
APPLIED STATISTICS I in Spring 2021 (MA1020B)

Course Code	MA1020B	Professor(s)	Jelena Pantel
Prerequisites	None	Office Number	C-202
Class Schedule	F: 12:10-13:30 in PL-1 T: 16:55-18:15 in PL-1 W: 16:55-18:15 in Q-704	Office Hours	Weds 15:30 - 16:30
Credits	4	Email	jpantel@aup.edu
Semester	Spring 2021	Office Tel. Ext.	614

Course Description

The course Applied Statistics introduces the basic tools of descriptive and inferential statistical analysis. In this course, we will cover the data-analysis concepts and procedures used in economics, business and other social sciences. Emphasis will be given to the manipulation of real data sets to obtain useful and meaningful statistical results, to the qualitative interpretation of such results and to the effective communication in numbers, graphs and words of the insights thus developed. Theory will be combined with data collection and curation, as well as computer lab work with a statistical software package. Students will be encouraged to develop an attitude of mind that accepts uncertainty and variability as part of problem analysis and decision making.

Course Learning Outcomes

- Develop a positive approach to mathematics.
- Appreciate the use of mathematics in modeling the world.
- Reason with quantitative information – in words, numbers and graphs and charts.
- Clearly communicate quantitative information in words, in numbers and with graphs.
- Develop strategies for solving problems.
- Use descriptive statistics to describe samples, populations, and relationships between variables (independence, regression).
- Use techniques of inferential statistics appropriately (confidence intervals, hypothesis tests for proportions, means, chi-squared tests and linear regression).
- Take into account uncertainty and ethics applied to statistics.
- Have familiarity and fluency in using a statistical software package.

General Education

Course Outline

Typical class sessions consist of the introduction of a new concept or skill, worked out in a number of different examples or case studies, interspersed with similar exercises to give students the chance to practice skills on their own and in small group situations. Active participation in class activities and discussion is necessary for students to master the concepts and skills. Classes will take place in the computer lab where students learn to use the statistical software package Data Desk.

Students are expected to work between 2 and 4 hours outside the classroom for each class meeting, including 2 hours per week of computer work outside class times. *Late work will not be accepted without a valid reason.*

Textbooks

Title	Author	Publisher	ISBN	Required
Stats: Data and Models (4th Edition)	VELLEMAN ET AL.	PEARSON	9781292101637	Yes

Attendance Policy

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member might have set in the course syllabus. The French Department, for example, has its own attendance policy, and students are responsible for compliance. Academic Affairs will excuse an absence for students' participation in study trips related to their courses.

Attendance at all exams is mandatory.

IN ALL CASES OF MISSED COURSE MEETINGS, THE RESPONSIBILITY FOR

COMMUNICATION WITH THE PROFESSOR, AND FOR ARRANGING TO MAKE UP MISSED WORK, RESTS SOLELY WITH THE STUDENT.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may recommend that a student withdraw, if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and especially during the Drop/Add and Exam Periods.

Covid-19 temporary amendments:

Students studying at The American University of Paris are STILL EXPECTED TO ATTEND ALL scheduled classes. Due to the Covid-19 pandemic, students will have the option of attending classes remotely when special circumstances apply, for example when students are placed under quarantine by the French authorities or by their doctor, or when students present symptoms of Covid-19 and are directed, by their doctor or the AUP Health Office, to remain home. It is still the student's responsibility to be aware of any specific attendance policy that their professor might have set in the course syllabus. In particular, Students attending remotely from distant time zones should check with their professors about the specific attendance policy for remote learners.

Grading Policy

Item	% Grade
Weekly Concept Test	35
Homework, lab work, assignments	40
Final Exam	25

Other
