

نموذج وصف المقرر

وصف المقرر

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناتاً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولا بد من الربط بينها وبين وصف البرنامج.

1. المؤسسة التعليمية	Shatt Al-Arab university
2. القسم العلمي / المركز	Department of pathological analysis sciences\ college of science
3. اسم / رمز المقرر	Biostatistics/ PATH-124
4. أشكال الحضور المتاحة	in person-Online-Mixed
5. الفصل / السنة	2 nd Semester\ 2024-2025
6. عدد الساعات الدراسية (الكلي)	33
7. تاريخ إعداد هذا الوصف	2025/7/29

8. أهداف المقرر

1. Understand the basic concepts of biostatistics and its importance in biological and health sciences.
2. Acquire skills in data collection, classification, organization, and graphical representation.
3. Apply descriptive statistical methods such as measures of central tendency and dispersion.
4. Understand the fundamentals of inferential statistics, including estimation and hypothesis testing.
5. Analyze and interpret biological and health data using appropriate statistical tools.
6. Develop critical thinking and scientific reasoning skills for evaluating and applying statistical results.

أ- الاهداف المعرفية

1. Define the basic concepts in biostatistics such as population, sample, and data types.
2. Distinguish between descriptive and inferential statistics and their applications.
3. Describe methods for collecting and organizing data using tables and graphs.
4. Calculate central tendency and dispersion measures (mean, median, standard deviation, etc.).
5. Interpret statistical results within the context of biological or health-related studies.
6. Identify different statistical distributions and their use in hypothesis testing.

ب- الاهداف المهاراتية الخاصة بالمقرر

1. Accurately collect, classify, and organize data into appropriate statistical formats.
2. Use calculators or software (such as Excel or SPSS) to perform statistical analyses.
3. Apply statistical analysis steps to real-life data in health or biological contexts.
4. Interpret statistical results in a practical and evidence-based manner.

طرائق التعليم والتعلم

1. **Lectures:** To explain theoretical and conceptual foundations.
2. **Active learning:** Through problem-solving, questioning, and practical examples.
3. **Practical sessions:** For applying statistical software and analyzing real data.
4. **Project-based learning:** Students conduct small studies using biostatistics.
5. **Collaborative learning:** Working in groups to solve problems and analyze data.
6. **Student presentations:** Enhancing communication and explanation skills.
7. **Class discussions:** Encouraging participation and critical thinking.

طرائق التقييم

1. Written exams (quizzes, midterm and final)
2. Practical reports
3. In class task
4. Homeworks

ج- الاهداف الوجدانية والقيمية

1. Appreciate the importance of biostatistics in serving health and life sciences.
2. Demonstrate scientific integrity and accuracy in data handling and analysis.
3. Show interest in applying statistics to solve real-life health and environmental problems.
4. Develop a spirit of teamwork and effective collaboration.
5. Build confidence in using statistical tools and interpreting outcomes.
6. Promote lifelong learning and staying updated with statistical tools and methods.

د - المهارات العامة والتأهيلية المنقولة (المهارات الأخرى المتعلقة بقبالية التوظيف والتطور الشخصي) .

1. **Critical thinking and problem-solving skills:**
Ability to analyze data and make evidence-based decisions.
2. **Computer and statistical software skills:**
Proficiency in tools such as Excel or SPSS used widely in research and the job market.
3. **Teamwork and communication skills:**
Working effectively with peers and presenting data-driven insights.
4. **Self-learning and continuous development:**
Encouraging independent study and keeping pace with modern statistical techniques.

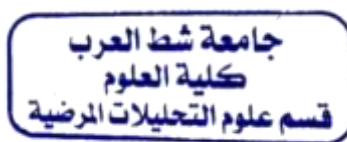
10. بنية المقرر

الاسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة/او الموضوع	طريقة التعلم
1st	2	By the end of the course, its expected from all the students to understand and apply the following outcomes: Cognitive (Knowledge): <ul style="list-style-type: none"> • Explain the fundamental concepts of biostatistics and its applications in health and life sciences. • Distinguish between types of data (quantitative and qualitative) and methods of classification. • Identify appropriate methods for data collection and analysis, using statistical terminology accurately. 	مقدمة في الاحصاء الحيائي	-In person
2nd	2		عرض البيانات	- Online
3rd	2		عرض البيانات المبوبة	-Mixed
4th	2		مناقشة + كوز	
5th	2		العرض البياني والهندسي	
6th	2		مقاييس النزعة المركزية ج1	
7th	2		مقاييس النزعة المركزية ج2	
8th	2	2. Psychomotor/Skills (Skills): <ul style="list-style-type: none"> • Organize data using tables and graphical representations (e.g., histograms, polygons, frequency curves). 	مناقشة + كوز	
9th	2		امتحان نصف الفصلي	

	مقاييس التشتت	<ul style="list-style-type: none"> Calculate measures of central tendency (mean, median, mode) and dispersion (range, standard deviation, etc.). Apply statistical concepts to analyze real-life datasets in the health field. Use statistical software (e.g., Excel, SPSS) to perform basic data analysis. 	2	10th
	المقاييس الاحصائية الاساسية		2	11th
	مناقشة التقارير مج 1		2	12th
	مناقشة التقارير مج 2	3. Affective (Attitudes/Values): <ul style="list-style-type: none"> Demonstrate accuracy and objectivity in presenting and analyzing statistical data. Appreciate the role of biostatistics in evidence-based health decision-making. Collaborate effectively in teams to interpret and analyze statistical findings. 	2	13th
	التحضير للامتحان النهائي		2	14th
	الامتحان النهائي		2	15th

11. البنية التحتية	
1- الكتب المقررة المطلوبة	لا يوجد
2- المراجع الرئيسية (المصادر)	- مبادئ علم الاحصاء التطبيقي لغير الاختصاص، غازي عطية زراك-جامعة تكريت ٢٠١٥
أ) الكتب والمراجع التي يوصى بها (المجلات العلمية، التقارير،)	- مبادئ علم الاحصاء التطبيقي لغير الاختصاص، غازي عطية زراك-جامعة تكريت ٢٠١٥. - الاحصاء الوصفي والتطبيقي والحيوي، محمد حسين محمد رشيد ٢٠٠٨
ب) المراجع الالكترونية، مواقع الانترنت،	-biostatistics for dummies Wahi, Monika, and John C. -coursera, Kahoot, quizlet

12. خطة تطوير المقرر الدراسي	
<ul style="list-style-type: none"> • Integrate real-world applications in the medical and health fields to enhance practical understanding. • Improve the scientific content to include modern statistical concepts (such as big data and analysis using statistical software). • Add a practical laboratory component and equip the labs with modern computers installed with licensed versions of statistical software. 	



العميد

رئيس القسم

استاذ المادة