

## *Introduction to Accounting Information Systems and Data Analytics*

|        |                 |                    |                     |
|--------|-----------------|--------------------|---------------------|
| CREDIT | 3               | INSTRUCTOR         | Seong Cho, Ph.D.    |
| OFFICE | TBA             | OFFICE HOURS       | Tue, Wed, 1:30~2:30 |
| TIME   | 11:00 ~ 12:40   | CLASSROOM LOCATION |                     |
| E-MAIL | cho@oakland.edu |                    |                     |

### [COURSE INFORMATION]

|                            |  |            |     |
|----------------------------|--|------------|-----|
| COURSE DESCRIPTION & GOALS | <p>This course focuses on business modeling, data analytics, and the integration of accounting systems with other information systems in the organization. It emphasizes business risk as well as information technology risk and the controls. Students will learn the basic skills for Data Analytics, Relational Database modeling skills using Unified Modeling Language, SQL Queries, Pivot tables, elements of XBRL taxonomy, Data visualization tools. The objective of the course is as follows:</p> <ul style="list-style-type: none"> <li>• Learn about the basics of Data Analytics.</li> <li>• Discuss the documentations techniques used in accounting systems. Discuss the risks within accounting systems and identify needed controls.</li> <li>• Understand how risk relates to organizational goals, how controls act to reduce risk, and how accounting and other business information and procedures are used to implement controls.</li> <li>• Analyze and evaluate general internal control strengths and weaknesses in given business contexts.</li> <li>• To learn and implement intermediate-level spreadsheet skills</li> <li>• To learn and implement SQL language and queries.</li> <li>• Architecture and Implementation of XBRL</li> <li>• Learn about data analytics tools: Poer BI, Tableau</li> </ul> |            |     |
| PREREQUISITE               | <p>Introductory Financial or Managerial accounting, Introduction to Management Information Systems or Equivalents or Waiver can be obtained from the Instructor based on the concurrent classes taken.</p>   |            |     |
| COURSE REQUIREMENTS        | <ol style="list-style-type: none"> <li>1. Textbook Accounting Information Systems: 3rd edition: Richardson, Chang, and Smith: McGraw-Hill (ISBN10: 1259969533, ISBN13: 9781259969539)- Enrollment to connect will have access to e-textbook. No hard copy needed.</li> <li>2. Access to Computer out of class time</li> <li>3. Student Subscription to JMP - Additional Information will be provided in the beginning of the class</li> </ol>  |            |     |
| GRADING POLICY             | <p>Course grade will be based solely on the following grading factors and weights:</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Attendance</td> <td style="text-align: center;">10%</td> </tr> </table>   | Attendance | 10% |
| Attendance                 | 10%  |            |     |

|                      |  |
|----------------------|--|
|                      | <p>Assignment 1 20%</p> <p>Assignment 2 20%</p> <p>Assignment 3 20%</p> <p>Final Exam <u>30%</u></p> <p>100%</p>   |
| TEXTS & NOTES        | Textbook Accounting Information Systems: 3rd edition; Richardson, Chang, and Smith; McGraw-Hill (ISBN10: 1259969533, ISBN13: 9781259969539)- Enrollment to connect will have access to e-textbook. No hard copy needed. No hard copy needed.   |
| INSTRUCTOR'S PROFILE | Dr. Seong Cho is an associate professor of accounting at Oakland University, Rochester Michigan, US and Visiting Professor at Yonsei School of Business, Seoul, Korea. He has taught accounting classes more than 15 years at various schools including Tulane University, Drexel University, George Washington University, and Yonsei Global MBA program. His teaching areas are Financial, Managerial, Financial Statement Analysis, and Accounting Information Systems at both undergraduate and graduate levels. His research works have been published in various journals such as Journal of Financial Intermediations, Accounting Horizons, Journal of Accounting and Public Policy, Journal of Business Ethics, and many others. His current research areas are XBRL, Corporate Social Responsibility, Disclosure, Auditor Remuneration, and CEO compensation. |

[WEEKLY SCHEDULE]

| WEEK (PERIOD) | WEEKLY TOPIC & CONTENTS   | COURSE MATERIAL & ASSIGNMENTS                      | NOTES   |
|---------------|---|--|---------|
| 1             | <ul style="list-style-type: none"> <li>AIS overview and Accountants as Business Analysts</li> <li>Data Modeling</li> <li>SQL Practice 1</li> </ul>  | <p>Chapter 1</p> <p>Chapter 2</p> <p>Chapter 3</p> | HW 1    |
| 2             | <ul style="list-style-type: none"> <li>Relational Databases and Enterprise Systems</li> <li>Sales and Collections Business Process</li> <li>SQL Practice 2</li> </ul>                         | <p>Chapter 4</p> <p>Chapter 5</p>                  | HW 2    |
| 3             | <ul style="list-style-type: none"> <li>Purchase and Payment Business Process</li> <li>Conversion Business Process</li> <li>SQL Practice III</li> <li>Data Analytics-JMP Practice I</li> </ul> | <p>Chapter 6</p> <p>Chapter 7</p>                  | Midterm |

| WEEK (PERIOD) | WEEKLY TOPIC & CONTENTS  | COURSE MATERIAL & ASSIGNMENTS          | NOTES      |
|---------------|--|--|------------|
| 4             | <ul style="list-style-type: none"> <li>• Integrated Project</li> <li>• Data Analytics in Accounting</li> <li>• Pivot Table Practice</li> <li>• Data Analytics-JMP Practice II</li> </ul>       | Chapter 8<br>Chapter 9                 | HW 3       |
| 5             | <ul style="list-style-type: none"> <li>• XBRL Taxonomy/AMPS model</li> <li>• Data Analytics Practice Power BI /<br/>Tableau I</li> <li>• Emerging Technology: Blockchain<br/>and AI</li> </ul> | Chapter 10<br>Chapter 11<br>Chapter 12 | HW 5       |
| 6             | <ul style="list-style-type: none"> <li>• Information Security and Computer<br/>Fraud</li> <li>• Monitoring and Auditing AIS</li> <li>• Data Analytics- Practice Tableau II</li> </ul>          | Chapter 13<br>Chapter 14<br>Chapter 15 | Final Exam |