AUCA | SCHOOL OF ECONOMICS & BUSINESS ADMINISTRATION

American University of Central Asia
Course Information
School of Economics and Business Administration
Fall 2017

Course Title:	Quantitative and Qualitative Methods of Decision Making
Course Code:	MBA 521
Course Coordinator:	Kanaiym Kydyralieva, Assistant Professor
Contact:	kydyralieva_k@auca.kg (+996) 312 915 000 (Ext. 463) Office 215
Course Duration:	15 weeks
No. of Credit Units:	3
Class meeting:	220
Appointments/Hours:	Wed. or Th. 20:00 - 21:15

1. Abstract:

This course is designed to introduce MBA students to various methods and tools that can be used to aid managerial decision making by applying a scientific approach to managerial problems that involve qualitative and quantitative factors. Upon completion of this course, students should be able to take more advanced quantitative courses.

2. Course Aims:

- Improve students' ability to use scientific techniques for decision making
- Help students understand and solve various kinds of managerial problems to which linear programming can be applied
- Enhance students' skills to develop and analyze spreadsheet models

3. Learning Outcomes:

- Create mathematical models
- Apply graphical and algebraic methods to linear programming problems
- Use spreadsheets to formulate and solve decision making problems

4. Assessment Tasks/Activities

Every week we are going to have a combination lectures and seminars. Quizzes and exams will consist of theoretical questions and/or problems/cases similar to exercises we will solve

during our classes.
Students are expected to read the materials and solve problems before classes.
Students must register for the relevant e-course. The enrolment key will be provided during the first week of classes. All relevant links and materials will be uploaded there. Students must read all the announcements and complete assignments on the e-course.

Grade Component	Percent
Attendance/ Participation	10
Quiz 1	10
Quiz 2	30
Final Exam	50
Total	**100%**

5. Course Policies:
Course instructor reserves the right to modify any and all portions of this syllabus at any time during the period of the course. Any modifications will be communicated in writing to students.

6. Missing Classes:

- If the reason for missing Quiz 1 is valid, the student's Quiz 2 will be worth up to 37 points. In this case extra tasks can be included in Quiz 2.
- If the reason for missing Quiz 2 is valid, the student's Final Exam will be worth up to 70 points. In this case extra tasks can be included in the Final Exam.
- If the reasons for missing Quiz 1 and Quiz 2 are valid, the student's Final Exam will be worth up to 75 points. In this case extra tasks can be included in the Final Exam.
- If the reason for missing the Final Exam is valid, the student can apply for grade I.
- If the reason for missing any quiz or exam is not valid, then the grade 0 will be given for the missed quiz.
- If the reason for missing any class is valid, the instructor should be notified within 24 hours and documentary evidence should be provided within a week of the missed class. Otherwise the reason is considered to be invalid.

7. Academic Integrity

I. The use of cell phones (talking, texting, etc.) during class is strictly prohibited. Students violating this policy will be given one (1) warning. A second violation of this policy will result in the student being counted absent for the class.

II. The use of any other electronic devices (SUCH AS LAPTOP, IPADS) during class for any purpose not related to the furtherance of the class objectives is strictly prohibited. Students violating this policy will be given one (1) warning. A second violation of this policy will result in the student being counted absent for the class.

III. Students are expected to follow the AUCA ACADEMIC HONESTY code. All types of plagiarism are strictly prohibited. If a student fails to observe this requirement, the instructor may assign an "F" for the work or an "F" for the whole class, depending on the type of assignment and relevant circumstances. Students are expected to read and

follow the section on the Student Academic Dishonesty of the AUCA Code of Student Rights, Responsibilities and Conduct.

IV. You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment file, a diskette, or a hard copy.

8. GRADING CRITERIA

A 100-93%	B- 82-80%	D+ 69-67%
A- 92-90%	C+ 79-77%	D 66-61%
B+ 89-87%	C 76-73%	D- 62-60%
B 86-83%	C- 72-70%	Failing Grade: below 60%

9. Explanation of Grades Obtained

A	Student demonstrates exceptional understanding and able to critique existing literature and shows good abilities to derive policy implications; Performs well in every aspect of class participation and submits final paper of Journal quality.
B	Ability to think conceptually and to perform in class participations, and in final paper. Student is able to form plausible arguments and provides reasonable conclusions.
C	Marginal ability to analyze material presented in lectures and readings. While the student has attended class and involved in discussions, performance is merely class average.
D	Limited ability to analyze material presented in lectures and readings. While the student has attended class and involved in discussions, performance has been below class average.
F	Poor learning or lack of effort, the student has failed to demonstrate even a minimal capacity to analyze concepts and theories. Misses most classes and performed very poorly in, or even failed to participate in class discussions. The final paper, if submitted, has been of a poor standard or plagiarized.

10. Tentative Course Schedule:

Weeks	Topic	Reading Assignment/Homework
1	Introduction	
2-3	Linear Programming: Basic Concepts	Hillier, F.S., and Hillier, M.S. (2013). *Introduction to Management Science.* Ch.2
4-5	Linear Programming:	Hillier, F.S., and Hillier, M.S. (2013). *Introduction to*

	Formulation and Applications	*Management Science.* Ch.3
6	**Quiz 1**	
7	Simplex Method	Hillier, F.S., and Hillier, M.S. (2013). *Introduction to Management Science.* Ch.2
8-9	Transportation Models. Assignment Models	Hillier, F.S., and Hillier, M.S. (2013). *Introduction to Management Science.* Ch.3
	Fall Break	
11	**Quiz 2**	
12-13	Models The Art of Modeling with Spreadsheets	Hillier, F.S., and Hillier, M.S. (2013). *Introduction to Management Science.* Ch.4
14	Basic Game Theory	Gardner,R. (1995). *Games for business and economics*. Part 1
15	**Final Exam**	

11: Readings

Required readings:

- Hillier, F.S., and Hillier, M.S. (2013). *Introduction to Management Science* (5th ed.). New York, NY: McGraw-Hill Higher Education.
- Gardner,R. (1995). *Games for business and economics*. Wiley.