Course Name: RSKA 5340-01 Audit Data Analytics

Class Schedule: 5:30 PM to 9:00 PM Wednesday Starting June 23, 2021, to August 11, 2021

All Classes will run on Zoom. Students must load and use Zoom to participate and earn a grade.

Instructor: Steve Mar (Prof. Mar), Teaching Assistant: Olivia Chen

Course Overview

So much data. What does it all mean? Is it reliable? Is it accurate? Today, we see data used in business, social, non-profit, and government organizations. Big Data gets collected and analyzed in ways we don’t even realize.

Organizational leaders and Internal Auditors need to understand better how data gets used. Internal Auditors especially need to recognize that using data analytics to perform audit work represents the next wave of skills and value add to organizations. Auditors or professionals need to understand the power of data analytics. Auditors must recognize how it helps assess governance, risk, and controls. The individuals who learn to be data-savvy will become the most sought after and most valuable resource to any organization.

Required Text Book:

Data Analytics Made Accessible: 2021 Edition Dr. Anil Maheshwari – Only available as Kindle Book via Amazon. The cost is $9.99 plus tax. You can read with a Kindle app on a mobile phone, iPad, or PC device.

Sorry, there is no Seattle U Bookstore edition available.

Course Learning Objectives:

1. Introduce Students to Internal Audit Data Analytics and understand Business Risk Data.
2. Prepare Students for possible future Data Analytics careers and align with skills that organizations seek.
3. Introduce Key Concepts and General Software Tools to allow Students to practice data analytics.
4. Plan Team and Personal Data Analytics Project and Programs that are impactful.
5. Develop an understanding of the business process model and mine the critical performance data points and indicators.
6. Gather and clean data to solve significant Accounting, Audit, and Business Problems.
7. Analyze data to discover and answer Accounting, Audit, and Business Problems Questions.
8. Present and visualize Accounting, Audit, and Business Insights to Business Leaders and Board Members.
Students will learn, plan, and perform Team and Personal data analytic projects to deliver reports that visualize information so that management can make insightful decisions. We will focus on fundamental principles, business process frameworks, and robust data tools given the course schedule. Specifically, Students will learn to use EXCEL, Power BI, SQL, and Tableau to plan, mine, gather, analyze, and visualize audit, accounting, and business data.

Students will plan, gather data, perform analysis, and deliver their insights on the following proposed project data:

1. Accounting – Review and analyze Procurement Account data to determine if transactions comply with existing Accounting Policies.
2. Audit – Analyze one of the highest technology process risks, Cyber Security data.

Note: Projects subject to availability and Stakeholder approval.

High-Level Course Syllabus. Note: All guest speakers subject to availability.

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<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic/ Learning Objective</th>
<th>Reading Assignments</th>
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</thead>
<tbody>
<tr>
<td>Before first class</td>
<td>6/9/2021</td>
<td>Pre-class Survey and Assignment</td>
<td>Chapter 1 - Wholeness of DA</td>
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<tr>
<td>1</td>
<td>6/23/2021</td>
<td>1. Introduce, Play, and Cover Class Objectives</td>
<td>Chapter 2: Business Intelligence Concepts and Applications</td>
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<td>2. Cover Data Analytics (DA) Concepts, Data Analytics Process Framework (DAP), and Tools.</td>
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<td>3. Confirm EXCEL level of Mastery.</td>
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<td>4. Introduce and Organize Team Projects</td>
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<td>5. Discuss Metadata and OSU P-Card Data Analytics</td>
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<td>6. Discuss Deliverables, Grading, and Metrics.</td>
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| 2    | 6/30/2021 | 1. Perform Data Analytics Trends using OSU P-Card Data  
                            2. Use EXCEL to Extract, Load, and Transform (ELT) Data  
                            3. Discuss Business Intelligence and Data Warehousing when using DAP  
                            4. Introduce Personal Data Analytics Project  
                            5. Discuss Deliverables                                                                 | Chapter 3: Data Warehousing |
| 3    | 7/7/2021  | 1. Listen to Guest Speaker Claire Patterson  
                            2. Introduce and Use Tableau  
                            3. Discuss and Work on Personal DA Project Assignment  
                            4. Hold In Class Project Team Work Session  
                            5. Discuss Deliverables                                                                 | Read Chapter 4 Data Mining and Chapter 5 Data Visualization |
| 4    | 7/14/2021 | 1. Continue with Tableau Audit DA Visualization  
                            2. Cover Data Mining Chapter 4 and Data Visualization Chapter 5  
                            3. Work on Team Project  
                            4. Work on Personal DA Project - Give Status Report  
                            5. Discuss Deliverables                                                                 | None                        |
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| 5    | 7/21/2021 | 1. How Microsoft Deploys Power BI in Internal Audit" - Pooja Sund  
2. Present Personal Projects - the Three Minute Pitch (3MP) to Professional Panel of Judges  
3. Discuss Deliverables | Chapter 16: Big Data |
| 6    | 7/28/2021 | 1. Listen to Guest Speaker  
2. Work on Power BI Exercise  
3. Work on Team Project & Give Status Report with Instructor  
4. Discuss Deliverables | Provided by Instructor - presentations |
| 7    | 8/4/2021  | 1. Discuss using SQL and Alteryx - Rachel Nelson  
2. Work on Team Project  
3. Trusting your peers and co-workers  
4. Practice and Give Dress Rehearsals  
5. Close with Deliverables | Provided by Instructor - visualization |

**Grades**

Course Grades based on project work, homework assignments, attendance, and in-class participation will follow the point range below:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>900-1000</td>
<td>A</td>
</tr>
<tr>
<td>800-899</td>
<td>B</td>
</tr>
<tr>
<td>700-799</td>
<td>C</td>
</tr>
<tr>
<td>600-699</td>
<td>D</td>
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Note: Points earned vary by assignment.

Other important information

Academic Resources:
- Library and Learning Commons (http://www.seattleu.edu/learningcommons/)
  (This includes: Learning Assistance Programs, Research [Library] Services, Writing Center, Math Lab)
- Academic Integrity Tutorial (found on Canvas and SU Online)

Academic Policies on Registrar website

Academic Policies - Redhawk Service Center - Seattle University
- Academic Integrity Policy
- Academic Grading Grievance Policy
- Professional Conduct Policy (only for those professional programs to which it applies)

Notice for students concerning Disabilities

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff located in Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

Office of Institutional Equity

Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in educational programs or activities that receive Federal financial assistance. This prohibition includes sexual misconduct, which encompasses sexual harassment and sexual violence. Seattle U remains committed to providing a safe and equitable learning, living, and working environment. Seattle U offers emergency, medical, and other support resources, as well as assistance with safety and support measures, to community members who have experienced or been impacted by sexual misconduct.

Seattle U requires all Faculty and staff to notify the University’s Title IX Coordinator if they become aware of any incident of sexual misconduct experienced by a student.
For more information, please visit https://www.seattleu.edu/equity/. If you have any questions or concerns, you may also directly contact the Title IX Coordinator in the Office of Institutional Equity (email: oie@seattleu.edu; phone: 206.296.2824) University Resources and Policies.

**Student Code of Conduct**

Please review and read the updated Seattle U Student Code of Conduct. [SU Student Code of Conduct](https://www.seattleu.edu/equity/)

**Seattle U COVID-19 Response**

Please review and be alert to the Seattle U COVID-19 Response. See the link below for more details. Students and Faculty should understand and follow the guidelines and instructions to keep safe and healthy.

Link to: [Seattle U COVID-19 Response](https://www.seattleu.edu/equity/)