

1	Course title	Biostatistics
2	Course number	5501221
3	Credit hours (theory, practical)	2
	Contact hours (theory, practical)	2
4	Prerequisites/corequisites	5401131
5	Program title	B.Sc. in Biological Science
6	Program code	-
7	Awarding institution	University of Jordan / Aqaba Branch
8	School	Faculty of Marine Sciences
9	Department	Coastal Environment
10	Level of course	Third and fourth year
11	Year of study and semester (s)	2019/2020 – Autumn Term
12	Final Qualification	B.Sc. in Biological Science
13	Other department (s) involved in teaching the course	NA
14	Language of Instruction	English
15	Date of production/revision	2019

#### 16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Office Number: 339

Office Hours: 12:00 – 1:00 Sunday, Tuesday, Thursday

Phone Number: 35029

Email Address: w.hayek@ju.edu.jo

#### 17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

None

#### 18. Course Description:

البيانات والمقاييس البيولوجية، الاختبارات المعلمية وغير المعلمية للنسب، تحليل البيانات ذات الفئات، وقياس المخاطر النسبية، تقييم الاختبارات المعلمية (النوعية، الحساسية والاختبارات ذات الصلة) كفاءة اللقاحات، وظائف البقاء، اختبارات الاختلاف في منحنيات البقاء على قيد الحياة باستخدام جداول الحياة السريية، منحنى الاستجابة للجرعة وتقدير الجرعات الفعالة.

#### 19. Course aims and outcomes:

**A- Aims:****B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to**

1. Understanding the basic concepts for statistis
2. Ability to reflect the concepts on statistics in the biological field
3. Learning how to use the SPSS software
4. Ability to read and analyse the resultant biological statistics to come up with recommendations and conclusions.

## 20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved Intended Learning Outcomes	Evaluation Methods	Reference
Fundamentals of biostatistics	Week One	Dr. Wissam Hayek	Definitions of biostatistics Populations and samples Statistics and parameters	Homework Quizzes Participation Mid-term exam Final Exam	Different sources
Fundamentals of biostatistics	Week Two	Dr. Wissam Hayek	Statistical inferences Variables and their types		
SPSS Practicals	Week Three	Dr. Wissam Hayek	Applying the previous concepts on SPSS		
Data and their Representation	Week Four	Dr. Wissam Hayek	Data and their types		
Data and their Representation	Week Five	Dr. Wissam Hayek	Representation of data		
SPSS Practicals	Week Six	Dr. Wissam Hayek	Applying the previous concepts on SPSS		
Numerical variables and measures	Week Seven	Dr. Wissam Hayek	Introducing the various types for numerical variables and measures		
SPSS Practicals	Week Eight	Dr. Wissam Hayek	Applying the concepts in week 7 using sppss		
Biostatistics in reality!	Week Nine	Guest lecturer	Being introduced on how to apply statistics in the biology field, and using other statistical programs		
Biostatistics in reality!	Week Ten	Guest lecturer	Being introduced on how to apply statistics in the biology field, and using other statistical programs		

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ANOVA Testing	Week Eleven	Dr. Wissam Hayek	Understanding the basic concepts related to ANOVA testing		
Correlation	Week Twelve	Dr. Wissam Hayek	Understanding the basic concepts related to correlation		
SPSS practicals	Week Thirteen	Dr. Wissam Hayek	Applying ANOVA and correlation using SPSS		

## 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- 1- Power point presentations
- 2- Discussions and questions
- 3- Presenting real case studies

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

- 1- Home works
- 2- Quizzes
- 3- Mid-term exam
- 4- Final exam

## 23. Course Policies:

### A- Attendance policies:

- Absence from lectures shall not exceed 15%.
- Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the college shall not be allowed to take the final examination and shall receive a mark of zero for the course.
- If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

### B- Absences from exams and handing in assignments on time:

- Absences without a medical or emergency excuse acceptable to and approved by the Dean of the college shall receive a mark of zero.

### C- Health and safety procedures:

NA

### D- Honesty policy regarding cheating, plagiarism, misbehaviour:

- Attempts to cheat during an exam or plagiarism for the written reports shall lead to a mark of zero in the exam or the home works and might lead to failure in the course with other consequences according to the regulations of the university.

### E- E- Grading policy:

Mid-term Exam	30%
Semester Work	20%
Final Exam	50%
<b>Total:</b>	<b>100%</b>

91-100	4	<b>A</b>
86-90	3.75	<b>A-</b>
81-85	3.5	<b>B+</b>
76-80	3	<b>B</b>
71-75	2.75	<b>B-</b>
66-70	2.5	<b>C+</b>
61-65	2	<b>C</b>
56-60	1.75	<b>C-</b>
51-55	1.5	<b>D+</b>
46-50	1	<b>D</b>
40-45	0.75	<b>D-</b>
0-39	0	<b>F</b>

**F- Available university services that support achievement in the course:**

- Library sources and access to internet.

**24. Required equipment:** ( Facilities, Tools, Labs, Training....)

- Laptop and data show

**25. References:**

**Required book (s), assigned reading and audio-visuals:**

- Students will be supported with the material for the course at the end of each week.

**Recommended books, materials, and media:**

- Various sources distributed on a weekly basis

**26. Additional information:**

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Name of Course Coordinator: Dr. Wissam Al-Hayek Signature: Dr. Wissam Al-Hayek Date: 22<sup>nd</sup> Sep, 2019

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----