## American University of Beirut

# STAT 210: Elementary Statistics for Sciences

Syllabus (2022-2023 Fall)

**Summary:** Statistics is the science of extracting reliable information from empirical data. This is an introduction to fundamental statistical methods with applications in the biological and life sciences.

**Textbook:** Introductory Statistics (global edition) by Prem S. Mann

#### **Tentative Course Outline:**

- Introduction
- Organizing and visualizing data
- Measures of center and variation; Box plots
- Probability
- Discrete random variables; binomial and Poisson distributions
- Continuous random variables; normal distribution
- Sampling distributions
- Estimation of mean and proportion
- Testing hypotheses about mean and proportion
- Estimation and hypothesis testing about two populations
- Chi-squared tests
- Analysis of variance
- · Linear regression and correlation

#### **Sections:**

Section	Instructor	Days	Time	Location	Email	Office	Office hours
L1	Alice Ashkar	TR	15:30–16:20	Bliss 203	aa103@aub.edu.lb	Bliss Hall 113	M 11–12
E1	Alice Ashkar	M	16:00–16:50	Bliss 205	aa103@aub.edu.lb	Bliss Hall 113	T 12–14
E2	Alice Ashkar	M	15:00–15:50	Bliss 205	aa103@aub.edu.1b	Bliss Hall 113	
E5	Tatiana Beainy	M	17:00–17:50	Bliss 205	tgb04@mail.aub.edu	TBA	TBA
L2	Siamak Taati	MW	12:00-12:50	Nicely 211	st71@aub.edu.lb	Bliss Hall 312B	TBA
E3	Alice Ashkar	R	12:30-13:20	Bliss 205	aa103@aub.edu.1b	Bliss Hall 113	
E4	Israa Fakih	R	17:00–17:50	Nicely 416	ijf00@mail.aub.edu	TBA	TBA
E6	Fatima Fneish	R	17:00-17:50	Bliss 205	fhf07@mail.aub.edu	TBA	TBA

### **Course Policies:**

- You are expected to attend every lecture and recitation session, and to actively participate in the class discussions. In case of absence, it is your responsibility to ask about the covered materials and any announcement made during your absence.
- It is your responsibility to regularly consult the course Moodle site for supplementary materials and announcements.

#### **Course Assessment:**

Midterm 1 (Thursday, October 6, 6pm; Nicely 500): 25%
Midterm 2 (Friday, November 4, 6pm; Nicely 500): 25%
Final: 40%
Active participation and quizzes: 10%

It is your responsibility to pay attention to the schedule of the midterm exams and communicate any potential conflict during the first week of the semester.

**Withdrawal:** The last day for withdrawal from courses is Friday, November 18.

**Unique Learning Needs of Students with Disabilities:** AUB strives to make learning experiences as accessible as possible. If you anticipate or experience academic barriers due to a disability (including mental health, chronic or temporary medical conditions), please inform your lecturer immediately so that we can privately discuss options. In order to help establish reasonable accommodations and facilitate a smooth accommodation process, you are encouraged to contact the Accessible Education Office: <a href="mailto:accessibility@aub.edu.lb">accessibility@aub.edu.lb</a>; +961-1-350000, x3246; West Hall, 314.

**Academic Integrity:** Please refer to AUB Student Code of Conduct, in particular to section 1.1, which concerns academic misconduct including cheating, plagiarism, in-class disruption, and dishonesty. Please be aware that misconduct is vigorously prosecuted and that AUB has a zero tolerance policy. Course policy is that credible evidence of cheating will result in course failure.

**Non-Discrimination:** AUB is committed to facilitating a campus free of all forms of discrimination including sex/gender-based harassment prohibited by Title IX. The University's non-discrimination policy applies to, and protects, all students, faculty, and staff. If you think you have experienced discrimination or harassment, including sexual misconduct, we encourage you to tell someone promptly. If you speak to a faculty or staff member about an issue such as harassment, sexual violence, or discrimination, the information will be kept as private as possible, however, faculty and designated staff are required to bring it to the attention of the University's Title IX Coordinator. Faculty can refer you to fully confidential resources, and you can find information and contacts at [https://www.aub.edu.lb/president/titleix]. To report an incident, contact the University's Title IX Coordinator Trudi Hodges at 01-350000 ext. 2514, or titleix@aub.edu.lb. An anonymous report may be submitted online via EthicsPoint at [http://www.aub.ethicspoint.com].