

# Course Specification

## (2024/2025)

### 1. Basic Information

Course Title (according to the bylaw)	<b>Biostatistics</b>			
Course Code (according to the bylaw)	AHTE BS			
Department/s participating in delivery of the course	Technology of Radiology and Medical Imaging			
Number of credit hours/points of the course (according to the bylaw)	Theoretical	Practical	Other (specify)	Total
	1	-----	2	2
Course Type	<b>Elective</b>			
Academic level at which the course is taught	Level 1 (1 <sup>st</sup> semester)			
Academic Program				
Institute	Institute of High Technology Institute of Applied Health Science			
Academy	Nile delta for science and technology			
Name of Course Coordinator				
Course Specification Approval Date				
Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)				

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## 2. Course Overview (Brief summary of scientific content)

This course covers the basic principles and concepts of Biostatistics. It consists of definition, collection, analysis and presentation of data. It also includes descriptive and basic probability concepts and distribution.

## 3. Course Learning Outcomes CLOs

### Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		Course Learning Outcomes Upon completion of the course, the student will be able to:	
Code	Text	Code	Text
	1.1.1- Demonstrate an understanding of fundamental knowledge of basic and applied health sciences.	CLOs 1	Use computers and internet.
		CLOs 2	Interpret biostatistics data.
		CLOs 3	Present biochemical data.
	2.1.1- Exhibit appropriate professional behaviors and relationships in all aspects of practice.	CLOs 4	Know how to write a report.
		CLOs 5	Search on the internet.
	4.1.1- Participate in teamwork harmoniously and exhibit collaborate effectively with colleagues and other health		

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Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		Course Learning Outcomes Upon completion of the course, the student will be able to:	
Code	Text	Code	Text
	care professionals		
		CLOs 6	Design a professional presentation.

## 4. Teaching and Learning Methods

Discussion  
Assignment and reports.

## Course Schedul



Number of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Expected number of the Learning Hours			
			Theoretical teaching (lectures/discussion on groups/ .....)	Training (Practical/ Clinical/ .....)	Self-learning (Tasks/ Assignment s/ Projects/ ...)	Other (to be determined)
1	<b>Introduction to Biostatistics in Dentistry</b> Introducing Biostatistics in Dentistry, Assessment and evaluation system	2	1	2		
2	<b>Sampling methods</b> Sampling, terminologies, classification and different methods	2	1	2		
3	<b>Data, type and methods of representation</b> Definition, different types of data, different ways of representation of data.	2	1	2		
4	<b>Measures of Central tendency and Dispersion</b> Central tendency measures, mean, median and mode with dispersion types	2	1	2		
5	<b>Tests of significance</b> Chi square test, z test, t test and ANOVA.	2	1	2		
6	Mid term exam					
7	<b>Rates and Proportions</b>	2	1	2		

	Prevalence and Incidence, sensitivity and specificity, odds ratio.					
8	<b>Probability</b> Terminology and laws of probability.	2	1	2		
9	<b>Correlation and Regression</b> Types and Calculations of correlation and calculation of regression.	2	1	2		
10	<b>Designing and Methodology of a Study</b> Steps , methodology and format	2	1	2		
11	<b>Demography and Vital Statistics</b> Terminology and various vital statistics	2	1	2		
12	<b>Computers in Dentistry</b> Its importance, uses and its advantages in the field of dentistry	2	1	2		
13	<b>Computers in Dentistry II</b> Its importance, uses and its advantages in the field of dentistry	2	1	2		
14	<b>Revision</b>	2	1	2		
15	<b>Revision</b>	2	1	2		
16	---					
17	Final exam					

## 5. Methods of students' assessment

No.	Assessment Methods *	Assessment Timing (Week Number)	Marks/ Scores	Percentage of total course Marks
1	Mid term exam	6 <sup>th</sup>	40	40%
2	Exam 2 ..... (Semester work)	-----	-----	-----
3	Final Written Exam	17 <sup>h</sup>	50	50%
	Final Practical/Clinical/... Exam	--	--	--
	Final Oral Exam	-----	-----	-----
	Presentation	-	--	--
	Field training	-----	-----	-----
	Other (Mention)	Attendance	10	10%

**\* The methods mentioned are examples, the organization may add and/or delete**

## 6. Learning Resources and Supportive Facilities \*

<b>Learning resources (books, scientific references, etc.) *</b>	<b>The main (essential) reference for the course</b> (must be written in full according to the scientific documentation method)	Methods in Biostatistics, 7 <sup>th</sup> edition By: B K Mahajan
	<b>Other References</b>	
	<b>Electronic Sources</b> (Links must be added)	<a href="http://www.sdl.edu.sa">http://www.sdl.edu.sa</a>
	<b>Learning Platforms</b> (Links must be added)	
	<b>Other</b> (to be mentioned)	<a href="https://www.ekb.eg/ar">https://www.ekb.eg/ar</a>
<b>Supportive facilities &amp; equipment for teaching and learning *</b>	<b>Devices/Instruments</b>	Projector, Data Show
	<b>Supplies</b>	, Whiteboard Markers
	<b>Electronic Programs</b>	ابن الهيثم Model
	<b>Skill Labs/ Simulators</b>	Presentation
	<b>Virtual Labs</b>	-----
	<b>Other (to be mentioned)</b>	-----

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**\* The list mentioned is an example, the institution may add and/or delete depending on the nature of the course**

**Name and Signature  
Course Coordinator**

**Name and Signature  
Program Coordinator**