

المملكة العربية السعودية وزارة التعليم العالي جامعة المجمعة كلية العلوم بالزلفي قسم الرياضيات

COURSE CLASSIFICATION FORM

Course Number/Name		STA	T 203 Probability I	
Prepared by		Dr.	Ahmed Elmoasry	
Program Learning Outcomes	Level (0,1,2 3,4,5)	ls* 2,)	Relevant Activities	Assessment Methods/Metrics
a1. Apply fundamentals and concepts of mathematics.	5		Lectures, Assignments,	project
a2. Apply fundamentals and concepts General sciences and	4		Assignments on creativity dealing with	Lectures, Quizzes, Homework, Exam
a3. Realize Social and ethical	3		Design project; Lectures and assignments	project
b1. Read and construct mathematical arguments and proofs			Design project;	Project, Lectures, Quizzes, Homework, Exam
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	5		Lectures and assignments.	project
c1. Work independently and	4		Design project	project
c2. Bear responsibility for different situations	3		Design project in which students demonstrate basic	project
c3. Realize codes of ethics and their importance.	5		Design project; Lectures	Lectures, Quizzes, Homework, Exam
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing	4		Design project in which students show ability to apply principles of Mathematical and Statistical data	project
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas	3		Design project; Lectures and assignments	Project, Lectures, Quizzes, Homework, Exam
d3. Critically interpret numerical and graphical data.	5		Design project; Lectures and assignments	project
e1. Use computer and its applications as an office tool	4		Lectures and oral discussions on identification of the	project

* Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.



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Course Objectives and Outcomes

Course Number: STAT 203 Course Name: Probability I Prepared by: Dr. Ahmed Elmoasry

Table 1: Relationship of course objectives/outcomes with PLO and ASIIN Criteria

Co	urse Objectives:	Course Outcomes:	ASIIN	PLO
1.	This course is designed to	1. solve complex problems in Probability.	с	a
	follow on from, and reinforce, A level mathematics.	2. Apply knowledge, as needed, to design a satisfactory system to achieve a final successful project.	c, e	a
2.	To build a logical structure on probabilistic intuition and to	 have a systematic and coherent understanding of theoretical mathematics in the field of Probability 	c, e	A,b
	cover such peaks of the subject as the Strong Law of Large Numbers	2. Synthesize information that the team gathers to solve open-ended problems.	e	A,b
	as well as more modern topics.	3. Conceptualize alternative concepts, evaluate alternatives, select preferred alternative, and	c, e	A,b
3.	The emphasis is upon the understanding of real-life statistical problems, and develops the basic concepts and statistical methods by example.	 have acquired coherent body of knowledge of these subjects demonstrated through one or more of the following topic areas: Probability as a measure. Random variables. Convergence Theorems. Probability under partial information. Applications of Probability. students will have basic mathematical skills in : Modeling, computation students will have basic skills in exploratory data analysis. 	a, c	B,c
4.	Broaden skills in team work, critical thinking.	1. Learn successful group interaction for a project	d, g	C,d
	communication, planning and	deliverable	5	C,u
	project	3. Deliver a final oral presentation for their project.	g	C,d
5.	Enable students to consider safety, ethical, legal, and other	1. Understand environmental and legal issues	h	d
	societal constraints in execution of their	2. Understand the importance of professional and ethical	f	d
	design projects	3. Understand the impact of aesthetic and human aspects	h	d
		4. Select from standard tables and catalogues machine elements, components and materials given appropriate performance requirements	С	e

Course Objectives and Outcomes

Table 2: Methods of assessment of course syllabus

Assessment Method	Ν	umber/T	уре		Instructor Assessed	TA/Grader Assessed	Peer/Self Assessed
Homework	5 homewor	k assignn	nents		X		
Mid Terms/Final Exams	2 mid-term	; 1 final e	xam		X		
Quizzes	One biweel	cly			x		
Individual Projects	1-2 wks	3-4 wks	1/2 sem	Full sem			
Team Projects	1-2 wks	3-4 wks x	1/2 sem	Full sem x	X		х
Lab Assignments							
Computer Assignments							
Computer Tools Used							
Oral Presentations	one				X		Х
Written Reports	one				x		
Other	Design p	roject (pr	oject bind	er)	X		

Majmaah University Zulfi, College of Sciences Mathematics Department





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د. أحمد المعاصري Dr. Ahmed ElMoasry

التوقيع:

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Students Outcomes Survey Analysis STAT 203

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4E+08	5	5	5	5	5	5	5	5	5	4	5	4		5	4
3E+08	5	1	5	5	4	4	4	5	4	5	4	3		4	4
3E+08	4	5	3	5	4	5	5	5	3	5	4	3		4	3
3E+08	4	0	4	5	5	5	4	5	5	4	4	0		4	4
3E+08	5	0	3	4	4	5	5	2	4	4	3	4		4	4
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70% 91% 90% 86% 51%



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Instructor Course Evaluation Form

The purpose of this evaluation is to collect instructor feedback for improving this course and the Mathematics program. Information will also be used for program accreditation purposes.

I. Program Learning Outcomes Evaluations

Course Number/Name	STAT	203 Probability I	Semester	Fir	st 1	43	4/1	43.	5	
Instructor	Dr. Ah	med Elmoasry								
The course listed above is de Low, Low- Medium, Medium	signed fo n, Mediu	r students to achieve the follow m-High or High level.	ing outcomes	at a	No	t At	Al	l,		
Please mark (or type) High (All (0) indicating the level to outcomes in this course.	5), Mediu which yo	um-High (4), Medium (3), Low u believe, as an instructor, the	-Medium (2), students hav	Low e ach	(1) iev	or ed t	Not hes	At e		
Program Learning Out	comes	Relevant Activit	5	4	3	2	1	0		
al. Apply fundamentals and c of mathematics.	concepts	Lectures, Assignments,	Lectures, Assignments,							
a2. Apply fundamentals and c General sciences and Comput	concepts ter skills.	Assignments on creativity dealing with physical	systems							
a3. Realize Social and ethical	values.	Design project; Lectures and assignments								
b1. Read and construct mathe arguments and proofs.	ematical	Design project;								
b2. Apply critical thinking sk solve problems that can be me mathematically.	ills to odeled	Lectures and assignments.								
c1. Work independently and wit team	hin a	Design project Home works								
c2. Bear responsibility for dif situations.	ferent	Design project in which students demonstrate basic kno Mathematics in the development	wledge of nt of the							
c3. Realize codes of ethics an importance.	d their	Design project; Lectures								
d1. Communicate a depth and of mathematical knowledge, l orally and in writing.	l breadth ooth	Design project in which students show ability to apply Mathematical and Statistical da	principles of ata							
d2. Ability to Organize, conn communicate mathematical a algorithmic ideas.	ect and nd	Design project; Lectures and assignments								
d3. Critically interpret numer graphical data.										
e1. Use computer and its applications as an office to	ol	Lectures and oral discussions on identification of project goals and constraints	îthe							

II. Catalog Description , and Course Prerequisites Evaluations:

Based on your experiences in the course, please respond by circling the most appropriate number. Circle N/A for items that are not applicable, or if you have no opinion.

Catalog Description 1434-1435	Random vectors – Bivariate distributions Joint probability mass function, joint probability densty function, Independence, conditional distributions, Expectation, Covariance, Correlation Coefficient, Variance of sum or difference of two random variables and the Moment Generating Functions of Bivariate Random Variables) Random samples – Distribution of sample mean – Law of large numbers – Central limit theorem – Elementary statistical Inference - (estimation theory) –Methods and properties of point estimation - MLE.										
Course Prerequisites:	STAT 202	Circle One (5=Strongly Agree; 1=Strongly disagree)									
2a. Do you believe that the catalog description (above) is accurate for this course?		5	4	3	2	1	N/A				
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		5	4	3	2	1	N/A				
2c. If not, please list any prerequisites you believe are not appropriate for this course.						<u> </u>					

III. Textbook(s) and/or Lab Manuals (if applicable) Evaluations:

Textbook(s) and/or Lab Manuals (if applicable):	 D.C. Montgomery & G. C. Runger. Applied Statistics and Probability. 3rdedition.2003. Probability and Statistics . Schaum's Outline Series. 	Circle One (5=Strongly Agree; 1=Strongly Disagree)								
3a. In general, do you believe this to be an appropriate textbook for this course?		5	4	3	2	1	N/A			
3b. Was the organization of the textbook appropriate for this course?		5	4	3	2	1	N/A			
3c. Was the level of the textbook appropriate for this course?		5	4	3	2	1	N/A			

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):	Circle One (5=Strongly Agree; 1=Strongly Disagree)							
4a. Was the use of computer well integrated with the course?	5	4	3	2	1	N/A		
4b. Was the computer lab adequately equipped with well- maintained and updated computers?	5	4	3	2	1	N/A		
4c. Was the computer lab equipped with sufficient number of computers?		4	3	2	1	N/A		
4d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?		4	3	2	1	N/A		
4e. Was adequate technical support available when needed?	5	4	3	2	1	N/A		

Zulfi, College of Sciences

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Student Course Evaluation Form

The purpose of this evaluation is to collect instructor feedback for improving this course and the Mathematics program. Information will also be used for program accreditation purposes.

I. Program Learning Outcomes Evaluations

Course Number/Name	STAT 203 Probability I	Semester	First 1434/1435								
Instructor	Dr. Ahmed Elmoasry										
Student Name	Student ID										
The course listed above is designed for students to achieve the following outcomes at a Not At All, Low, Low- Medium, Medium, Medium-High or High level.											
Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.											
Prog	5	4	3	2	1	0					
a1. Apply fundamentals and concepts of mathematics.											
a2. Apply fundamentals and concepts General sciences and Computer skills.											
a3. Realize Social and ethical values.											
b1. Read and construct mathematical arguments and proofs.											
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.											
c1. Work independently and	within a team										
c2. Bear responsibility for	different situations.										
c3. Realize codes of ethics	and their importance.										
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.											
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.											
d3. Critically interpret numerical and graphical data.											
e1. Use computer and its applications as an office tool											

Instructor Course Evaluation Form

II. Catalog Description , and Course Prerequisites Evaluations:

Based on your experiences in the course, please respond by circling the most appropriate number. Circle N/A for items that are not applicable, or if you have no opinion.

Catalog Description 1434-1435	 Random vectors – Bivariate distributions Joint probability mass function, joint probability densty function, Independence, conditional distributions, Expectation, Covariance, Correlation Coefficient, Variance of sum or difference of two random variables and the Moment Generating Functions of Bivariate Random Variables) Random samples – Distribution of sample mean – Law of large numbers – Central limit theorem Elementary statistical Inference - (estimation theory) –Methods and properties of point estimation - MLE 									
Course Proroquisitos:	STAT 202	Circle	One (5	=Stro	ngly A	gree;				
rielequisites.		1-Stro	ngiy a	sagre	e)	.				
2a. Do you believe that	t the catalog description (above) is	5	4	3	2	1	N/A			
accurate for this course?										
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		5	4	3	2	1	N/A			
2c. If not, please list an appropriate for this cou	y prerequisites you believe are not irse.		•	•	-		·			

III. Textbook(s) and/or Lab Manuals (if applicable) Evaluations:

Textbook(s) and/or Lab Manuals (if applicable):	 D.C. Montgomery & G. C. Runger. Applied Statistics and Probability. 3rdedition.2003. Probability and Statistics . Schaum's Outline Series. 	Circle One (5=Strongly Agree; 1=Strongly Disagree)								
3a. In general, do you believe this to be an appropriate textbook for this course?		5	4	3	2	1	N/A			
3b. Was the organization of the textbook appropriate for this course?		5	4	3	2	1	N/A			
3c. Was the level of the textbook appropriate for this course?		5	4	3	2	1	N/A			

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):	Circle One (5=Strongly Agree; 1=Strongly Disagree)					y
4a. Was the use of computer well integrated with the course?	5	5	5	2	1	N/A
4b. Was the computer lab adequately equipped with well- maintained and updated computers?	5	4	3	2	1	N/A
4c. Was the computer lab equipped with sufficient number of computers?		5	5	2	1	N/A
4d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?		4	3	2	1	N/A
4e. Was adequate technical support available when needed?	5	4	3	2	1	N/A

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