

### **Marketing and Business Analytics**

#### **About the Instructor**

#### **Contact information:**

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Office Hours via Zoom:

https://umsystem.zoom.us/my/ho.kim

Wednesday 6:00 – 7:00pm, or by appointment

In-Person Office Hours: by email appointment



#### Welcome

Welcome to the exciting world of Marketing and Business Analytics! I am so excited to teach this course because it is my passion to understand consumers and markets using scientific methods of data collection and analysis. In this course you will learn various data analytics methods to make better marketing and business decisions.

#### **Teaching Philosophy**

I strongly believe that motivation is the key factor for successful learning. Therefore, I will do my best to motivate you to engage in the learning process. Considering that marketing is an applied discipline, I believe that students are best engaged when I can effectively link what is learned in the class to what is actually happening in the real world. I exploit various materials, including discussions about real-world problems and business cases.

#### **About this Course**

#### **Course Description**

Prerequisites: MKTG 5700 and SCMA 5300. A broad approach to marketing research as a model for acquiring, retrieving, and analyzing decision-making information. Includes market measurement, evaluation of sales and cost-effectiveness, sales forecasting, and primary marketing research studies aimed at solving specific problems. Emphasis is also placed on building a theoretical and analytical framework to provide flexibility in the design of marketing experiments and in judging recent research innovations.

#### **Goals of the Course**

The overarching goal of this course is to equip you with analytical thinking skills so that you can benefit from them in the long run. Specifically, after completing the course you will be able to:

- Identify business problems in a given analytics context
- Translate the business problems into analytical questions
- Solve business questions using analytics and statistical methods
- Provide business insights from analytical solutions to help managers

#### **Course Topics**



## **Marketing and Business Analytics**

To achieve the course goals, the following topics will be covered:

- data summary and visualization techniques to understand data
- experimentation and A/B testing to (dis)prove causal claims
- regression analysis to identify drivers of market outcomes
- predictive analytics to predict demand and consumer behavior accurately
- Hands-on experience in IBM SPSS

#### **Course Materials**

- **Lecture slides and videos**: Lecture slides and videos will be posted on Canvas during the weekend prior to the respective sessions.
- **Software programs**: For statistical computations, we will use **IBM SPSS 28**. IBM SPSS is user-friendly and performs various statistical analyses, including all the statistical methods that we will use in this course. As a UMSL student, you can download the software from the <u>UMSL Software</u> page. In Week 1, I will explain how to install the program on your computer.
- Cases and data sets: The following materials are required for classroom activities and homework
  assignments. They are included in the course pack, available for purchase at
  <a href="https://hbsp.harvard.edu/import/1080340">https://hbsp.harvard.edu/import/1080340</a>.
  - McAfee, Andrew and Erik Brynjolfsson (2012), "Big Data: The Management Revolution," Harvard Business Review, 90 (September-October)
  - Davenport, Thomas H. (2013), "Keep Up with Your Quants," Harvard Business Review, 91 (July-August)
  - Fantini, Fabrizio and Das Narayandas (2023), "Analytics for Marketers," Harvard Business Review, 101 (May-June)
  - o Gallo, Amy (2018), "4 Analytics Concepts Every Manager Should Understand," *Harvard Business Review*, 96 (September-October).
  - Weitz, Rob and David Rosenthal (2011), "Web Analytics at Quality Alloys, Inc.," Columbia Business School.
  - o Pfeifer, Phillip E. and Greg Mills (2009), "Sarah Gets a Diamond," Darden School of Business.
  - Luca, Michael, Weijia Dai, and Hyunjin Kim (2016), "Advertising Experiments at RestaurantGrades,"
     Harvard Business School.
  - Cohen, Randolph B. and Jason Wallace (2003), "A-Rod: Signing the Best Player in Baseball," Harvard Business School.
  - Ovchinnikov, Anton (2011), "Modeling Discrete Choice: Categorical Dependent Variables, Logistic Regression, and Maximum Likelihood Estimation," University of Virginia Darden Business Publishing.
  - o Ovchinnikov, Anton (2014), "Predicting Customer Churn at QWE Inc.," Darden School of Business.

#### **Class Format: Blended Learning**

• This is a blended course. What does this mean? This course is designed to integrate in-person and online modes of learning to fully engage you with your instructor, course content, and other students to accomplish our course goals supported through in-person and online content and activities and assessments best suited for in-person and online. Each online and in-person component of our course will enrich your learning experience to provide you with opportunities for variation and practice, active learning and interaction with your fellow students.



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• With the **online components**, you will learn on your own schedule within a certain timeframe. You can access and complete lectures, readings, and other learning materials at any time during the week. On the other hand, the **in-person components** require you to be present at the **designated classroom (ABH 001)** on specific days (8/23, 9/13, 10/11, 11/01, from 6 to 8:40 PM).

#### **Time Requirements for Our Blended Course:**

This is an active, blended class with roughly 1 in-person class meeting each month complemented by online learning experiences in Canvas in between class meetings. Our course is a 3-credit hour course and requires 3 hours of your time each week **in addition to** the time it takes you to read the required materials, watch the videos, and complete the assignments. That means that you need to plan to spend a **minimum of 6 hours every week** (up to 9-10 hours a week) on activities related to this course. If you would like to explore how the online Canvas activities work, consult the <u>Online Course Overview course in Canvas</u> where you can practice posting to a discussion board, take a practice quiz, and more.

#### **Technology Requirements:**

As a student in a blended course, you are expected to have reliable internet access almost every day. Please reach out to your academic advisor or student success network if you need hardware or access to the Internet. If you have computing problems, it is your responsibility to address these through the ITS Helpdesk (helpdesk@umsl.edu) or to use campus computing labs. Problems with your computer or other technology issues are not an excuse for delays in meeting expectations and missed deadlines for the course. If you have a problem, get help in solving it immediately. At a minimum, you will need the following software/hardware to participate in this course:

- 1. Computer with an updated operating system
- 2. Updated Internet browsers (Google Chrome (required) or Mozilla Firefox)
- 3. Ability to navigate Canvas (Learning Management System)
- 4. Minimum Processor Speed of 1 GHz or higher recommended.
- 5. Reliable and stable internet connection.
- 6. Adobe Reader or alternative PDF reader (free)

#### **How to Succeed in This Course**

This course is divided into 16 weekly sessions. The activities you need to complete will be inside each weekly folder in Canvas with a clear outline of deadlines for each activity. Common weekly activities include watching the lecture videos (in case of online teaching weeks), reading lecture slides and solving business cases with possible participation in discussion forums. You will also have four written assignments to show your progress through the semester and one exam at the end of the semester. Please plan to complete assignments as early as you can to allow for any complications you may encounter submitting your work.

#### **Course Plans for the Unexpected**

While this course has been designed as a blended course, we may need to pivot to a fully online course in the event of a campus closure due to illness or weather-related emergency. If that happens, I will notify you of this change through a Canvas announcement. Our lectures will then move to a fully online format, and I will also



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create and post regular Panopto videos to help you stay connected to the course content. We will also have regular discussion boards on Canvas, so that you can continue to have conversations with your peers. Quizzes and exams will take place on Canvas, and you will submit all other assignments through the "Assignments" tab on Canvas. Please let me know if you have questions about how to submit assignments, take exams, or access the materials online. I will be available to meet with you on Zoom during my designated office hours. However, if you cannot meet during those times, please contact me to schedule an appointment. I will do my best to support you through the transition to online learning. For additional information and updates, check out the UMSL Campus Closures Procedure Website: <a href="https://www.umsl.edu/safety/police/closures.html">https://www.umsl.edu/safety/police/closures.html</a>. Please be sure to sign up for emergency notifications from the University: <a href="https://safety.umsl.edu/police/notification/index.html">https://safety.umsl.edu/police/notification/index.html</a>.

#### **Assessment/Grading**

#### **Grade Composition**

The course grade will be based on four individual and two group assignments.

#### • Individual (65%)

Discussion forum participation	15%
Individual assignment	25%
Final exam	15%
Peer evaluation	10%

#### • Group (35%)

Group assignment 15% Term project 20%

#### - Discussion Forum Participation (15%)

In most weeks, you will have a "before-class" discussion. Answer all the discussion questions by **Wednesday 11:59 pm of the week**. To answer discussion questions, you will need to watch the week's lecture videos and read the assigned case. You can earn up to 6 points per discussion board participation. Collectively, the discussion board activities will account for 15% of your course grade. Refer to the grading rubric in the table below.

#### **Discussion Rubric**

<b>Exceeds Expectations</b>	Meets Expectations	Developing	Needs	Missing
			Improvement	



6 pts.	4 pts.	2 pts.	1 pt.	0 pt.
Use of analysis, synthesis and evaluation  Critical and/or creative contribution  Incorporates readings well into responses, demonstrating excellent understanding.  Asks questions that extend the discussion and relate material to prior course content.  Makes insightful, critical comments on the readings and to fellow students.  Contributes new information and identifies the source.	Use of comprehension and application Incorporates readings into responses, demonstrating solid understanding.  Exhibits some insights and understanding of course content, but may not ask critical questions of the readings or fellow students.  May relate module's issues to prior material covered in the course.  May respond to fellow students.	Use of knowledge Repeats basic correct information related to discussion, but neglects to extend conversation or critically analyze course content.	No clear evidence that readings were understood or even completed.	No postings throughout the week

#### Individual Assignments (25%)

There will be five individual assignments. The assignments ask you to complete the in-class case analyses. These weekly assignments can be completed by applying the analysis methods that you learned in the week. You can find the assignment deadlines in the course schedule section of this syllabus.

Exam (15%)

You will have one exam in Week 16. It is an open-book, take-home exam administered on Canvas.

- Peer Evaluation (10%)
  - You will have a survey at the end of the semester to evaluate your team members' contribution to group assignments and the term project.
- Group Assignments (15%) and Group Term Project (20%)

You will work on the "Sarah Gets a Diamond" case for your group assignments and term project. You will have four weekly sessions (Weeks 4, 8, 11, 15) to work on the group assignments. In each of the weekly sessions, you will apply what you have learned in the previous sessions to solve various problems (Weeks 4, 8, and 11) and to write a research report (Week 15). After Week 15, you will combine the four group assignments, revise based on my feedback, and complete a research report. The complete research report should be submitted by Week 16 for the term project.



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#### **Grading Scale**

The UMSL Grading System is based on a four-point scale. The grade value for each letter grade is as follows:

A:4.0	B-: 2.7	D+: 1.3	EX = Excused
A-: 3.7	C+: 2.3	D:1.0	DL = Delayed
B+: 3.3	C:2.0	D-: 0.7	FN = Failure/Non
B:3.0	C-: 1.7	F : 0	Participation

#### **Feedback and Grading Timeline**

- "Before-class" Discussion Board: Unless announced otherwise, the score will be provided by the Sunday of the week.
- Individual Assignments: Unless announced otherwise, the score will be provided by the Sunday of the following week.
- Final Exam: The feedback and score will be provided by Wednesday, December 14.
- Group Assignments/Term Project: The feedback and score will be provided by Sundays of Weeks 5, 9, 12, and 16.
- The feedback and score will be available on Canvas.

#### **Course Policies**

#### **Participation**

If you are unable to participate in the scheduled class activity or discussions, you must notify me within the week of that class module or discussion. I, as the instructor of this class, reserve the right to make judgment to accept and/or make—up assignments.

- It is important that our classroom environment promotes the respectful exchange of ideas. This entails being sensitive to the views and beliefs expressed during discussions, whether in class or online. Please speak with me before recording any class activity. It is a violation of University of Missouri policy to distribute such recordings without my authorization and the permission of others who are recorded.
- I will monitor each discussion but may not respond to each post. I will check the discussion board twice a week: **Wednesday morning and Friday morning**.
- Your success in this course will heavily depend on your ability to communicate, engage and participate in all course activities. Successful completion of this course requires that a student keep up with all assignments, coursework and discussions. Timely participation in the online discussions is a very important part of this course and participation in these discussions, and other activities as assigned, is not optional. You are expected to prepare and post to discussions in a timely manner consistent with the course requirements.

#### **Attendance Policies**

- **Present** in class is determined by participation in an "academically related activity," i.e. submission of an assignment, assessment or discussion forum posting as well as the Zoom session participation.
- Documentation that a student has logged into the Canvas course site alone is not sufficient by itself to demonstrate academic attendance.
- Lack of attendance in-person or submission of work in Canvas could result in an automatic course drop.



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• If you expect to miss class due to a religious observance, let me know early in the semester so that we can discuss your responsibilities and plan so that you meet course obligations and requirements.

#### **Academic Integrity/Plagiarism**

- You are responsible for being attentive to and observant of University policies about academic honesty
  as stated in the University's Campus Policies and Code of Student Conduct found in the UMSL Bulletin.
- Academic dishonesty is a serious offense that may lead to <u>probation</u>, <u>suspension</u>, <u>or dismissal from the University</u>. One form of academic dishonesty is plagiarism the use of an author's ideas, statements, or approaches without crediting the source. Academic dishonesty also includes such acts as cheating by using any unauthorized sources of information and providing or receiving unauthorized assistance on any form of academic work or engaging in any behavior specifically prohibited by the faculty member (e.g., copying someone else's answers on tests and quizzes). Unauthorized possession or distribution of academic materials is another type of academic misconduct. It includes the unauthorized use, selling or purchasing of examinations or other academic work, using or stealing another student's work, unauthorized entry or use of material in a computer file, and using information from or possessing exams that an instructor did not authorize for release to students. Falsification is any untruth, either verbal or written, in one's academic work. Facilitation is knowingly assisting another to commit an act of academic misconduct. Plagiarism, cheating, and falsification are not acceptable.
- All instances of academic dishonesty will be reported to the Office of Academic Affairs, who will
  determine whether you will appear before the Student Conduct Committee for possible administrative
  sanctions such as dismissal from the university. The instructor will make an academic judgment about
  the student's grade on that work in this course. The campus process regarding academic dishonesty is
  described in the "Policies" section of the Academic Affairs website.
- The use of generative AI tools (such as ChatGPT, DALL-E, etc.) are not permitted in this class; therefore, any use of AI tools for work in this class may be considered a violation of UMSL's <u>Academic Honesty</u> policy and <u>Student Conduct Code</u>, since the work is not your own.

#### Online Class Netiquette/Behavior

- **Be self-reflective** before you post an emotional response and reread what you have written to be sure it is positive. Think of your comments as printed in the newspaper. Your online comments will be seen, heard, and remembered by others in the class.
- Use effective communication.
  - Avoid the use of all caps or multiple punctuation elements (!!!, ???, etc.).
  - Be polite, understate rather than overstate your point, and use positive language.
  - o If you are using acronyms, jargon or uncommon terms, be sure to explain them so everyone can understand and participate in the discussion.
- Ask for clarification to a point if you feel emotional from a classmate's post. It is likely that you misunderstood his/her point. This strategy will also help you step away from the intensity of the moment to allow for more reflection.
- **Sign your name.** It is easier to build a classroom community when you know to whom you are responding.
- **Foster community.** Share your great ideas and contribute to ongoing discussions. Consider each comment you make as one that is adding to, or detracting from, a positive learning environment for you and your classmates.



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- **Be constructive.** You can challenge ideas and the course content but avoid becoming negative online. When you disagree politely, you stimulate and encourage great discussion. You also maintain positive relationships with others with whom you may disagree on a certain point.
- **Keep the conversation on topic** by responding to questions, adding thoughtful comments about the topics at hand. Online dialogue is like conversation. If there is a certain dialogue going on, please add to it, but if you have something new to say, please post it in another thread.
- **Define your terms.** When using acronyms or terms that are particular to your field (or new to our course), please define them for others.

#### **Title IX Policies**

 Mandatory Reporting: Under Title IX, I am obligated to report any incidents of sexual harassment, sexual misconduct, sexual assault, or gender discrimination to the Student Affairs office and/or other University officials. This ensures that all parties are protected from further abuses and that victim(s) are supported by trained counselors and professionals.

#### **Student Resources**

#### **Student Advocacy & Care**

Provides students with case management and other support and services to address unmet basic needs and other challenges they may be facing outside of the university that impacts their ability to succeed academically. These challenges may include things like food insecurity, housing instability, lack of childcare, counseling needs, and financial emergencies.

- Location: 144 Millennium Student Center
- LINK to request assistance or help
- Website: <a href="https://www.umsl.edu/studentadvocacy/">https://www.umsl.edu/studentadvocacy/</a>

#### Access, Disability, and Communication

Your academic success is important to me. We all learn differently and bring different strengths and needs to the class. If there are aspects of the course that prevent you from learning or make you feel excluded, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course.

If you have a documented disability that may have an impact upon your work in this class, please contact Disability Access Services (DAS) immediately. Students must provide documentation of their disability to the office of Disability Access Services in order to receive official University services and accommodations. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations. Information about your disability is confidential. Once DAS reviews your medical documentation, they will provide you with the information and steps to inform me about the accommodations to which you are entitled. Your accommodations will begin as soon as we discuss your approved accommodations.

- Location: 131 Millennium Student Center (MSC)
- Phone: (314) 516-6554
- Email: Tara Cramer, cramert@umsl.edu
- Website: <a href="http://www.umsl.edu/services/disability/">http://www.umsl.edu/services/disability/</a>



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#### Office of International Students and Scholar Services

If you have difficulty communicating in English with the instructor of this course, contact ISS.

• Location: 362 Social Sciences & Business Building (SSB)

Phone: (314) 516-5229Email: <u>iss@umsl.edu</u>

• Website: <a href="http://www.umsl.edu/~intelstu/contact.html">http://www.umsl.edu/~intelstu/contact.html</a>

#### **Student Enrichment and Achievement**

SEA provides comprehensive success coaching services to targeted populations (i.e., new First Time College & Transfer, current UMSL students with less than a 2.500 GPA).

Location: 107 Lucas Hall
Phone: (314) 516-5300
Email: umslsea@umsl.edu

Website: https://www.umsl.edu/services/sea/

#### **TRIO Student Support Services**

TRIO provides a holistic support model through Success Coaching for targeted populations (i.e., transfer students who are first-generation college students, have a documented disability, or have demonstrated economic need).

Location: 180 MSC
Phone: (314) 516-4332
Email: umsltrio@umsl.edu

Website: https://www.umsl.edu/services/trio/

#### **University Student Support (USS)**

USS provides comprehensive success coaching services to targeted student populations (i.e., new First Time College & Transfer, current UMSL students with at least a 2.500 GPA).

Location: 225 Millennium Student Center (MSC)

Phone: (314) 516-6807Email: uss@umsl.edu

Website: <a href="https://www.umsl.edu/tutoring/">https://www.umsl.edu/tutoring/</a>

#### **Technical Support**

UM-System provides students with a variety of technology support on campus and virtually. The information listed below connects you with the most commonly sought supports.

#### Academic technologies (Canvas, VoiceThread, SmarterProctoring, Zoom, etc.)

Location: virtual and via website chat

• Phone: (855) 675-0755

• Email: teachingtools@umsystem.edu

Website: https://online.missouri.edu/learning

Login and network issues (SSOID, email, campus wifi, password changes, etc.)



Location: 190 Millennium Student Center (MSC)

Phone: (314) 516-6034Email: <u>helpdesk@umsl.edu</u>

Website: http://www.umsl.edu/technology/tsc

#### **Academic Support**

#### **University Tutoring Center (UTC)**

The University Tutoring Center (UTC) is here to transform your learning with one-on-one support. UTC offers many options for tutoring, and all of them are free for UMSL students:

Walk-in Tutoring: On-the-spot, in-person assistance. No appointment required.

• <u>Triton Online Tutoring</u>: Live virtual assistance over Zoom. No appointment required.

• Paired Peer Tutoring: We'll match you with a tutor to work together all semester long.

• NetTutor: Another online, flexible tutoring option.

Location: 225 Millennium Student Center (MSC)

Phone: (314) 516-6807Email: tutoring@umsl.edu

Website: <a href="https://www.umsl.edu/tutoring/">https://www.umsl.edu/tutoring/</a>

#### The Online Writing Center (OWC)

At the OWC Canvas site, students can send their papers to our tutors, who will read them and send them back with suggestions. Students can also access Turnitin, which identifies quoted material in their essays.

Location: 222 Social Sciences and Business Building (SSB)

Website: https://www.umsl.edu/~umslenglish/Writing Center/

- Visit the OWC course site on Canvas to submit drafts online. To find the OWC course, click on Courses All Courses. Then click to join this course
- The OWC usually responds within 48 hours. Please allow ample time.

#### Math Academic Center (Math Lab)

The Math Academic Center offers free individual assistance on a walk-in basis to students needing help with any mathematics from basic math through calculus or any course involving mathematical skills.

Location: 222 Social Sciences and Business Building (SSB)

Website: http://www.umsl.edu/mathcs/math-academic-center/

A final note: this syllabus will be subject to change at the instructor's discretion.



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==Continue to the next page to see a tentative course schedule==



### Course Schedule (subject to change)

Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due
Week 1	After completing Week 1, students will be	Lecture Slides 1: Course Overview	BEFORE CLASS (by WED 6:00 pm)
Introduction to Analytics	<ul> <li>Describe the unique characteristics of big data and its implications for</li> </ul>	<ul> <li>Lecture Slides 2: Introduction to Analytics</li> <li>Paper 1: McAfee &amp; Brynjolfsson (2012), "Big Data: The Management Revolution."</li> <li>Paper 2: Davenport (2013), "Keep Up with</li> </ul>	<ul> <li>Read the three assigned articles</li> <li>Answer discussion questions in Discussion Bd</li> </ul> AFTER CLASS (by SUN 11:59 pm)
Class Meeting 8/23 6:00 – 8:40 (ABH 001)	<ul> <li>business.</li> <li>Articulate the six steps of the analytics-based decision-making process.</li> </ul>	Your Quants." • Paper 3: Gallo (2018), "4 Analytics Concepts Every Manager Should Understand."	• Install <u>IBM SPSS</u>
Week 2 Aug 28 – Sep 3	After completing Week 2, students will be able to	<ul> <li>Lecture Slides: Exploratory Data Analysis 1</li> <li>Voice Thread: Exploratory Data Analysis 1</li> <li>Case: Weitz &amp; Rosenthal (2011), "Web</li> </ul>	<ul> <li>Watch Voice Thread lecture</li> <li>Read and get familiar with the QA case</li> <li>Answer discussion questions in Discussion Bd</li> </ul>
Exploratory Data Analysis 1: Summarizing Data	<ul> <li>Explain the importance of exploratory data analysis.</li> <li>Articulate where exploratory data analysis fits in the data analysis process.</li> <li>Contrast the definitions and usage of various descriptive statistics.</li> <li>Identify and apply the most appropriate descriptive statistics to achieve the analysis objectives.</li> <li>Analyze data sets by applying various descriptive statistics in SPSS.</li> </ul>	Analytics at Quality Alloys, Inc."	<ul> <li>Preview Individual Assignment #1</li> <li>Start to solve Individual Assignment #1</li> </ul>



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Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due
Week 3	After completing Week 3, students will be	Lecture Slides: Exploratory Data Analysis 2	Watch Voice Thread lecture
Sep 4 - 10	able to	Voice Thread: Exploratory Data Analysis 2     Grand Maits & Baranthal (2014) (Mala	Remind yourself of the QA case by re-reading it
Exploratory Data Analysis 2: Visualizing Data	<ul> <li>Explain the importance of data visualization as a data analysis method.</li> <li>Contrast the definitions and usage of various visualization tools, including histogram, boxplot, line plot, and scatter plot.</li> <li>Identify and apply the most appropriate visualization methods to achieve the analysis objectives.</li> <li>Create various charts and plots in SPSS to find managerially relevant insights.</li> </ul>	Case: Weitz & Rosenthal (2011), "Web Analytics at Quality Alloys, Inc."	<ul> <li>Answer discussion questions in Discussion Bd</li> <li>Continue to solve Individual Assignment #1</li> <li>Complete Individual Assignment #1 and submit.</li> </ul>
Week 4	After completing Week 4, students will be	Case: Pfeifer & Mills (2009), "Sarah Gets a	BEFORE CLASS (by WED 6:00 pm)
Sep 13	able to	Diamond"	<ul> <li>Read the "Sarah Gets a Diamond" case</li> </ul>
Project Session 1  Class Meeting 9/13 6:00 - 8:40 (ABH 001)	<ul> <li>Articulate the business problems or the research questions of the term project (the "Sarah Gets a Diamond" case).</li> <li>Explain the project data, describe the distributional characteristics of individual variables, and identify important relationships between variables that will answer the research questions.</li> </ul>		<ul> <li>Prepare a preliminary answer to Group         Assignment #1</li> <li>BRING TO CLASS         <ul> <li>A preliminary answer to Group Assignment #1</li> </ul> </li> <li>AFTER CLASS (by SUN 11:59 pm)         <ul> <li>Complete Group Assignment #1 and submit</li> </ul> </li> </ul>



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Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due
Week 5	After completing Week 5, students will be	<ul> <li>Lecture Slides: A/B Testing</li> </ul>	Watch Voice Thread lecture
Sep 18 - 24	able to	<ul> <li>Voice Thread: A/B Testing</li> </ul>	<ul> <li>Read and get familiar with the RG case</li> </ul>
A/B Testing	<ul> <li>Distinguish the difference between correlation and causation and explain why the experiment is the gold standard for proving causality.</li> <li>Articulate the concept of A/B testing and provide real-world examples of it.</li> <li>Explain the various concepts of statistical hypothesis testing, focusing on the rule of rejecting the null hypothesis.</li> <li>Apply an independent sample t-test for means to run A/B testing with a real-world data set and interpret the results</li> </ul>	Case: Luca, Dai, & Kim (2016), "Advertising Experiments and RestaurantGrades."	<ul> <li>Answer discussion questions in Discussion Bd (by WED 6:00 pm)</li> <li>Complete Individual Assignment #2 and submit (by SUN 11:59 pm)</li> </ul>
	for marketing decision making.		
Week 6	After completing Week 6, students will be	Lecture Slides: Regression Analysis 1	Watch Voice Thread lecture
Sep 25 – Oct 1  Regression Analysis 1: Basics of Linear Regression	<ul> <li>Identify the types of business problems that can be best solved with regression analysis.</li> <li>Explain the purpose of various concepts in regression analysis.</li> <li>Develop a linear regression model to answer a business question.</li> <li>Conduct a regression analysis in SPSS, interpret the results, and find managerial insights from the results.</li> </ul>	<ul> <li>Voice Thread: Regression Analysis 1</li> <li>Case: Cohen &amp; Wallace (2003), "A-Rod: Signing the Best Player in Baseball."</li> </ul>	<ul> <li>Read and get familiar with the A-Rod case</li> <li>Answer discussion questions in Discussion Bd (by WED 6:00 pm)</li> <li>Start Individual Assignment #3</li> </ul>
Module Date	Learning Objectives	Weekly Session Materials	Required Activities



Work 7	After completing Week 7 students will be	a Lastina Clides Degrassian Analysis 2	a Watch Vaice Three dilecture
Week 7 Oct 2 - 8	After completing Week 7, students will be	Lecture Slides: Regression Analysis 2     Maior Throad Bases and Analysis 2	Watch Voice Thread lecture
OCI 2 - 8	able to	Voice Thread: Regression Analysis 2	Remind yourself of the A-Rod case
Regression Analysis 2: Advanced Linear Regression	<ul> <li>Explain the concept of dummy variables and when to use dummy variable regression models.</li> <li>Transform a categorical variable into a set of dummy variables and build a regression model using the dummy variables.</li> <li>Find managerial implications from dummy variable regression results.</li> <li>Articulate when to use a log-transformation in regression analysis.</li> <li>Analyze data with log-linear and log-log models, and find managerial implications from the results.</li> </ul>	Case: Cohen & Wallace (2003), "A-Rod: Signing the Best Player in Baseball."	<ul> <li>Answer discussion questions in Discussion Bd (by WED 6:00 pm)</li> <li>Complete Individual Assignment #3 and submit (by SUN 11:59 pm)</li> </ul>
Week 8	After completing Week 8, students will be	<ul> <li>Pfeifer &amp; Mills (2009), "Sarah Gets a</li> </ul>	BEFORE CLASS (by WED 6:00 pm)
Oct 9 - 15	able to	Diamond"	• Read the "Sarah Gets a Diamond" case again to
			remind yourself of the case
Project Session 2	Select the best regression model to predict the fair market price of		<ul> <li>Prepare a preliminary answer to Group Assignment #2</li> </ul>
Class Meeting	diamonds.		BRING TO CLASS
10/11	<ul> <li>Predict the fair market price of diamonds using the identified regression</li> </ul>		A preliminary answer to Group Assignment #2
6:00 - 8:40	model.		
(ABH 001)	<ul> <li>Identify over/under-priced diamonds by</li> </ul>		AFTER CLASS (by SUN 11:59 pm)
	comparing the fair market price and actual price.		Complete Group Assignment #2 and submit



Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due
Week 9 Oct 18 - 22  Understanding Decisions of Individual Consumers 1	<ul> <li>After completing Week 9, students will be able to</li> <li>Articulate the key differences between the linear regression model and the logistic regression.</li> <li>Provide cases where managers can benefit from logistic regression versus linear regression.</li> <li>Explain concepts of logit models such as success probability and odds of success.</li> <li>Conduct a logistic regression analysis using SPSS, interpret the results, and find managerial insights from the results.</li> </ul>	<ul> <li>Lecture Slides: Understanding Decisions of Individual Consumers 1</li> <li>Voice Thread: Understanding Decisions of Individual Consumers 1</li> <li>Concept Paper: Ovchinnikov (2011), "Modeling Discrete Choice."</li> <li>Case: Ovchinnikov (2014), "Predicting Customer Churn at QWE, Inc.</li> </ul>	<ul> <li>Watch Voice Thread lecture</li> <li>Read and get familiar with the QWE case</li> <li>Answer discussion questions in Discussion Bd (by WED 6:00 pm)</li> <li>Start Individual Assignment #4</li> </ul>
Week 10 Oct 23 – Oct 29  Understanding Decisions of Individual Consumers 2	After completing Week 10, students will be able to  • Articulate the key differences between the linear regression model and the logit model.  • Provide cases where managers can benefit from logit models. versus linear regression models  • Explain concepts of logit models such as success probability and odds of success.  • Estimate a logit model using SPSS, interpret the results, and find managerial insights from the results.	<ul> <li>Lecture Slides: Understanding Decisions of Individual Consumers 2</li> <li>Voice Thread: Understanding Decisions of Individual Consumers 2</li> <li>Concept Paper: Ovchinnikov (2011), "Modeling Discrete Choice."</li> <li>Case: Ovchinnikov (2014), "Predicting Customer Churn at QWE, Inc.</li> </ul>	<ul> <li>Watch Voice Thread lecture</li> <li>Remind yourself of the QWE case</li> <li>Complete Individual Assignment #4 and submit (by SUN 11:59 pm)</li> </ul>



Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due
Project Session 3  Class Meeting 11/1 6:00 - 8:40 (ABH 001)	After completing Week 11, students will be able to      Estimate a logistic regression model to find factors that contribute to the overpricing of a diamond.      Evaluate the impact of change in the factors on the probability of overpricing.	Pfeifer & Mills (2009), "Sarah Gets a Diamond"	BEFORE CLASS (by WED 6:00 pm)  Read the "Sarah Gets a Diamond" case again to remind your of the case  Prepare a preliminary answer to Group Assignment #3  BRING TO CLASS  A preliminary answer to Group Assignment #3  AFTER CLASS (by SUN 11:59 pm)  Complete Group Assignment #3 and submit
Week 12 Nov 6 - 12  Presenting Research Findings	<ul> <li>After completing Week 12, students will be able to</li> <li>Discuss three writing standards for an effective research report.</li> <li>Outline the main elements that make up a standard research report.</li> <li>Explain the kind of information contained in the executive summary.</li> <li>Identify the best type of charts to present given data.</li> </ul>	<ul> <li>Lecture Slides: Research Presentation; Writing a Research Report</li> <li>Voice Thread: Research Presentation; Writing a Research Report</li> </ul>	Watch Voice Thread lecture     Answer before-class questions in Discussion Bd (by WED)



Module Date	Learning Objectives	Weekly Session Materials	Required Activities and Due	
Week 13	After completing Week 13, students will be	Pfeifer & Mills (2009), "Sarah Gets a	Read the "Sarah Gets a Diamond" case again to	
Nov 13 - 19	able to	Diamond"	remind yourself of the case	
Project Session 4	<ul> <li>Write an effective research report by applying the "best practices" you learned in Week 12.</li> </ul>		Complete Group Assignment #4 and submit (by SUN 11:50 pm)	
	Fall Break November 20 – 26			
Week 15		Lecture Slides: Course Wrap-Up	Watch Voice Thread	
Nov 27 – Dec 3		Voice Thread: Course Wrap-Up	<ul> <li>Participate in course evaluation survey</li> </ul>	
Course Wrap-Up				
Week 16 (Dec 4 – 10) Final Exam, Peer Evaluation, Term Project Submission				