Econ 256AB/ Mgmt 256AB: Econometrics
Moravian College, Fall 2015
Department of Economics and Business

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Office Hours: Mondays and Wednesdays: 2:30-4 pm; or by appointment

Class Information:
Meeting Times: A: Mondays, Wednesdays, Fridays 8:55 am – 10:05 am
B: Mondays, Wednesdays, Fridays 10:20 am – 11:30 am
Class Location: PPHAC 112

What is this course all about? In this course you will have an introduction to regression-based modeling. The emphasis is on how to use econometrics to inform decision-making: to formulate, model, and interpret results of real-world problems based on data. In addition to learning various modeling techniques, you will learn about often-encountered data problems and understand various terminology including: multi-collinearity, endogeneity, serial correlation, and heteroskedasticity. As an applied course, there will be significant emphasis on correct specification of models and interpretation of results. You will learn to use econometric software to estimate models and detect and address common challenges inherent in data.

What I am required to read?
Angrist J. and Pischke J. (2015) Mastering 'Metrics. Princeton University Press, Princeton, NJ. ISBN: 978-0-691-15284-4

Stock and Watson. (2015) Introduction to Econometrics 3rd Edition. Pearson Education Inc., New York, NY. ISBN: 978-0-13-348687-2

William E Wagner, III. (2015) Using IBM SPSS Statistics for Research Methods and Social Science Statistics. Sage. ISBN: 978-1-4833-5128-5

What other resources would be helpful to review in order to succeed in this course?
Klein G. and Dabney, A. (2013) The Cartoon Introduction to Statistics. Hill and Wang, New York, NY. ISBN: 978-0-8090-3359-1

Several websites have excellent and regular information on statistical modeling issues and econometric-based analyses. As you peruse various links, be sure to verify the credentials of each author. Databases available through Reeves Library are excellent sources of scholarly articles.

Other relevant readings and course materials will be posted on the Blackboard site for this class. Please check Blackboard regularly.

What else do I need for class? (1) Relevant reading materials. (2) An Internet-enabled device (phone, tablet, laptop) for in-class assessments and discussion, (3) Access to MyEconLab (see separate handout for details).

What preparation do I have to have? Students are expected to have completed Econ 152 and one of the following statistics courses: Econ 156, Math 107, or Math 231, prior to taking this course.

How will I be assessed?

Exams	45%
Final Project Components	30%
Problem Sets	15%
Quizzes	5%
Participation	5%

What are the learning outcomes for this course?

- Differentiate between correlation and causality.
- Apply the classical regression model to different sets of data.
- Learn appropriate modeling techniques to handle selection bias, endogeneity, and heteroskedasticity.
- Become proficient in data analysis using the SPSS software package.
- Interpret and clearly communicate results from various regressions.

What is the workload expectation for this course?

This course is a full-unit course that meets three times per week for 70 minutes at each class period. Middles States Accreditation requires that each full-unit course include at least **174 hours of course work** during the fifteen-week semester. Over the course of this semester we will meet 42 times for 70 minutes each; therefore, our classroom time will only account for 49 of these required hours plus an additional three hours for final presentations. This implies that **work outside of the classroom** must meet a minimum threshold of 122 hours, or **eight hours per week**. The activities and assignments required for successful completion of this course are designed with that goal in mind.

What happens if there is inclement weather?

In hazardous weather conditions, the College may be closed and classes cancelled, or the college may opt to run on a two-hour delayed schedule (see below). The decision to close or delay the opening of classes will be announced on the inclement weather hotline, 610-625-7995, and will be communicated on the following radio and TV stations: WLEV-FM 100.7, WAEB-FM 104.1, WAEB-AM 790, WCTO-FM 96.1, WRFY-FM 102.5, WBYN-FM 107.5, WODE-AM 99.9, WWYY-FM 107.1, WKFB-FM 107.5, WSBG-FM 93.5, WZZO-FM 95.1, and WFMZ-TV (Channel 69).

These closings or delays will also appear at the top of the login page on the College's internet portal AMOS (amos.moravian.edu) as well as the College's website (www.moravian.edu <http://www.moravian.edu/>). College-wide cancellations *after the start of the class day* will be announced on the public-address system of the HUB, the campus e-mail system, the radio and TV stations mentioned above, and AMOS and the College's website.

Two-Hour Delay: If the decision has been made to open with a two-hour delay, the day does not begin with third-period classes; it begins with first-period classes on a shortened schedule. When following the delayed schedule, please note that there will be no "A" or "B" periods. A 2-hour delay does not affect courses, which begin at 4PM or later. Those courses would run on their normal schedule, if the college were open. Morning and afternoon science labs and studio art classes have their own schedule. Music lessons and practice are cancelled for the day when the delayed schedule is in effect.

What should I do if I need an accommodation in this course or need access to tutoring services?

The Academic Support Center houses Disability Support and Greyhound Tutoring on the first floor of Monocacy Hall and can be reached at 610-861-1401.

Greyhound Tutoring provides course-specific tutors to Moravian students, free of charge. If you would like to work with a Greyhound Tutor to boost your academic success, please request a tutor through http://bit.ly/NeedTutorMC (case-sensitive). Plan ahead! It takes 2-3 business days to connect you with a tutor. Please email Dana Wilson (wilsond@moravian.edu), Tutor Coordinator, for more information about tutoring.

Please email Laurie Roth (rothl@moravian.edu), Director of Academic and Disability Support, for more information about disability support.

How do I schedule an appointment with you?

If you would like to meet with me during office hours, please sign-up for an open office-hour slot using the my Google calendar for office hour appointments, which can be found here:

https://www.google.com/calendar/selfsched?sstoken=UUN1am9JUDhPRjFlfGRlZmF1bHR8Yzc3OWY0NDBlMjM1YTM0Y2U4YjkwMGRmMDczYTI3OTE

If you would like to meet with me outside of my regularly scheduled office hours, please send a meeting request via Google calendar for an available time on my schedule between the normal working hours of M-F 8 am – 4 pm.

If you come by my office and my door is open, feel free to stop in and say hi! If I am available I am happy to work with you then; if not, we'll find another time to meet using the methods described above.

Upon successful completion of this course you may become eligible for the Economics Honor Society (ODE)!

Omicron Delta Epsilon (ODE) is the economics honor society. Its purpose is to recognize scholastic achievement in economics and to promote closer ties of students and faculty. Each semester ODE will organizes meetings for any interested students. Current students can present their research and young economics alumni will talk about their careers. To become eligible for induction into ODE, students must attain junior status and have a 3.0 GPA in three or more economics courses as well as overall.

What are the classroom policies?

1. **Attendance is expected** at each class period. Absences will not only reduce your participation grade, but also prevent you from becoming an engaged member of our classroom community.

2. As a common courtesy for your fellow students and myself, I expect students to **be on time**. Lateness not only reduces your participation grade, but also disrupts the learning environment.

3. I permit **appropriate and responsible use of technology** during class. Phones, tablets, and laptops can be used as calculators or as 'Internet-enabled' devices for **purposes of class assignment and discussion only**.

4. Violations of the Moravian College Academic Honesty Code will not be tolerated. **Plagiarism**, regardless of intent, is a violation of academic honesty. **All** cases of academic dishonesty **will be reported to Dean Traupman-Carr** and the offender will receive a zero on the related work in addition to other possible sanctions.

5. Communication for this course will occur through your **Moravian e-mail account and Blackboard**. You are required to check these sources regularly for updates and assignments related to this course.

6. **Late assignments are not accepted** and a grade of zero is recorded. Please be cognizant of the due dates for each assignment. No exceptions will be made.

7. **I do not give makeup examinations (or quizzes).** If you miss an assessment without notifying me beforehand, or without providing a proper excuse (written excuse from health center or dean), you will receive a zero for that assessment. If you miss an assessment due to an extenuating circumstance (and have proper documentation and notify me beforehand), the percentage from the missed assessment will be split evenly between the other remaining exams (or quizzes).

8. Part of your responsibility as a Moravian student is to attend classes and to take notes. This is an essential part of the learning process. I will therefore not post extensive lecture notes online. Also, note that this course will be fairly intense, so it is essential that you do not fall behind in your readings.

9. We will use the final exam period for presentations. Attendance is expected; please plan accordingly.

10. In the event of inclement weather, we will follow the decisions made by the college (see details above). Online meetings are an option if it becomes too dangerous to travel to class. I will provide updates via email.

11. **I do not offer extra credit**.

The following pages detail specific information regarding each assessment. More details will be provided as due dates approach.

PROBLEM SETS

Problem sets (PSs) are designed to enhance your problem-solving and economic analysis skills. PSs will be assigned and completed through MyEconLab. PSs will be graded for accuracy.

All students are required to complete individual PSs; however, you are encouraged to ask questions about PSs and work with your classmates to resolve difficult questions. Further, students are able to use multiple attempts to answer each question within each assignment and can use the resources available within MyEconLab to gain an increased understanding and improve their score.

The PS schedule is detailed below. All PSs must be submitted to MyEconLab **by 8:00 am** on their respective due date. Late assignments are not accepted and will receive a grade of zero.

QUIZZES

Quizzes are meant to test your knowledge of basic concepts covered in class and assigned readings. Quizzes will be taken outside-of-class through MyEconLab. They are **due by 8:00 am** on the dates listed below. Missed quizzes receive a grade of a zero; there are no exceptions.

The purpose of the MyEconLab quizzes is to provide practice before exams and ensure you stay current with your readings. These quizzes are not timed. You can use your notes or other resources while you take the quizzes, and you may even take these quizzes with a classmate (although all students must submit their own quiz). Further, you will have two chances to answer each quiz question before your answer is recorded.

My recommendation is to take the quiz alone and without notes for your first attempt at each question. This will give you a good indication of where you may need to study more. However, you can choose the method of taking quizzes that is most conducive to your learning and studying style. Just remember: all exams are individual assessments taken in class without access to notes.

EXAMS

Exams consist of problems, essays, multiple choice, and short answer questions. Exams will cover a combination of topics from many chapters, which will be announced in the week prior to the exam. In-class exams are restricted to a one-hour time period. You may need calculators for some exams. Simple four-function calculators are the only type of calculator permitted during exams. You cannot share calculators. Cell phones may not be used as calculators, or for any other purpose during an exam. Exam dates are listed below, and make-ups will not be given.

Exam questions include short answer (analytical, definitional), multiple choice and essay questions. Sometimes a student will disagree with a grade assigned to a particular question. This is a legitimate concern and will be addressed with the following procedure.

To have an answer reevaluated, the student must submit a written request for a reevaluation. This request should identify the question in dispute, provide a written explanation why you feel the question was incorrectly evaluated, and propose a suggested remedy. It is within my purview to apply qualitative judgment in determining grades for an assignment or for a course. The following dates represent the deadline for grading appeals; appeals received after these dates will not be reviewed:
Exam 1 Appeals: Oct. 14; Exam 2 Appeals: Nov. 9; Exam 3 Appeals: Dec. 11.

IN-CLASS PARTICIPATION

Class participation accounts for five percent of your final grade. Simply attending class will earn students an approximate participation grade of 75%. Students can marginally improve their participation grade through "passive participation", which implies attending class, taking notes, and being attentive. Students can substantially improve their participation grade through "active participation", which includes volunteering thoughtful questions and answers on a regular basis. Students who choose not to attend class on a regular basis (i.e. have more than three absences during the course of the semester) or are perpetually late to class will receive a participation grade lower than a 75%. Additionally, there may be surprise assessments on a regular basis to check students' understanding of course material. Successfully completing these assessments will also improve a student's participation grade.

FINAL PROJECT AND PRESENTATION:

The final project in this course involves careful econometric analysis designed to answer a research question of your choosing. The final project will include data analysis, methodology, and interpretation. Details about the specific requirements of this project (and all interim deliverables) will be available as the course progresses.

You will be required to present your final analysis and also present a critique of peers' work during the final exam period of this course.

The final project comprises 30% of your final course grade; the breakdown of interim components is as follows:

Interim Project Drafts (3)	10%
Final Project Report	10%
Final Presentation	5%
Peer Project Critique	5%

Schedule of Assignments and Topics (subject to change with notice):

Week / Dates:	Topic:	Assignments Due:
1: Aug. 31, Sept. 2 and 4	Introduction to Econometrics and to Course Technology S&W: Ch. 1	**PS 0: Sept. 2** **Quiz 0: Sept. 4** **Syllabus Sign. Page: Sept 4.**
2: Sept. 7, 9, and 11	Review of Probability and Statistics S&W: Ch. 2 and 3	**PS 1: Sept. 9** **Quiz 1: Sept. 11**
3: Sept. 14, 16, and 18	Linear Regression with Single Regressor S&W: Ch. 4 A&P: Ch. 1	**PS 2: Sept. 16** **Quiz 2: Sept. 18**
4: Sept. 21, 23, and 25	Hypothesis Tests and Confidence Intervals S&W: Ch. 5	**PS 3: Sept. 23** **Quiz 3: Sept. 25**
5: Sept. 28, 30, and Oct. 2	Review and Exam	**Exam 1: Oct. 2**
6: Oct. 5, 7, and 9	Linear Regression with Multiple Regressors S&W: Ch. 6 A&P: Ch. 2	**Final Project Team and Data Choices: Oct. 9**
7: Oct. 12, 14, and 16 (no class Oct. 12)	Hypothesis Tests and Confidence Intervals in Multiple Regression S&W: Ch. 7	**PS 4: Oct. 14** **Quiz 4: Oct. 16**
8: Oct. 19, 21 and 23	Nonlinear Functions S&W: Ch. 8	**PS 5: Oct. 21** **Quiz 5: Oct. 23**
9: Oct. 26, 28, and 30	Review and Exam	**Exam 2: Oct. 30**
10: Nov. 2, 4, and 6	Assessing Studies Based on Multiple Regression S&W: Ch. 9	**Draft Summary Stats and Descriptive Statistics: Nov. 6**
11: Nov. 9, 11, and 13	Panel Data S&W: Ch. 10 A&P: Ch. 5	**PS 6: Nov. 11** **Quiz 6: Nov. 13**
12: Nov. 16, 18, and 20 (no class Nov. 20)	Binary Dependent Variables S&W: Ch. 11	**PS 7: Nov. 18** **Quiz 7: Nov. 20**
13: Nov. 23 and 25 No regular class this week; online collaborative sessions instead	Project Meetings and Analysis	**None** **HAPPY THANKSGIVING!**
14: Nov. 30, Dec. 2, and 4	Special Topics (IV and RD) and Review A&P: Ch. 3	**Draft Results and Analysis: Dec. 4**
15: Dec. 7, 9, and 11	Exam/ Project Preparations/ Data Analysis and Interpretation/ Peer Review	**Exam 3: Dec. 7** **Final Draft for Peer Review: Dec. 11**
Finals Week: Dec 14	**Presentations and Peer Critique** **A: Wednesday, Dec 16 @ 1:30 pm** **B: Thursday, Dec 17 @ 8:30 am**	**Final Report Due:** **A: Dec 16 @ 1:30 pm** **B: Dec 17 @ 8:30 am**