BRSS) team. See: brss.wustl.edu

5. **Mental health service**: Mental Health Services’ professional staff members work with students to resolve personal and interpersonal difficulties, many of which can affect the academic experience. These include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. See: shs.wustl.edu/MentalHealth

6. **Sexual Harassment**: Sexual harassment is a form of discrimination that violates university policy and will not be tolerated. It is also illegal under state and federal law. Title IX of the Education Amendments of 1972 prohibits discrimination based on sex (including sexual harassment and sexual violence) in the university's educational programs and activities. Title IX also prohibits retaliation for asserting claims of sex discrimination. The university has
designated the Title IX Coordinator identified below to coordinate its compliance with and response to inquiries concerning Title IX.

For more information or to report a violation under the Policy on Discrimination and Harassment, please contact:

**Discrimination and Harassment Response Coordinators**
- Apryle Cotton, Asst. Vice Chancellor for Human Resources
  - Section 504 Coordinator
  - Phone: 314-362-6774
  - Email: apryle.cotton@wustl.edu
- Leanne Stewart, Employee Relations Manager
  - Phone: 314-362-8278
  - Email: leannerstewart@wustl.edu

**Title IX Coordinator**
- Jessica Kennedy, Director of Title IX Office
  - Title IX Coordinator
  - Phone: 314-935-3118
  - Email: jwkennedy@wustl.edu

You may also submit inquiries or a complaint regarding civil rights to the United States Department of Education's Office of Civil Rights at 400 Maryland Avenue, SW, Washington, DC 20202-1100 or by visiting the U.S. Department of Education website or calling 800-421-3481.