

EconS 452: Advanced Business Management Economics Syllabus, Fall 2017

Class Meetings:	Tuesday in Hulbert 23 Thursday in Hulbert Computer Lab 5 (unless otherwise stated) Time: 4:15 p.m. – 5:30 p.m.
Instructor:	Anthony Delmond
Office:	Hulbert Hall 201A
Email:	anthony.delmond@wsu.edu
Office Hours:	Mondays 9:00 a.m. – 12:00 p.m. (noon) or by appointment
Prerequisites:	EconS 301 MATH 171 or 202 MGTOP 215 or Stat 212
Website:	Blackboard Learn (https://learn.wsu.edu)

Disclaimer:

This syllabus may change at the discretion of the instructor.

Course Overview:

The course will cover various techniques in decision modeling, ranging from simple deterministic models to complex nonlinear programs and multi-stage probabilistic models. The methods used for analysis rely heavily on computer applications. Throughout the course, we will refer to real-world situations that can be examined and solved using the tools outlined in lectures, problem sets, and the text.

Course Objective and Learning Outcomes:

The primary objective of this course is for students to develop and hone the analytical tools and application skills necessary to succeed in the business and management environment. This is achieved by introducing practical decision modeling techniques used in addressing common business challenges. The students will receive hands-on training in the following areas:

- Keeping abreast of current market conditions, collecting and synthesizing that information and presenting it to the class weekly
- Developing decision models and applying these models in a variety of settings
- Utilizing Microsoft Excel to solve a wide variety of optimization problems, with applications in
 - Marketing
 - Finance
 - Transportation
 - Manufacturing
- Interpreting and explaining the results of various decision modeling techniques
- Applying and adapting these skills to address business needs
- This course is designed to meet the following WSU Student Learning Goals:

- LG1: Critical and creative thinking
- LG2: Quantitative reasoning
- LG4: Information literacy
- LG5: Communication

Student Expectations:

This is an active-learning course. Students are expected to attend all classes and to prepare in advance. Readings will be specified and any additional expectations will be made clear in class. Students are expected to come to class having already familiarized themselves with the relevant material. Class time will be used for students to ask the instructor questions about the material and for the instructor to ask students questions about the material.

This is a 3-credit course, so by Academic Regulation 27 students are expected to commit a minimum of 9 independent study hours per week to work directly related to this course (see <http://registrar.wsu.edu/academic-regulations/>).

Required Materials:

Text: Balakrishnan, Nagraj, Barry Render, and Ralph M. Stair, Jr. (2013), *Managerial Decision Modeling with Spreadsheets*, 3rd Edition, Pearson.

Assessments:

Participation. Students will receive a participation score in this class based on a combination of class attendance (including labs) and positive active participation.

Problem sets and assignments. As this course is heavily tools-based, we will make use of lab time during most of our regularly scheduled Thursday class meetings for students to work on weekly problem sets. Unless otherwise specified, problem sets should be typed, printed, and turned in at the beginning of class on the Thursday following the associated lab. In addition, the instructor may assign work other than the scheduled problem sets. Deadlines and procedures for any additional assignments will be specified as necessary. **Late problem sets and assignments will not be accepted in this course.** The only exceptions to this are extended illnesses or pre-arranged and documented absences due to University-sponsored activities.

Exams. There will be two “midterm” exams during the semester and a cumulative final exam. Each midterm exam will cover only the material since the previous midterm exam. Both midterms are equally weighted, but the instructor may curve midterm exams at his discretion. If some type of curve takes place, it will be for the class as a whole. **Make-up exams will not be given.** If you must miss a midterm exam due to a University-sponsored activity, you may arrange to take the exam early.

Group market analysis project. This project will require weekly reports (oral and written) and a final presentation and paper. Collaboration and writing will occur outside of class. There will be a peer evaluation process whereby students will grade other members of the group. For more information about the group project, see the Group Project Description.

Exam Dates (subject to change):

Exam 1	Thursday, October 5
Exam 2	Thursday, November 16
Final Exam	Monday, December 11, 3:10-5:10 p.m., in Hulbert 5 (computer lab)

Grading Policy:

Classroom Participation	10%
Problem Sets and Assignments	20%
Exams (3)	35%
Group Market Analysis Project	
Weekly Summaries (written/oral)	10%
Final Presentation	10%
Final Paper	10%
Group Assessment (Peer)	5%
Total Project	35%

Course grades will be determined using the following scale:

A	93–100%
A–	90–92.99%
B+	87–89.99%
B	83–86.99%
B–	80–82.99%
C+	77–79.99%
C	73–76.99%
C–	70–72.99%
D+	67–69.99%
D	60–66.99%
F	0–59.99%

Scores will be updated on Blackboard on a regular basis.

Contacting the Instructor:

It is best to ask questions in class and during office hours. **If you send an email, please include “EconS452” in the subject line.** You should try to complete all assignments well in advance of deadlines in case you have questions. The instructor will not be responsible for answering questions shortly before deadlines.

Attendance Policy & Classroom Expectations:

Students are expected to attend all classes and labs. Students are responsible for all announcements made in class, whether present or not. Participation is included in the course grade, so skipping class is usually a suboptimal decision. Each student is expected to be a positive member of and contributor to the class. Students are expected to come to class prepared and participate in manner that facilitates a learning environment for everyone. Mutual respect and collaborative effort are essential. No cell phones, smart phones, or texting during class. Laptops may be used on lab days for problem sets and for note taking, but not for social media or general Web browsing during class time. Violations may result in a revision of the instructor’s

laptop policy. Changes in classroom policies, deadlines, or the course schedule will be announced in class. Any changes made between class meetings will be sent via email.

WSU Academic Honesty Statement:

As an institution of higher education, Washington State University is committed to principles of truth and academic honesty. All members of the University community share the responsibility for maintaining and supporting these principles. When a student enrolls in Washington State University, the student assumes an obligation to pursue academic endeavors in a manner consistent with the standards of academic integrity adopted by the University. To maintain the academic integrity of the community, the University cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty. Students found responsible for academic integrity violations may receive an F on the particular assignment or exam, or even an F for the course. Serious and/or repeated offenses may result in referral to the Office of Student Standards and Accountability and expulsion from WSU. Cheating is defined in the Standards for Student Conduct WAC 504-26-010 (3).

You can learn more about Academic Integrity at <http://registrar.wsu.edu/academic-regulations/>. Please use these resources to ensure that you do not inadvertently violate WSU's standard of conduct. It is strongly suggested that every student read and understand these definitions.

Any student caught cheating in this class can expect to receive an F for the course and a referral to the Office of Student Conduct.

WSU Disability Statement:

Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please either visit or call the Access Center (<http://www.accesscenter.wsu.edu>) (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.

Three Useful Resources:

The **WSU Undergraduate Writing Program** (<https://writingprogram.wsu.edu/undergraduate-writing-center/>) offers free, non-credit, tutorial instruction to WSU students who need help with brainstorming, organization of writing, development of ideas, drafting papers, writing techniques, as well as sentence structure, grammar, and punctuation. Check out their website for more detail on their open-writing lab located in CUE 303 (tutors are available without an appointment, hours available at the website above) and an additional link to a new online writing tutorial program (eturoting.org) for self-help information to become a better writer without having to go to the lab!

Library Services: The Holland and Terrell Libraries contain many resources for WSU students and faculty interested in Economic Sciences, many of which can be accessed through their website: <http://libguides.wsulibs.wsu.edu/economics>. This includes links to data sources that might be useful in the group project. If you have any questions not answered by their website or would like to request a book or journal on any subject related to Economic Sciences, please contact Mary Gilles at gilles@wsu.edu (Office: Terrell 120E, Phone: 335-8740).

The **Academic Success and Career Center** provides services to enhance student learning and career and employee relations. They provide a variety of structured services that aid student success, including academic advising, peer tutoring, and academic success coaching. They also serve students, alumni, and employers in the exploration and pursuit of a fulfilling employment partnership. You are encouraged to browse their website (<https://ascc.wsu.edu/>) and familiarize yourself with the variety of services available.

WSU Safety Statement:

Washington State University is committed to maintaining a safe environment for its faculty, staff, students, and visitors. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community, the University has developed a Campus Safety Plan (<http://safetyplan.wsu.edu/>). It is highly recommended that you visit this website as well as the Office of Emergency Management website (<http://oem.wsu.edu/>) for a comprehensive listing of university policies, procedures, statistics, and information related to campus safety, emergency management, and the health and welfare of the campus community.

Classroom and campus safety are of paramount importance at Washington State University and are the shared responsibility of the entire campus population. WSU urges students to follow the “**Alert, Assess, Act**” protocol for all types of emergencies and the “**Run, Hide, Fight**” response for an active shooter incident. Remain **ALERT** (through direct observation or emergency notification), **ASSESS** your specific situation, and **ACT** in the most appropriate way to assure your own safety (and the safety of others if you are able).

Please sign up for emergency alerts on your account at [MyWSU](#). For more information on this subject, campus safety, and related topics, please view the [FBI’s Run, Hide, Fight video](#) and visit the [WSU safety portal](#).

**EconS 452: Advanced Business Management Economics
Tentative Course Schedule, Fall 2017**

Week	Dates (M-F)	Tuesday	Thursday	Reading/Problem Set due
1	8/21 – 8/25	Course Outline	Introduction	Ch. 1 / no PS due
2	8/28 – 9/1	LP Models	Lab / hand out PS#1	Ch. 2 / no PS due
3	9/4 – 9/8	Applications of LP	Lab / hand out PS#2	Ch. 3 / PS#1 due Tues. (9/5)
4	9/11 – 9/15	Sensitivity Analysis	Lab / hand out PS#3	Ch. 4 / PS#2 due Thurs. (9/14)
5	9/18 – 9/22	Network Models	Lab / hand out PS#4	Ch. 5 / PS#3 due Thurs. (9/21)
6	9/25 – 9/29	Integer Analysis & NL Programming	Lab / hand out PS#5	Ch. 6 / PS#4 due Thurs. (9/28)
7	10/2 – 10/6	Probability	Exam 1	Appendix A / PS#5 due Thurs. (10/5)
8	10/9 – 10/13	Decision-Making Environments	Lab / hand out PS#6	Ch. 8 / no PS due
9	10/16 – 10/20		Lab / hand out PS#7	Ch. 8 (cont.) / PS#6 due Thurs. (10/19)
10	10/23 – 10/27	Simulation	Lab / hand out PS#8	Ch. 10 / PS#7 due Thurs. (10/26)
11	10/30 – 11/3		Lab / hand out PS#9	Ch. 10 (cont.) / PS#8 due Thurs. (11/2)
12	11/6 – 11/10	Forecasting	Lab / hand out PS#10	Ch. 11 / PS#9 due Thurs. (11/9)
13	11/13 – 11/17		Exam 2	Ch. 11 (cont.) / PS#10 due Thurs. (11/16)
14	11/20 – 11/24	Thanksgiving Break		
15	11/27 – 12/1	Case Study	Case Study	TBA / no PS due
16	12/4 – 12/8	Group Presentations	Review	TBA / Case Study Assignment due Thurs. (12/7)
Final Exam: Monday, December 11, 3:10p.m.-5:10p.m. in Hulbert 5 (computer lab)				

EconS 452: Advanced Business Management Economics Group Project Description, Fall 2017

Project Overview:

The group project is designed to provide students an opportunity to become closely aligned with the dynamics of markets, to summarize and evaluate information from a variety of sources, and to present weekly summaries of relevant changes influencing the business environment. The individual groups are focused on different markets and each team is responsible for tracking relevant changes happening within its area. As the semester progresses and as input is provided across all groups, each student should:

- Appreciate the growing global connectivity between the various markets
- Realize the speed of change occurring in the various markets and the implications to individual businesses and management of those firms
- Visualize a clearer picture of factors influencing businesses in real time
- Understand the value of timely and accurate information in managerial decisions
- Gain experience in appropriate and accurate distillation of that information into succinct points
- Be prepared to present that information and defend it

Weekly Assignment:

Each Tuesday (beginning on August 29th), a brief written summary must be provided (posted to Blackboard prior to the beginning of class). The content of this summary is up to the group, but will be graded based on relevancy, completeness, conciseness, and clarity. The areas are broad, thus only major changes throughout the previous week should be covered and presented. Input from all group members is required. Each group member is expected to be an expert analyst in his/her respective area and should be knowledgeable of changes occurring within that area.

During the first 15-20 minutes of class, each group will verbally (no formal presentation) provide a brief recap of the highlights for its area. These should be only 2- to 5-minute summaries and should rotate sequentially through each group member. All students are encouraged to question anything that does not make sense or is contrary to their knowledge.

Final Report and Group Project Presentation:

At the end of the semester (due December 5th at 5:00 p.m.), each group must provide a final report summarizing the changes that occurred throughout the semester within its area. Data and information from the weekly reports may be incorporated, but the context for the final report is different from the weekly reports, spanning a broader time period and offering greater perspective. The final reports should include charts, graphs, tables, and other supporting figures and must be presented in a clear, professional manner. Each group will then have 15-20 minutes to present this information to the class during the week preceding finals week.

We want this project to be tied closely to the skills learned in class. Think hard about the changes in the market that will affect your area each week. Note the connections between each area (yours and those of other groups) and the similarities in terms of decisions that businesses in your area will incur.

Group	Market	Content / Details to Consider	Some Sources
1	Automotive	Production, marketing, sales, leasing, regulations (e.g., fuel standards and emissions restrictions)	AutoNews: http://www.autonews.com/ Forbes: https://www.forbes.com/autos/ Financial Times: https://www.ft.com/companies/automobiles Automotive World*: https://www.automotiveworld.com/ BBC: http://www.bbc.com/news/business/global_car_industry
2	Energy	Production, prices, world markets, regulations, shifting alternatives (e.g., growth of the sustainable energy market)	Crude Oil: https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm Natural Gas: http://www.eia.gov/naturalgas/weekly/ Coal Production: http://www.eia.gov/coal/production/weekly/ Coal Prices: http://www.eia.gov/coal/markets/ Wall Street Journal*: https://www.wsj.com/news/business/energy-oil-gas Forbes: https://www.forbes.com/energy/
3	Agriculture	Production, regulations, market supply chain, retail sales, market segmentation (e.g., sustainable alternatives, GMO vs. non-GMO)	AgWeb: https://www.agweb.com/ ScienceDaily: https://www.sciencedaily.com/news/plants_animals/agriculture_and_food/ Alltop: https://agriculture.alltop.com/ (good meta-site) Economist*: http://www.economist.com/topics/agriculture Brownfield Ag News: http://brownfieldagnews.com/
4	Technology	Production, marketing, network effects, sales, access issues (physical and policy restrictions)	Economist*: http://www.economist.com/topics/technology-industry Forbes: https://www.forbes.com/technology/ VentureBeat: https://venturebeat.com/category/business/ Next Web: https://thenextweb.com/ ScienceDaily: https://www.sciencedaily.com/news/computers_math/computer_science/
5	Tourism	Regulations and policies, world events, marketing, exchange rates, services and transportation	Travel Pulse: http://www.travelpulse.com/news/ Economist*: http://www.economist.com/topics/travel-and-tourism-1 Travel Weekly: http://www.travelweekly.com/ Skift: https://skift.com/ (and https://skift.com/2013/12/13/the-top-30-travel-industry-news-and-information-sites/) UN World Tourism Organization: http://media.unwto.org/news

*Site may require membership, but could at least be a good starting point for new developments