**The University of Jordan/ Aqaba**

**Faculty of Tourism and Hospitality**

**Department of Tourism Management**

**Tourism Statistics (5301344)**

**Fall 2020/2021**

**Instructor: Malek Jamaliah (Ph.D.)** **Office: 311**

**Course time: 8-9 am** **Teaching method: online**

**Electronic platform: Microsoft team** **Email: m.jamaliah@ju.edu.jo**

**Online office hours: 9-10 am (Sun)**

## Course description

The course is designed to provide students with the basic statistical concepts and techniques and presents procedures for applying them in social sciences. Students will not only learn how to perform statistical calculations by hands, but how to execute and interpret basic SPSS (Statistical software package) program.

## Course objectives

After completing this class, students should be able to:

1. Understand the basic statistical methodologies of data analysis
2. Describe, summarize, analyze, organize, and interpret quantitative data.
3. Create and manage computer filesand use SPSS program.
4. Develop and test a hypothesis.
5. Choose appropriate statistical techniques for data analysis.
6. Understand and use the most common statistical tests.

**Required Text**

The course textbook is available on the E-learning and Microsoft team platforms.

**Additional texts**

Mendenhall, W., Beaver, R.J. & Beaver, B.M. (2007). Introduction to probability and statistics ($3^{RD}$ Ed.). Brooks/Cole, Belmont, USA.

Abu-Bader, S.H. (2006). Using Statistical Methods in Social Work Practice: a Complete SPSS Guide. Lyceum Books. Chicago, Illinois.

**Evaluation**

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| Midterm exam | 30 points |
| Final exam | 50 points |
| Homework | 20 points |

**Course policies**

There are several common courtesies which I expect from all students:

1. Please join the meeting ON TIME.

3. Please turn off all cell phones during meeting.

4. When a classmate or instructor speaking, please do not talk.

5. If the instructor is more than 10 minutes late to class, you can leave.

6. Disruption of class will not be tolerated. Students disrupting the learning environment will be asked to leave the meeting

7. Students, who miss 15% of class meetings, will not be allowed to take the final exam and her/his grade should be zero (F).

8. Homework should be hand-written and submitted to the instructor by the specified due date and time. Late ones will attract a 20% reduction in the grade for every day late.

## Course Schedule

| Week | Topic | Learning outcomes |
|---|---|---|
| 1 | **Introduction to the course**<br>➢ Syllabus<br>➢ What is statistics?<br>➢ Branches of statistics<br>➢ Sources of data<br>➢ Variables and data<br>➢ Types of variables | - Understand statistics and types of statistics<br>- Understand descriptive and inferential statistics.<br>- Be familiar with sources of data<br>- Understand difference between sample and population.<br>- Learn basic vocabulary of statistics.<br>- Learn types of variables |
| 2 | **Describing data with graphs**<br>➢ Graphs for categorical data<br>➢ Graphs for quantitative data<br>➢ Relative frequency histograms | - Make cumulative frequency distribution<br>- Use graphs to describe data sets. |
| 3 | **Introduction to SPSS Software**<br>➢ What is SPSS?<br>➢ Coding and data entry<br>➢ Setting up SPSS database<br>➢ Selected SPSS procedures; and<br>➢ Data analysis and interpretation with SPSS | - Know how to start SPSS<br>- Understand how to create variable names, labels, and value categories.<br>- Know how to enter data<br>- Know how to analyze data |
| 4-5 | **Describing data with numerical measures**<br>➢ Measures of center (mean, median, and range<br>➢ Measures of variability<br>➢ Measures of skewness and kurtosis<br>➢ Partition measurements (Quartile, Decile, Percentile)<br>➢ | - Describe the properties of central tendency, variation, and shape in numerical data<br>- Construct and interpret a boxplot<br>- Compute descriptive summary measures for a population.<br>- Understand skewness and its types |

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|---|---|---|
| 6 | **Hypothesis development**<br>➢ What is hypothesis?<br>➢ Null hypothesis<br>➢ Alternative hypothesis<br>➢ Hypothesis testing procedures | - Understand level of significance<br>- Understand confidence interval.<br>- Develop and test hypothesis |
| **Mid Exam will be held on November 13 , 2020** | | |
| 8-9 | **Describing bivariate data**<br>➢ Bivariate data<br>➢ Graphs for qualitative data<br>➢ Scatter for two quantitative variables<br>➢ Numerical measures for quantitative bivariate data<br>• Correlation<br>• Simple liner regression | - Display and graph bivariate data<br>- Use scatterplot to show relationships between numerical variables.<br>- Calculate correlation coefficient and regression line by hands and in SPSS. |
| 10-11 | **Comparing means (T.test )**<br>➢ Independent T.test<br>➢ Dependent T.test<br>➢ One-sample T.test | - Understand types of T tests<br>- Know how to write T-test hypothesis<br>- Conduct T-tests using SPSS. |
| 12-13 | **Analysis of Variance (ANOVA)**<br>➢ ANOVA analysis<br>➢ Post Hoc test | - Understand the purpose of ANOVA.<br>- Understand hypothesis testing for ANOVA<br>- Use Post-Hoc testing |

**Note:** Schedule is subject to change with notification