Class Information: Tuesday and Thursday, 9:10-10:30 AM
SFEBB 3180
23 August 2016 – 13 October 2016

Instructor: Don Wardell
Office: SFE 7215
Phone: 581-8774
E-mail: don.wardell@eccles.utah.edu
Web: https://faculty.utah.edu/u0031639-Don_G_Wardell/

Office Hours: By appointment


Course notes available through Canvas


Course Description: This course will develop decision making abilities with data-analysis and decision models. Applications will be in the business functional areas. Students will use computers to solve business problems. Course topics will include advanced statistical analysis, regression models, decision analysis basics, and portfolio management.

Course Learning Objectives: An important aspect of leadership and management is the ability to define and solve many types of problems. Inherent in the problem solving process is the task of decision making. The best decisions are those that are made based on facts and such decisions usually require the use of data. In this class, the overall objective is to improve your ability to model situations and analyze data to make intelligent, data-driven decisions. For students in the Masters of Healthcare Administration program, all of the course learning objectives contribute to the core learning competencies, “Strategic and Analytical Thinking: Ability to analyze situations & develop plans,” and “Business Knowledge and Skills: Ability to use statistical & quantitative tools.”

We will specifically work on the following goals.

1. Develop your ability to approach problems using a systematic, analytical process.
2. Learn to combine assessments of probability and potential payoffs to compare decision alternatives.
3. Learn to formulate and test hypotheses using collected data.
4. Learn to understand relationships between variables that exhibit variation, and use those relationships to make decisions.
5. Implement statistical analyses on a computer and understand the resulting output.
6. Prepare to use quantitative methods in other classes, such as Finance, Marketing and Operations Management.
7. Improve your overall quantitative skills.
Grading:  
Graded Homework  20%  
Quizzes  40%  
Final Exam  40%  

HOMEWORK: There will be two types of homework assigned. Suggested homework will be assigned but will not be collected or graded. I will provide the answers to these problems so that you can easily check your work. The second type of assignments will be administered online and will be graded. In all cases you can work in groups on homework assignments. The principal purpose of homework assignments is to prepare you for the quizzes and the exam.

QUIZZES: Three quizzes will be given throughout the course. Each quiz will be based on homework problems, reading assignments and class discussions. The in-class quiz will be closed book, closed note, with the exception of one side of one 8.5x11” sheet of notes. Take-home quizzes will be open book, open note, and will require you to use the computer. All quizzes will be done individually.

EXAM: The exam will be open book, open note, and will require you to use the computer. It must be done individually.

Methods of Instruction:
The objectives of the course will be met through several different delivery methods. During the majority of class sessions, I will present concepts and tools and then we will work problems. In some cases, I will work along with you, asking questions and leading you to the next steps. In other cases, I will give you a problem and ask you to work it on your own and then we will discuss it. Practice working problems will be essential to you learning the material. To motivate the material, I will also typically introduce topics by discussing some applications that are used in the “real world” and will ask for your experiences with the quantitative tools that we discuss in class. I also plan to “flip the classroom” in some cases where you will watch lectures before coming to class and then during class we will concentrate on solving problems. Through a variety of in-class problem-solving and discussions, together with homework assignments that ask you to apply the material discussed, you should develop a deeper understanding of quantitative tools and their use as decision-making aids.

Computer Information

Laptops: In class we will use Excel extensively. My notes contain instructions on how to use Excel to do statistical analyses, so it is not completely necessary to have a computer in class. For many of you, however, it will be helpful to have a laptop in class to follow along as I demonstrate some of the methods. If you do have a laptop, I expect that you will use them on class exercises and nothing else. I also expect that you will help monitor the computer use of your classmates. Surfing the web or reading e-mail during class is disrespectful and distracting to me and to your colleagues.

Movies: I have created several Camtasia screen movies that demonstrate the functions and procedures that we will use in Excel. They will be available through Canvas (and in some cases YouTube). In many cases I will ask you to watch movies before class so that I can spend less time demonstrating the procedure in class, which will free up more time for examples and discussion.
Canvas: I will use Canvas to communicate with you and provide materials for the course. In order to access Canvas, you need to have an active University Network ID (UNID). For more information, go to http://guides.instructure.com/ and click on the student-guide links that are pertinent to you. Once you are logged into Canvas, you will have access to an electronic version of the syllabus and calendar, video lectures, course notes, Excel demonstrations, homework problems, current grades, and other electronic resources. I will also communicate with you using the Canvas announcement, email and discussion resources.

Feedback

There are a few ways to provide feedback to me so that I can improve the course (while you are still in it). You are always welcome to provide feedback face to face, by telephone, or through e-mail. If you prefer to provide anonymous feedback, there are two ways.

Anonymous e-mail link: You can send me anonymous e-mail by going to http://goo.gl/L9YDVA (or using the link in Canvas). When you send the message, it will tell me that it is from Anonymous Feedback for Professor Wardell <noreply@qemailserver.com>. The only way you will be identified as the sender is if you choose to identify yourself.

Informal Feedback Group: I would like a few students to act as liaisons between the class and me. About once a week I will meet for a few minutes with the feedback group to discuss any concerns or other feedback from the class. If you have any complaints, suggestions, or other comments, you should communicate them to the members of the feedback group.

Class Expectations

I assume that in your orientation you discussed expectations for the MBA program as a whole. Below are expectations specific to the class.

What you can expect from me
1. I will learn your names
2. I will respect your comments
3. I will answer your questions, both in and out of class
4. I will be respectful of your time
5. I will ask for and respond to feedback
6. I will provide you with prompt and thorough feedback
7. I will work hard to make course material interesting and relevant
8. I will challenge you
9. I will behave in a professional manner
10. I will have fun

What I expect from you
1. You will be attentive in class, participating with questions and comments. This also implies that you will be present in and on time to class.
2. You will respect your classmates, including their comments and questions
3. You will use laptops only for class-related exercises. You will turn off or silence all phones or other electronic devices.
4. You will provide feedback
5. You will do all assignments on time
6. You will be honest on all homework, quizzes and the exam
7. You will challenge yourself
8. You will behave in a professional manner
9. You will have fun
Reminder of University and David Eccles School of Business Policies

Important Dates
See [http://registrar.utah.edu/academic-calendars/fall2016.php](http://registrar.utah.edu/academic-calendars/fall2016.php) for a list of important dates for fall semester.

Selected University Policies

Adding, Dropping and Withdrawing from a Course:
Students have the option of adding a class the first week of the term, if seats are available. For this half-semester class, the last day to add, drop, elect CR/NC or audit classes is **Friday, August 26**. The last day to withdraw is **Friday, September 16**. See [http://registrar.utah.edu/handbook/lateadd.php](http://registrar.utah.edu/handbook/lateadd.php) for information on late add procedures. See [http://registrar.utah.edu/handbook/drop.php](http://registrar.utah.edu/handbook/drop.php) for more information regarding dropping a class and [http://registrar.utah.edu/handbook/withdrawal.php](http://registrar.utah.edu/handbook/withdrawal.php) for more details on withdrawals.

The above information on adding and dropping courses applies mainly to undergraduate courses. Masters students should check with their advisors about specific dates and procedures for adding and dropping courses.

Final Exam Period:
Final examinations in University courses may be required at the instructor’s discretion. When they are required, final examinations must be given at times officially set. A schedule for such examinations is prepared by the Director of Scheduling and published by the University. A copy of the Final Exam Schedule can be found online at [http://registrar.utah.edu/academic-calendars/final-exams-fall2016.php](http://registrar.utah.edu/academic-calendars/final-exams-fall2016.php).

Because this course is taught during the first session of the semester, the final exam day will not follow the University schedule.

Grade Distribution:
According to University policy, grades cannot be listed with reference to students’ names and/or other identifying characteristics. The policy does not permit leaving papers/exams where anyone can look at them. Students can access their grades via the web system on the date that the University makes them available.

Prerequisites:
The prerequisite for this class is graduate standing in the School of Business or instructor permission. If you are not a graduate business student and have not spoken with me, please do so immediately.

Attendance and Absences:
A student who is not officially registered may not attend a university course. The university expects regular attendance at all class meetings. Instructors must communicate any particular attendance requirements of the course to students in writing before the first class meeting. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements as defined by the instructor.

Students are not automatically dropped from class(es) if they do not attend. They must officially drop their class(es) by the published deadline in the academic calendar to avoid a "W" grade.
Students absent from class to participate in officially sanctioned university activities (e.g. band, debate, student government, intercollegiate athletics) or religious obligations, or with instructor's approval, shall be permitted to make up both assignments and examinations.

Unexpected university facility closures due to weather, emergency or disaster may occur from time to time. Students may be required to complete coursework missed due to these or other class cancellations. However, instructors requiring mandatory make-up sessions may not penalize students if they are unable to attend due to time conflicts, etc.

**Americans with Disabilities Act:**
The University of Utah, David Eccles School of Business seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the instructor and to the Center for Disability Services, [http://disability.utah.edu/](http://disability.utah.edu/), 162 Olpin Union Building, 581-5020 (V/TDD) to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

**Course Evaluations**
Course evaluations are completed online. You must complete the evaluation or “opt out” before you may view your grades. Once you view your grade you are not allowed to go back and fill out the evaluation. Evaluations are available two weeks before and two weeks after the official last day of the class. To fill out the evaluations, go to the Campus Information Systems ([http://cis.utah.edu/](http://cis.utah.edu/)) to complete the evaluation for the course.

**Student Responsibility**
It is the student's responsibility to contact instructors and submit necessary forms. If you have a problem with a course, please deal with it immediately.

For more information on students' rights and responsibilities, please refer to the Student Code ([http://www.regulations.utah.edu/academics/6-400.html](http://www.regulations.utah.edu/academics/6-400.html)).

**David Eccles School of Business**
**Statement on use of electronic devices in exams:**

Use of any and all electronic devices (e.g. pagers, cell phones, language translators, laptops, tablets, calculators, etc.) is forbidden during an exam unless otherwise specifically authorized by the instructor. A student who uses an unauthorized device may be subject to penalties for academic misconduct.
David Eccles School of Business
Statement of Professional and Ethical Conduct

Because of the importance of professional and ethical behavior in business, and its emphasis in our program, professional or academic misconduct is not tolerated in the David Eccles School of Business. Students are expected to adhere to the standards of behavior outlined in the University of Utah Code of Student Rights and Responsibilities (Policy 6-400). Students engaging in behavioral misconduct could be subject to suspension or dismissal from the University. Students involved in any form of academic misconduct, including but not limited to cheating on tests, plagiarism and collusion may, at the instructor's discretion, receive a failing grade in the course, examination, or academic assignment. In addition to or instead of this sanction, the instructor may refer the case to the Student Behavior Committee for hearing. If the instructor chooses not to do so, the Associate Dean for Academic Affairs, after appropriate investigation, may do so along with a recommendation to dismiss the student from the Business School. If, after hearing the evidence, the Committee determines that the student in question is guilty of the misconduct charged, the Committee may impose sanctions in addition to those taken by the professor. If the academic dishonesty is not proven, the instructor must rescind any sanctions imposed and will be required to evaluate the student's performance with the assumption that there has been no misconduct. The School will treat the student likewise. If a student suspects another student of academic misconduct, he/she should refer the incident to the instructor, the appropriate department, the Associate Dean for Academic Affairs, or the Student Behavior Committee, administered by the Associate Dean of Students, 270 Union.

David Eccles School of Business
Statement of Grading Policy

Grading provides feedback to students on how well they have mastered the content and learning objectives of a particular course to allow students to capitalize on strengths and work to improve weaknesses through future courses of action. The DESB grading policy is intended to ensure grades offer reliable feedback regarding student performance, and to ensure fairness and consistency across the School. The faculty member is responsible for arriving at a grade for each student that the faculty member believes appropriately reflects the student's mastery of the course material and learning objectives. The faculty member will then consider the class' overall performance in terms of School guidelines. These guidelines are provided to ensure that grading, on average for the School as a whole, is sustained at a reasonable level over time. The guidelines are as follows:

<table>
<thead>
<tr>
<th>COURSE LEVEL</th>
<th>GUIDELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-2000</td>
<td>2.4-2.8</td>
</tr>
<tr>
<td>3000-3990</td>
<td>2.6-3.0</td>
</tr>
<tr>
<td>4000-5990</td>
<td>2.8-3.2</td>
</tr>
<tr>
<td>6000-6990</td>
<td>3.1-3.5</td>
</tr>
</tbody>
</table>

If students have a concern about their grade in a particular course, they should consider whether it reflects an accurate evaluation of their mastery of the course material and learning objectives, in terms of the above descriptors. If they need clarification of the instructor's evaluation, they should meet with the instructor to obtain additional information and feedback. If after doing so, they believe their grade was arrived at in an inappropriate manner, they may pursue an appeal through the School's appeals process as described in Section 5.15 of the University of Utah Code of Student Rights and Responsibilities (Policy 6-400).
## Tentative Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 23</td>
<td>Course Introduction</td>
<td>Vickers, Chapter 1</td>
</tr>
<tr>
<td></td>
<td>Decision Analysis</td>
<td></td>
</tr>
<tr>
<td>August 25</td>
<td>Decision Analysis</td>
<td>Vickers, Chapter 21</td>
</tr>
<tr>
<td>August 30</td>
<td>Wrap Up Decision Analysis</td>
<td>Vickers, Chapters 2-5, 7-9</td>
</tr>
<tr>
<td></td>
<td>Distributions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graded Homework 1 Due</td>
<td></td>
</tr>
<tr>
<td>September 1</td>
<td>Distributions</td>
<td>Vickers, Chapters 10, 32</td>
</tr>
<tr>
<td></td>
<td>Sampling</td>
<td></td>
</tr>
<tr>
<td>September 6</td>
<td>Quiz 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sampling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graded Homework 2 Due</td>
<td></td>
</tr>
<tr>
<td>September 8</td>
<td>Wrap up Sampling Distributions</td>
<td>Vickers, Chapters 11-12</td>
</tr>
<tr>
<td></td>
<td>Estimation</td>
<td></td>
</tr>
<tr>
<td>September 13</td>
<td>More Estimation</td>
<td>Vickers, Chapters 13-17</td>
</tr>
<tr>
<td></td>
<td>Hypothesis Testing</td>
<td></td>
</tr>
<tr>
<td>September 15</td>
<td>Hypothesis Testing</td>
<td>Vickers, Chapters 22, 28, 29, 33</td>
</tr>
<tr>
<td></td>
<td>Graded Homework 3 Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quiz 2 Distributed</td>
<td></td>
</tr>
<tr>
<td>September 20</td>
<td>Quiz 2 Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wrap Up Hypothesis Testing</td>
<td></td>
</tr>
<tr>
<td>September 22</td>
<td>Linear Relationships — Scatter Plots and Correlation</td>
<td>Vickers, Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Regression—Introduction</td>
<td>Vickers Chapter 18</td>
</tr>
<tr>
<td>September 27</td>
<td>Regression— Statistics and Modeling Extensions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graded Homework 4 Due</td>
<td>Vickers, Chapter 25</td>
</tr>
<tr>
<td>September 29</td>
<td>Regression— More Modeling Extensions and Inference</td>
<td>Vickers, Chapters 19, 23-24</td>
</tr>
<tr>
<td></td>
<td>Quiz 3 Distributed</td>
<td></td>
</tr>
<tr>
<td>October 4</td>
<td>Quiz 3 Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Covariance and Application to Portfolio Management</td>
<td></td>
</tr>
<tr>
<td>October 6</td>
<td>More Portfolio Management and Course Wrap Up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graded Homework 5 Due</td>
<td></td>
</tr>
<tr>
<td>October 13</td>
<td>Final Exam Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Exam Distributed</td>
<td></td>
</tr>
</tbody>
</table>