Syllabus

Statistics for Business and Economics
BSAD 210 SPRING 2023

Instructor	David Youngberg, Ph.D.
	Department of Business and Economics
	Montgomery College—Rockville
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	Wednesdays: 12:30pm to 2:30pm
	Thursdays: 12:30pm to 2:30pm
	Appointments outside these times are also available
Course Information	CRN #32274 TR 9:30am to 10:45am SC 350
Course Length	01/24/2023 to 05/14/2023
Course Materials	All materials (lectures, practice exams, syllabus) will be available on my website and on Blackboard.

IMPORTANT: Zoom Recording

While our class is in person, circumstances might demand that we are sometimes remote. Please be advised that these remote class sessions will be recorded (in video and audio format), capturing student participation in class discussions or activities. Any student profile image used may be captured in the recording. As permitted by the Family Educational Rights and Privacy Act (FERPA), recordings of each class session may be shared with students currently enrolled in the course as reference material or when they are unable to attend a live class session. Recordings may not be shared with any other parties, without the prior written consent of those captured in the recording; however, the College reserves the right to use recordings to investigate alleged Code violations.

Students with a profile image, activated camera and/or audio features during a class session, agree to have their profile picture, video image, and/or oral statements recorded during the class session. If you choose not to have your profile picture, video image, or oral participation recorded:

A. Do not use a profile image,
B. Disable the video feature, and
C. Mute the audio component of Zoom for each class session.

This will allow you to share in the learning without being captured in class recordings. To participate while muted, you can submit comments or questions in the Zoom chat feature.

NOTE that when I record sessions, the <u>only</u> video recorded will be from my camera (with perhaps some glimpses of who is ever in the Zoom room during the initial set up period). Your video feed will not be captured during normal class sessions.

I.   Course Description

An introductory course in the business and economic application of descriptive and inferential statistics. The meaning and role of statistics in business and economics, frequency distributions, graphical presentations, measures of central tendency and dispersion, probability, discrete and continuous probability distributions, inferences pertaining to means and proportions, and regression and correlation, time series analysis, and decision theory will be discussed.

Prerequisites: MATH 093/096; appropriate score on mathematics assessment test.

Assessment levels: ENGL 101/101A; READ 120. Three hours each week.

II.   Resources

- Sharpe, De Veaux, and Velleman. *Business Statistics: A First Course*. 3rd edition, Pearson, 2017. ISBN 13: 978-0-13-418244-5; ISBN 10: 0-13-418244-8
- You must sign up and use Blackboard; homework will be on Blackboard and papers will be submitted through Blackboard.

III.   Student Learning Outcomes

Upon completion of this course, the student will be able to:

1) Organize and present data in a graphical format.
2) Describe data using measures of central tendency and dispersion as well as coefficients of variation.
3) Ascertain the appropriate use of and be able to calculate various measures of central tendency and dispersion.
4) Evaluate and create appropriate samples.
5) Evaluate the strength and causation of correlation and interpret the law of large numbers.
6) Calculate and distinguish between various types of probability for one or more events.
7) Employ probability to calculate payoffs under uncertain circumstances.
8) Interpret a test using Bayes' Theorem.
9) Ascertain the appropriate use of various discrete probability distributions.
10) Understand the normal distribution and the Central Limit Theorem.
11) Make inferences based upon large as well as small samples through the development of one-tailed and two-tailed tests of hypotheses pertaining to population parameters.
12) Understand how statisticians determine if a difference is random or truly unusual.
13) Determine how likely a test might be suffering from type II error.
14) Determine if two sample means are truly different using statistical significance testing.
15) Develop and apply regression and correlation models.

16) Succinctly communicate basic findings from a regression analysis.

IV.   Format and Procedures

This course is made up mostly of lecture with class discussion and class activities to underline important concepts. Class discussion is paramount to the class, since I find interaction of this sort particularly valuable in understanding the economic ideas and how they fit into the world.

V.   My Assumptions

I assume you have a basic curiosity about the world around you. I assume you are familiar with basic algebra and can correctly interpret diagrams and tables. I assume you will do the indicated readings.

VI.   Your Responsibilities

You are responsible for all information in class even if you are late or absent. You are also responsible for checking your campus email daily. Course changes, suggestions for study, and other important messages will be posted by campus email. Bear in mind your Montgomery College email is the official means of communication.

You will turn off cell phones during exams and during class. Keep disruptions (e.g. side conversations) at a minimum (aka zero).

If you have a question, you are strongly encouraged to email me or visit my office hours. Your method of contact should be through my email address at Montgomery College. Do *not* email me through other methods, including Blackboard. I will not respond to such messages.

VII.   Asking for Help

Please let me know if something is going on in your personal life that's making it difficult for you to succeed in this course. I don't need to know the details if you don't want to share them but if you're struggling with something, it's worth it to reach out to me (or another professor, or counseling, if you prefer).

To quote a Facebook post of the late, great Steve Horwitz:

> I know you think you can handle it, and I know that you think coming to us this way is a sign of weakness. But you're wrong. Coming to us is smart. It's brave. It's strong. It shows that you want to succeed. Most faculty are reasonable about these sorts of things, but we can't help you if we don't know.

We are here to help you succeed.

VIII.   Basic Needs Statement

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, is urged to contact the Dean of Students Affairs on your campus. Furthermore, please notify the professor if you are comfortable in doing so. This will enable the professor to provide any resources that they may possess. We know this can affect performance in the course and Montgomery College is committed to your success.

The Dean of Student Affairs on the Rockville campus is Dr. Tonya R. Mason, tonya.mason@montgomerycollege.edu.

The Student Health and Wellness/Fuel for Success website offers information about resources for food on our campuses and in the community and has links for community resources. The site offers the schedule for the mobile markets, locations of the food pantries as well as a link for those who wish to contribute their time or money to support our students. http://cms.montgomerycollege.edu/student-health-and-wellness/fuel-for-success/

Each of the main campuses has a pantry stocked with snacks and food. Students are welcome to come pick up a snack to carry you through your next class, and to take a few items home.

Campus	Pantry Location	Days & Hours of Operation
Germantown	*High Tech (HT) Food Pantry* In the hallway, near HT300	9:00 a.m. - 5:00 p.m.
Rockville	*Women's' and Gender Studies Program Food Pantry* Hallway outside of MT212 --- *Biology Department Food Pantry* Science Center, 2nd floor hallway	Monday-Friday 9:00 a.m. - 5:00 p.m. --- Monday-Friday 9:00 a.m. - 5:00 p.m.
Takoma Park/Silver Spring	*Commons Food Pantry* CM 110 *Institute for Justice, Race and Civic Engagement Food Pantry* Pavilion 4, #202 Vincent.intondi@montgomerycollege.edu	Monday - Thursday 8:00 a.m. - 7:00 p.m. Saturdays 9:00 a.m. - 1:00 p.m. Monday and Wed: 12:30-4 Tuesday and Thursday: 2-4

IX. Standards of College Behavior

This section is quoted from the Student Code of Conduct. For more information, please visit https://www.montgomerycollege.edu/_documents/policies-and-procedures/42001-student-code-of-conduct.pdf.

The College seeks to provide an environment where discussion and expression of all views relevant to the subject matter of the educational forum are recognized as necessary to the educational process.

However, students do not have the right to interfere with the freedom of the faculty to teach or the rights of other students to learn, nor do they have the right to interfere with the ability of staff to provide services to any student.

Faculty and staff set the standards of behavior that are within the guidelines and spirit of the Student Code of Conduct or other College policies for classrooms, events, offices, and areas, by announcing or posting these standards early in the semester.

If a student behaves disruptively in the classroom, an event, an office, or an area after the instructor or staff member has explained the unacceptability of such conduct and the consequences that will result; the student may be asked to leave that classroom, event, office, or area for the remainder of the day. This does not restrict the student's right to attend other scheduled classes or appointments.

If the student does not leave, the faculty or staff member may request the assistance of Security.

The faculty or staff member must communicate with the student about the incident before the next class meeting to resolve the issue. If a second incident occurs that warrants removal from class, the faculty member again communicates with the student and must send a written report about the incident to the Dean of Student Development with a description of the incident and whether or not the incident is being referred to the formal disciplinary process.

The Dean of Student Development or designated instructional Dean of Workforce Development and Continuing Education should be informed in writing about any situation that should be addressed through the formal disciplinary process. The faculty or staff member will provide the Dean of Student Development with a written summary of the facts or conduct on which the referral is based within 48 hours of the incident for appropriate and effective disciplinary process, which must include the date, time, place, and a description of the incident.

X.   Academic Dishonesty

This section is quoted from the Student Code of Conduct. For more information, please visit https://www.montgomerycollege.edu/_documents/policies-and-procedures/42001-student-code-of-conduct.pdf.

The maintenance of the highest standards of intellectual honesty is the concern of every student, faculty and staff member at Montgomery College. The College is committed to imposing appropriate sanctions for breaches of academic honesty.

See the above link for more information concerning what constitutes academic dishonesty and misconduct as well as possible sanctions imposed as punishment.

Some students have used websites that provide answers to exam or homework questions or write essays for them. To be abundantly clear, using these websites in this way is ***always*** cheating. For example, Chegg (which I know is popular) posts answers to homework or exam questions. Even

if you didn't post the question, using that website to find answers is a violation of the Student Code of Conduct and posting questions is a particularly egregious violation because you are not only cheating yourself but also enabling others to cheat.

XI.   Disability Support Services

Any student who needs an accommodation due to a disability should make an appointment to see the course instructor during office hours. In order to receive accommodations, a letter from Disability Support Services will be needed. Furthermore, any student who may need assistance in the event of an emergency evacuation must identify the Disability Support Services Office.

XII.   Veterans' Services

If you are a veteran or on active or reserve status and you are interested in information regarding opportunities, programs, and/or services, please visit the Combat2College website at http://www.montgomerycollege.edu/combat2college/.

XIII.   Attendance

Students are expected to attend all class sessions. In cases involving excessive absences from class, the instructor may drop the student from the class, but you are ultimately responsible for dropping yourself from the course. Auto-drop should not be assumed. Excessive absence is defined as one more absence than the number of classes per week during a fall or spring semester; the number of absences is pro-rated for accelerated sessions.

XIV.   Withdrawal and Refund Policy

It is the student's responsibility to drop a course. Non-attendance of classes or failure to pay does not constitute official withdrawal. To view specific drop deadlines, log into your MyMC account, click on "My Class Schedule" under "Student Quick Links." Select the current term and click "View Drop Deadline Dates" at the bottom of the page.

XV.   Audit Policy

All students registered for audit are required to consult with the instructor before or during the first class session in which they are in audit status, and students are required to participate in all course activities unless otherwise agreed upon by the student and instructor at the time of consultation.

XVI.   Delayed Opening and Closing of College

On occasion, Montgomery College will announce a late opening or early closing of a specific campus or the entire college because of weather conditions or other emergencies.
- If a class can meet for 50% or more of its regularly scheduled meeting time *or* if the class can meet for 50 minutes or more, it will meet.

- Montgomery College will always operate on its regular schedule unless otherwise announced. Depending on the nature of the incident, notifications of emergencies and changes to the College's operational status will be communicated through one or more communication methods include the College's web page.

XVII. Tutoring

The department will have *free* statistics and economics (for both macro and micro) tutoring this semester. No appointment is needed. When the schedule's determined, I will post it on Blackboard.

Montgomery College Learning Centers also provides academic support resources, including virtual tutoring, to currently enrolled students. All students have access to the STEM Learning Centers, the Academic Success Center, and the Writing, Reading, and Language Centers. Information about specific learning centers and tutoring schedules can be found at https://www.montgomerycollege.edu/academics/support/learning-centers/virtual-tutoring.html

XVIII. Course Changes

The instructor reserves the right to alter the schedule of the course if necessary but will notify the students of any changes to the schedule before the changes are implemented.

XIX. Grading, Evaluation, and Assessment Procedures

Weight of Assignments

Assignment	Weight
Course Orientation	1%
Blackboard Homework	1% each; lowest two dropped (10% total)
Proposal	4%
Tables	4%
Memo	15%
Regression Review	3%
Exams	10/12/14% (lowest 10%, highest 14%)
Final	17%
Participation	10%

Note: The weights here indicate that your grade will be determined by a weighted average. Blackboard, by default, posts an unweighted average. (I've tried hiding this number but it still posts in certain places.) As an unweighted average, it's a meaningless number and does not measure your grade to date at all. Ignore it. To determine your grade-to-date, use the Excel file linked on my website called WhatsMyGrade.xlsx.

Course Orientation.

This Blackboard "homework" is a short quiz about the syllabus. You have unlimited attempts.

Blackboard Homework.

There will be twelve homework assignments completed through Blackboard. The lowest two will be dropped.

You will have three attempts to complete each homework. After each submission, you will be informed which questions were wrong. Your score for the homework will be your best score among all attempts.

Answers will be displayed after the due date has passed. Therefore, you cannot start the homework after the due date has passed and any homework submitted after the due date will not be accepted.

To access the answers, and the feedback for each question, select the View Attempts option that becomes available after the due date has passed. It will display all your attempts' scores; select one of these scores to see the answers and feedback.

Regression Review.

This is a short homework assignment meant to reinforce the very basics of regression and prediction. Go to Yahoo! Finance and pull up **monthly** data of your favorite publicly traded company for the year 2022. Download the Excel file and add a variable: MONTH, where 1 is the first month, 2 is the second, and so on.

Use this to run a regression with MONTH predicting price at close, writing the regression equation in Excel. Then predict what the price will be in March 2023 (MONTH=15).

Memo Project.

You will write a short memo at the end of this semester. I call it a "memo" rather than a "paper" to emphasize that this is supposed to be short. It shouldn't be more than three pages long. If you think that short length means it's easy, think again! It is very difficult to convey all the relevant information in a small amount of space.

The memo will make an argument and use empirical data to support that argument. A regression analysis (to be explained in Unit 3) is required.

You will be provided a file with country-level (each observation is a country) and state-level (each observation is a U.S. state) data; the file is called Memo Data Sets. You will use variables from either dataset to build your empirical argument. While there are plenty of variables to

construct an interesting analysis, you should feel free to add your own variables. Please see me if you do this.

This assignment has three parts. Each part will be submitted through Blackboard. When submitting through Blackboard:
- Be sure you're submitting it as a Word document or pdf. To do this, attach the file through the submission section. Do not write the assignment in the comments section.
- Be sure you're submitting it through the correct assignment page.
- Be sure it was successfully submitted (you can check under your grades).
- Remember that your work will be submitted through SafeAssign. SafeAssign checks your work against work available on the Internet as well as a database of student papers. This is plagiarism-detection tool and violations will result in a zero for the assignment or for the class.
    - ***Be aware:*** if you're using the same original content in this paper and in a paper for another class, SafeAssign may read that as plagiarizing another student's paper (it doesn't say who wrote the paper you're allegedly copying). Make sure any "recycled" content is sufficiently rewritten or, better yet, write different papers for different classes.

The parts are:

- *Memo Proposal*.

    This is a short summary of the question you wish to explore. It is sort of draft of your memo; use the panel data provided in the Memo Datasets file. Each observation should involve measurements taken at (more or less) the same time.

    The proposal should establish one variable as your dependent variable and three others as independent variables causing the dependent variable. You must include a logical explanation for why <u>each</u> of the three independent variables should cause the dependent variable. Don't use an independent variable you included as a justification for another variable.

    For example, don't say "Income causes crime because lower incomes make people desperate. Education causes crime because less education means less income which makes people desperate." The first sentence is fine but the second sentence just reuses income as a cause of crime. A better justification would be something like "Education causes crime because more educated people are more likely to know what the law is and thus avoid breaking it." (This is a bit far-fetched but at least I'm not re-using income.)

    The independent variables should be very different from one another. For example, don't use both murder rates and assault rates. Be creative!

    Avoid obvious connections (e.g. average income causing average consumption).

Avoid making a state's or country's population a variable. That variable is there so I can adjust other variables for population. While population *can* be an appropriate dependent or independent variable, it's tricky to do right and best be avoided for the purposes of this course.

- *Tables*.

  Using the different variables you will use for your analysis, provide three tables:

  Descriptive statistics. Include the following information for each variable: number of observations, arithmetic mean, median, standard deviation, the minimum, and the maximum. Make sure to put the information into a table (label row 1 "Variable", row 2 "Observations," etc).
  Regression analysis. Include the relevant parts of the regression: coefficients, p-values, R^2, adjusted R^2, significance F, and the number of observations.
  Correlation table. Your paper will need a correlation table of your independent variables to show there's no multicollinearity. Include a correlation table in this and the final assignment.

  The tables should be easy to read. Variable names should be brief (you'll explain them in sufficient detail in the prose of the memo), commas should be used for large numbers, use no more than three decimal places, the table should be single spaced, etc.

  All of these tables will be incorporated into your memo; I suggest you make them in Word and submit the Word file.

- *Memo*.

  By now, your question should have turned into an argument. Instead of asking "What causes crime?" you should be arguing "X causes crime." This argument will the basis of your memo.

  Your memo will involve using panel data; it will not be a time series. That means that each observation will be a different state or country with measurements taken at (more or less) the same time.

  Be sure to:
  - Discuss why your argument is worth making
  - Explain why you think this causation exists (or doesn't exist if your key variable isn't statistically significant)
  - Include descriptive statistic, as above
  - Support your argument with a regression including implications ("my regression suggests that for every additional year of school, criminal activity falls by X"). Also include a table of the critical information from your regression.

- - Remember to use logical rounding. For example, p values should be rounded to four decimal places.
  - Discuss a weakness in your analysis. This can take one of two forms.
    - If your key variable <u>is</u> statistically significant, identify and justify a potential confounding variable in your analysis.
    - If your key variable <u>isn't</u> statistically significant, discuss limitations to your argument that there is no connection between your independent and dependent variable, such as identifying and justifying a possible omitted variable bias.
  - Proofread!
  - You are limited to three double spaced pages. This includes any tables you use but does not include a works cited page, title, your name or other basic information.
    - The memo must be **double spaced**. Font style and size must be reasonable and readable. (12 point Times New Roman is preferred.)
  - ***Submit your memo as a pdf.*** This is to avoid any formatting issues that might occur with your included tables.

Exams.

The three exams will comprise of short answer, matching, and multiple choice. Since all exam dates are listed here, you will be expected to complete each one. Failure of completion results in a zero for the exam. Exceptions will only be made in extreme circumstances (such as a death in the family) and in those cases written proof (such as a death certificate) must be supplied.

Final.

The final is comprehensive. I suggest you review past exams to help prepare.

The final schedule is available now, on the college's website. You have signed up for these classes with this knowledge at hand. I will not let you take your final at a different time just because you don't like your schedule.

Participation.

I'm a strong believer that people learn best if they speak up. It's a good rule not just for learning but for life in general. However because there's a lot of material to cover, we cannot always have an in depth class discussion. Thus the expectations for participation reflect that—a substantive comment or question once a week will fulfill the requirement just fine.

XX. Late Policy

For *every* 24-hour period (rounded up) an assignment is late, there is a 10% penalty. Because all assignments are turned in through Blackboard, weekends count towards this period (turning something in Monday when it was due Friday would count at a 30% penalty, not a 10% penalty).

If you miss an exam, you make appropriate arrangements with me and the Montgomery College Assessment Center. I will not allow you to make up an exam after I've graded and passed it back.

If you miss a homework, you've missed a homework and you can't make it up. (This is why I drop the lowest two homeworks.) You can't turn in homeworks late because the answers are posted on Blackboard after the due date has passed. At most, I'll let you do the homework just so you can access the answer key but it won't be worth any points.

Poor Internet or other technical problems is not a compelling reason to turn in an assignment late; this is a foreseeable problem—akin to traffic—and it's a possibility that should be accounted for.

XXI. Challenges

Students are encouraged to challenge how any assignment was graded. To challenge the score on a question, *type* a paragraph explaining why your answer is the correct one and are thus deserving of additional points. I am not, repeat *not*, interested in reading about any mistakes you made but why you believe you are more correct than I gave credit. These challenges are due one week after the graded assignment was passed back or posted on Blackboard.

XXII. Reviewing Papers

I'm happy to look at your paper before you turn it in. However you *must* give it to me at least 72 hours before the assignment is due. I do not have time to review dozens of papers at the last minute and will refuse to look at any paper any closer to the deadline.

XXIII. Comments

I will always provide comments for your proposal and tables because that helps you write your final paper. However, it's not clear to me that students generally read comments. Therefore, comments for your final paper will *only* be provided if you opt in by writing "please provide comments" or something like that in the comment section when you submit your final paper via Blackboard.

XXIV. Group Me

To facilitate student inquiries, I've set up a GroupMe chat for my statistics class. You are encouraged to ask questions to me or the class in general. See Blackboard Announcements for the link to join the GroupMe chat. Please note that all sections of my statistics classes share a chat. The content is the same but deadlines may differ.

XXV. Study Advice

The general rule of thumb for studying for college classes is <u>at least</u> 2 hours *per hour of class per week*. That means for this course <u>alone</u>, you should be studying at least six hours a week, not including the time you are in class.

Obviously, this is a crude rule. People learn at different paces and some courses are harder than others so I'm not saying that you <u>must</u> do this to get a grade you'd be proud of, but if you're dissatisfied with how you're doing in this (or any course), adjusting your study time is a good first step, especially if you're like the many college students who study far below that six-hour suggestion.

I get questions about studying—often too late in the semester to do much good—so it's worthwhile to consider *now* the different things you can do to study. Some of these things will seem labor intensive and that's the point. There's no secret trickity trick to understanding something complex. It takes hard, meaningful work and that takes time.

- Form a study group and meet regularly. The best way to learn is to teach others.
- Read the lecture notes <u>before</u> class.
- Read the lecture notes the day after class. Reading them out loud is also helpful.
- Reorganize the lecture notes so that different ideas connect in different ways.
- Take practice exams <u>under time pressure</u>. Only look at the key <u>after</u> you've completed the exam.
- Work through any bonus problems I've created. Only look at the key <u>after</u> you've worked through the problems.
- Review the homework <u>before</u> trying it. Sometimes students will look at the homework before the class we covered in the material in, which I suspect is helpful.
- Copy your notes, by hand. This can lead to you discovering gaps in your notes that you didn't realize you had, allowing for ample time to fill the gaps.
- Visit office hours. Remember, you do ***not*** need an appointment; you can just drop in.
- Read the suggested textbook. You might also want to look at YouTube videos but if they contradict the class materials or seem confusing, talk to me.

XXVI. What's My Grade?

If you want to know your grade-to-date, multiply your score on each assignment by its weight (indicated in the previous section). Then divide by the total percent assigned so far. Compare the result with the grading scale (below) to determine your grade.

Linked on my website, there's an Excel file called <u>WhatsMyGrade.xlsx</u>. Download this file and then follow the instructions: (1) selecting the correct class from the tabs at the bottom; (2) fill in the scores for the assignments you've completed so far, marked in blue; and (3) look in the yellow area for your grade-to-date. Note this is not a perfect measure, especially since

participation has an outsized influence in the start of the semester, but it should give you an accurate idea of where you stand.

Note that the first two homeworks don't add to your weight total because I drop the lowest two homeworks for your final grade.

Grading Scale (points or percent needed for specific grades). Your grade, for both the midterm and the semester, will be determined by how many points you've accumulated throughout the class (by the table below).

| A: 90+ | B: 80-89.99 | C: 70-79.99 | D: 60-69.99 | F: 0-59.99 |

Note that these are strict bounds: if you get 89.89 points for the semester, that's a "B," not an "A." I will only "round up" if I feel it's appropriate. This may mean you:

- Regularly went above and beyond what's required for full credit (such as participation);
- Exhibited increasing mastery of the material as the semester moved forward (impressive, since the material gets harder as the semester moves forward); and/or
- Consistently demonstrated an understanding of particularly important question(s), especially if your fellow students had trouble with such question(s).

XXVII.   Tentative Schedule

The following table describes this course day-by-day. "#" indicates which numbered lecture is covered that day which will aid you finding the lecture notes on my website. "Text" indicates the chapter of the textbook we will be referencing that day.

Blackboard homework is always due the night before the exam at 11:59pm. The last three homework assignments are due the night *before* the review session at 11:59pm.

UNIT	DATE	#	TOPIC	TEXT
	01/24	01	Introduction	N/A
	01/26	02	Understanding Excel	N/A
	01/30		**COURSE ORIENTATION DUE AT 11:59PM**	
	01/31	03	Sampling	8
	02/02	04	Law of Large Numbers and Central Tendency	1, 2, 3
I	02/07	05	More on Central Tendency	5
	02/09	06	Dispersion	2
	02/13		**HOMEWORK 1-2 DUE AT 11:59PM**	
	02/14	07	Of Data and Displays	3
	02/15		**HOMEWORK 3 DUE AT 11:59PM**	
	02/16		**EXAM 1**	

	02/21	08	The Normal Distribution and the CLT	7, 11
	02/23	09	Confidence Intervals I	9, 11
	02/27		**PROPOSAL DUE VIA BLACKBOARD AT 11:59PM**	
	02/28	10	Confidence Intervals II	9, 11
II	03/02	11	Hypotheses and Types of Error	10, 11
	03/06		**HOMEWORK 4-5 DUE AT 11:59PM**	
	03/07	12	Hypothesis Testing I	10, 11
	03/09	13	Hypothesis Testing II	10, 11
	03/14 **03/16**		**NO CLASSES—SPRING BREAK**	
	03/20		**HOMEWORK 6 DUE AT 11:59PM**	
	03/21		**EXAM 2**	
	03/23	14	Correlation & Causation	4
	03/28	15	Simple Linear Regressions I	4,14
	03/30	16	Simple Linear Regressions II	4,14
	04/03		**HOMEWORK 7 DUE AT 11:59PM**	
III	04/04	17	Multivariate Regressions I	15
	04/05		**REGRESSION REVIEW DUE AT 11:59PM**	
	04/06	18	Multivariate Regressions II	15
	04/10		**TABLES DUE VIA BLACKBOARD AT 11:59PM**	
	04/11	19	Understanding Regressions	14, 15
	04/12		**HOMEWORK 8-9 DUE AT 11:59PM**	
	04/13		**EXAM 3**	
	04/18	20	Probability	5
	04/20	21	Expected Value	6
	04/25	22	Bayes' Theorem I	5
	04/26		**MEMO DUE VIA BLACKBOARD AT 11:59PM**	
IV	04/27	23	Bayes' Theorem II	5
	05/01		**HOMEWORK 10-11 DUE AT 11:59PM**	
	05/02	24	Discrete Probability Models	6
	05/04	—	*Review*	N/A
	05/08		**HOMEWORK 12 AT 11:59PM**	
	05/11		**FINAL EXAM FOR THE 9:30AM CLASS: 8:00AM TO 10:00AM**	

Note: This syllabus is subject to change at the discretion of the Professor.