IS 3150-04 Introduction to Information Systems

Albers School of Business and Economics
Seattle University

1. General information

Instructor: Ben Yeo (Master Yeoda)
Email: byeo@seattleu.edu
Term: SP 2021
Class: Online
Day/Time: NA
Office hours: Tue/Thu; 1130 hrs – 1230 hrs

2. Course description

This course builds a basic understanding of the value and uses of information systems for business operations, management decision-making, and strategic advantage. Students will be presented with a broad overview of the field to examine the increasing impact of information technology in business organisations, and be prepared for more advanced courses in data analytics and information systems. By completing the course, students should be better equipped to apply IT skills to solve business problems, to participate in IT projects, and to communicate more knowledgeably with IT professionals.

3. Faculty biographical sketch

Yeoda is a faculty at Seattle University. His research interests include innovation- and technology-driven economic growth and social informatics, using both quantitative and qualitative methods, including traditional statistics and data mining. Prior to academia, Yeoda worked in the industry as a Senior Research Analyst in Economics. He received a Ph.D. in Information Science from the College of Information Sciences and Technology at the Pennsylvania State University. Obviously, a Star Wars nerd, he is ☺

4. Learning objectives

The primary course outcome is to provide students with an understanding of the business value of information systems and the MIS industry. Practical skills covered include web design, introductory database design and queries, introductory data analysis, as well as process modelling and management. Specific learning objectives include:

1. Examine the role of information in the business organization, and the relationships between business functions and the nature of their individual information systems
2. Describe various types of information systems critical to businesses.
3. Develop skills in using various office applications (Excel, Access, Visio).
4. Understand how information systems can be utilized to support business operations
5. Examine the challenges involved the use of information systems
6. Understand the importance of knowledge and knowledge management
7. Explore issues in information systems management using real work cases
5. Course materials


6. Evidence students will submit

Grades are based on course deliverables. Specifically, there are 5 graded components for the course. These are given as follows.

- Recaps x5
- Projects x2
- Mid term
- Excel MOS certification exam
- Final exam

Recaps are self-paced homework on the material covered in that corresponding week. They are designed to keep us up to date with the concepts and force us to revise our notes in preparation for the exams.

The Projects are problem-based, where students apply the tools covered to develop solutions to solve the given problems. Each Project deliverable comprises a professionally written paper. These should be submitted on Canvas. Feedback will be provided to submitted work on Canvas approximately within one week of submission. All late submissions without an approved extension will receive a 5% penalty for each day late. The quality of submissions will be measured using corresponding rubrics, available on the Project itself. However, some aspects may involve subjective evaluation. As much as possible, the rubrics will frame the assessments. All Projects will be evaluated on evidence of learning, depth of analysis, organisation and thoroughness. They should demonstrate the consideration of key issues and critical thinking. All written Projects should be typed, single-spaced, and contain a bibliography of cited sources and appropriate footnotes (where applicable). All ideas, quotes and statistics borrowed from another author must be cited. If external content (such as facts or data) are used, please be sure to cite the corresponding authorities. Students may use any citation style, formal or otherwise, as long as it is complete and consistent. The objective here is simply to attribute to corresponding resources accordingly.

The mid term comprises a series of conceptual, factual and applied questions that students should be able to address within 90 minutes. There are likely to be approximately 60.

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1 Renting a textbook is a good way to reduce costs. Students may use the 3rd edition if preferred. However, the lecture materials and exams are based on the 4th edition. We will try our best to point out and cover the differences in class. Students are responsible for looking into the differences.
2 This can be obtained from GMetricx using the code given on Canvas.
3 Not every week has an associated Recap assigned. Please check the course schedule.
4 Extensions on any deliverable have to be very well justified on reasonably valid reasons and with appropriate documentation. The deliverables are assigned well in advance and any delays should be anticipated. Last minute extensions are not acceptable except under emergency situations.
5 +/- 10%. Subject to minor changes as needed. The format will be clearly communicated in class prior to the test date.
questions (multiple choice, true/false, and/or short answer questions). Due to the short quarter, make-ups must be completed within a week of the original test date. However, this requires appropriate documentation, such as medical documentation, for a valid and/or official reason to justify the absence. Make ups will be different and may not be at the same level of difficulty. If a student requires special accommodation, he/she should inform the instructor in advance with the appropriate documentation so special arrangements can be made.

The MOS Excel Certification exam is required for all Albers undergraduate students. For more information, please refer to the following URL. Students are required to pass this exam to graduate. These exams will be administered remotely via Certiport over two dates.

https://www.seattleu.edu/business/undergraduate/excel-certification

The final exam follows a similar format to the mid term, except it is cumulative. Hence, it is weighted more heavily. Due to the short quarter, make ups for the final exam will not be permitted. Missing for the final exam will require sufficient documentation (such as medical) to be removed from the final grade calculation. Per the University’s policy, INCOMPLETE grades can only be given in extenuating circumstances. This does not include missing the deadline for a final project because of connection issues, or having a common cold on the day of the exam. Likewise, if a student requires special accommodation, he/she should inform the instructor in advance with the appropriate documentation. This is to ensure special arrangements can be made in advance.

6.1 Expectations
Participation and studying outside class times are critical to completing the course successfully. Students are expected to read the assigned materials according to the course schedule, and complete the deliverables in a timely manner.

Keeping up with the schedule is critical in completing the course. Falling behind by more than two weeks can be challenging, as deliverables accumulate. Students should contact the instructor if he/she anticipates missing a class. Students are responsible for reviewing materials posted on Canvas. Students are expected to be present in all classes barring unforeseen circumstances and official/professionally-related absences due to necessity. In addition, students are expected to participate in class discussions to facilitate a healthy exchange of ideas and an effective learning experience for everyone.

6.2 Criteria for assessment
The final grade will be based on the graded deliverables

- Recaps (x5): 5%
- Projects: 40%
- Mid term: 20%
- Excel MOS exam: 10%

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6 This is advantageous to students because with so many things cramped in Finals Week, missing a question or two in the final exam does not have a heavy stake.
7 This will be approximately 20% of the course, which is synonymous with missing a day’s work in a week.
8 The lowest recap score will be dropped. Sometimes, we may be caught up with many deliverables at the end of the quarter. This gives us a cushion to help us manage our times better.
Final exam: 25%
Total: 100%

6.3 Grade descriptions
Grading will follow the Albers School’s recommended rigour. Students are expected to follow the rubrics very closely.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Point</th>
<th>Grade Range</th>
<th>Grade Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>95% +</td>
<td>The instructor judged the student to have accomplished the stated objectives of the course in an OUTSTANDING manner.</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>90 – 94.99%</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>87 – 89.99%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>83 – 86.99%</td>
<td>The instructor judged the student to have accomplished the stated objectives of the course in an ACCEPTABLE manner.</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>80 – 82.99%</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>77 – 79.99%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>73 – 76.99%</td>
<td>The instructor judged the student to have accomplished the stated objectives of the course in a POOR manner; but it is still a passing grade.</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td>70 – 72.99%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>60 – 69.99%</td>
<td>The instructor judged the student to have accomplished the stated objectives of the course in a DREADFUL manner. (A grade of D will not fulfil the requirements in a major field of concentration.)</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>Less than 60%</td>
<td>The instructor judged the student NOT to have accomplished the stated objectives of the course. TROLL</td>
</tr>
</tbody>
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7. Course schedule (in Pacific Time)\textsuperscript{9}

<table>
<thead>
<tr>
<th>Module Date</th>
<th>Topic</th>
<th>Activities\textsuperscript{10}</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview</strong></td>
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</tbody>
</table>
| Week 1 Mar 29 – Apr 2 | Introduction to MIS; ethics in information systems\textsuperscript{11} | Readings:  
  \begin{itemize}  
    \item Rainer Ch 1  
  \end{itemize}  
  Activities:  
  \begin{itemize}  
    \item Class introduction  
    \item Course overview  
    \item MIS careers  
    \item Asynchronous materials on ethics in information systems (tentative)  
  \end{itemize}  
  Homework:  
  \begin{itemize}  
    \item Recap 1 (1st attempt due Apr 4)  
  \end{itemize} |

| **Managing Data** | | |
| Week 2 Apr 5 – Apr 9 | Databases I: Database concepts | Readings:  
  \begin{itemize}  
    \item Rainer Ch 3  
  \end{itemize}  
  Activities:  
  \begin{itemize}  
    \item Database concepts  
  \end{itemize}  
  Homework:  
  \begin{itemize}  
    \item Recap 2\textsuperscript{12} (1st attempt due Apr 18)  
  \end{itemize} |

| Week 3 Apr 12 – Apr 16 | Databases II: Entity relationship modelling | Readings:  
  \begin{itemize}  
    \item Rainer Ch 3 & Plug IT in 3 (Sect 3.1 and 3.2)\textsuperscript{13}  
  \end{itemize}  
  Activities:  
  \begin{itemize}  
    \item Entity relationship diagrams  
  \end{itemize}  
  Homework:  
  \begin{itemize}  
    \item Project 1 Part 1 (due May 2)  
  \end{itemize} |

\textsuperscript{9} Class schedules are tentative and are subject to changes as necessary.
\textsuperscript{10} Additional readings will be assigned as needed.
\textsuperscript{11} Tentative. In conjunction with Albers Ethics Week, we may have a guest who will share her expertise on ethics in information systems. Corresponding materials will be provided on Canvas in an asynchronous format. Stay tuned!
\textsuperscript{12} This covers content from Databases I and II.
\textsuperscript{13} Plug IT in 3 is available at the end of the textbook.
<table>
<thead>
<tr>
<th>Week 4</th>
<th>Databases III: Database queries</th>
<th>Activities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 19 – Apr 23</td>
<td></td>
<td>• Database queries</td>
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<td></td>
<td></td>
<td>Homework:</td>
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<td></td>
<td></td>
<td>• Project 1 Part 2 (due May 2)</td>
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<td></td>
<td><strong>Foundations of Data Analytics</strong></td>
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<tr>
<td>Week 5</td>
<td>Mid Term Exam; Excel I</td>
<td>Readings:</td>
</tr>
<tr>
<td>Apr 26 – Apr 30</td>
<td></td>
<td>• Excel MOS guidebook Ch 1</td>
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<tr>
<td></td>
<td></td>
<td>Activities:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mid Term&lt;sup&gt;14&lt;/sup&gt; (To be taken on Canvas, Tue, Apr 27)</td>
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<td></td>
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<td>• GMetrix set up for Excel preparation exam</td>
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<tr>
<td>Week 6</td>
<td>Excel II</td>
<td>Readings:</td>
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<tr>
<td>May 3 – May 7</td>
<td></td>
<td>• Excel MOS guidebook Ch 2 – 4</td>
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<tr>
<td></td>
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<td>Activities:</td>
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<tr>
<td></td>
<td></td>
<td>• Excel prep for MOS&lt;sup&gt;15&lt;/sup&gt;</td>
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<tr>
<td></td>
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<td>• Certiport set up for actual Excel certification exam</td>
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<td>• Recap 3 (1st attempt due May 9)</td>
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<tr>
<td>Week 7</td>
<td>Excel III</td>
<td>Readings:</td>
</tr>
<tr>
<td>May 10 – May 14</td>
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<td>• Excel MOS guidebook Ch 5</td>
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<td></td>
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<td>Activities:</td>
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<tr>
<td></td>
<td></td>
<td>• Excel prep for MOS</td>
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<td></td>
<td></td>
<td>• Excel MOS exam (To be taken on Certiport, May 13, 13:45)&lt;sup&gt;16&lt;/sup&gt;</td>
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<tr>
<td></td>
<td></td>
<td>• Additional Excel topic: Pivot tables and charts&lt;sup&gt;17&lt;/sup&gt;</td>
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</tbody>
</table>

<sup>14</sup> The mid term exam covers Module 1 Intro to MIS and Module 2 Databases. More information is provided on Canvas.

<sup>15</sup> This includes doing the walkthroughs and taking the preparation exams on GMetrix.

<sup>16</sup> The certification exam lasts 50 min. However, due to the need for ID verification and other housekeeping matters, please set aside time from 13:45 am – 15:30 pm. This window is specifically set aside for our section. Students who cannot take the exam during this window can register for one of the other open sessions that are available to all Albers students. Due to the limited number of seats available, retakes are scheduled at a different date/time. Please note that the exact session dates/times may change due to the availability of the Certiport, the certification exam provider. Technical difficulties or exam issues should be brought up immediately. All attempts must be completed before Finals Week.

<sup>17</sup> Pivot tables/charts are not included in the MOS Excel exam certification. But it is an important topic in Excel. The final exam may have problems requiring the use of pivot tables.
## Managing the IT-enabled Business

| Week 8  | May 17 – May 21 | Telecommunications and Networking | Readings:  
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<tbody>
<tr>
<td></td>
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<td></td>
<td>• Rainer Ch 4</td>
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</table>
|         |                 |                                   | **Activities:**  
|         |                 |                                   | • Excel review (if needed) for a second attempt at the certification exam. |  
|         |                 |                                   | **Homework:**  
|         |                 |                                   | • Recap 4 (1st attempt due May 23) |  
| Week 9  | May 24 – May 28 | Business Process Management (BPM) I | Readings:  
|         |                 |                                   | • Rainer Plug IT in 1\(^{18}\) |  
|         |                 |                                   | **Activities:**  
|         |                 |                                   | • Designing flowcharts |  
|         |                 |                                   | **Homework:**  
|         |                 |                                   | • Recap 4 (1st attempt due May 30)  
|         |                 |                                   | • Project 2 (due Jun 6) |  
| Week 10 | May 31 – Jun 7  | Business Process Management (BPM) II | Readings:  
|         |                 |                                   | • Rainer Plug IT in 1\(^{19}\)  
|         |                 |                                   | • Q&A |  
|         |                 |                                   | **Activities:**  
|         |                 |                                   | • Designing flowcharts  
|         |                 |                                   | • Excel review (optional) |  
| Finals  | Jun 8 – Jun 12  | Final exam week | **Activities:**  
|         |                 |                                   | • Final exam (to be taken Tue, Jun 8 on Canvas\(^{20}\)). |  

### 8. 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)

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\(^{18}\) Plug IT in 1 is available at the end of the textbook.

\(^{19}\) Plug IT in 1 is available at the end of the textbook.

\(^{20}\) **Family/personal travel plans (and vacation) are not acceptable reasons for missing the final exam.**

There is sufficient time to plan in advance. Any difficulty with the date must be communicated to the instructor by Week 9.
9. Academic policies

Various Seattle University academic policies can be found at the following URL. Please be sure to review them prior to the course.

https://www.seattleu.edu/redhawk-axis/academic-policies/

- Academic Integrity Policy
- Academic Grading Grievance Policy
- Professional Conduct Policy (only for those professional programs to which it applies)

10. 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.

11. Notice on religious accommodations

It is the policy of Seattle University to reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of their academic course or program. Please see, Policy on Religious Accommodations for Students:

https://www.seattleu.edu/media/policies/Policy-onReligious-Accommodations-for-Students---FINAL.PDF

12. 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.