Course Descriptor < Statistics- Stat201 >

Proposed Academic Year	2021-2022	Last Reviewed Academic Year	2020-2021
Course Code	Stat201	Course Title	Statistics
Credit hours	3	Level of study	Year3
College / Centre	Applied and Health Science-Basic Science	Department	Basic Science
Co-requisites	Nil	Pre-requisites	Nil

COURSE OUTLINE 1.

Students of Statistics will develop the skills needed to be successful in subsequent courses in college of applied and health science. These skills will enhance their ability to do research, by introducing the statistical methods of collecting, representing, analyzing data and testing Hypothesis. These statistics also help in a better decision making. Students will continue to use the web-based course supplement to access course material and assessments. Students will communicate with online classmates and distance learning (at least now because of covid19), the instructor will use distance T/L/A methods to deliver material and assess students skills. The distance learning we are going to apply include moodle, Microsoft teams, google research, designing videos and other tools that support distance learning. This course will enhance teamwork and leadership skills by working in groups to achieve the solutions to designate problems.

2. **AIMS**

Learning Outcomes

This course is to lay a firm foundation for students in Statistics. The course will introduce students to the Basic Concepts of Statistics, Frequency Distribution and Graphs, Data Description, Probability and Counting Rules. Discrete and continuous Probability Distributions. The normal Distribution, Confidence intervals and Sample Size, Hypothesis Testing, Correlation and Regression

LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS Teaching and Learning

Assessment

exam and Final exam

(Defi Upor	initive) n successful completion of course, students will be to:	methods (Indicative)	(Indicative)
1.	Use descriptive statistics to Analyze Frequency Distribution, graphs and measures	Online Lectures and Discussion sessions, distance presentation, pre-designed videos, google research, moodle and open educational resources	Participation, Quiz I, Midterm exam Final exam
2.		Online Lectures and Discussion	Participation, Quiz 1, Midterm

sessions, distance presentation,

pre-designed videos, google

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	Find Probability by rules of probability including Baye's theorem	research, moodle and open educational resources	
3.	Analyze Discrete and continuous Probability Distributions including normal Distribution	Online Lectures and Discussion sessions, distance presentation, pre-designed videos, google research, moodle and open educational resources	Participation, Quiz 2 , Midterm exam, and Final exam
4.	Use inferential statistics to find confidence interval for the population mean and for testing hypothesis for the population mean	Online Lectures and Discussion sessions, distance presentation, pre-designed videos, google research, moodle and open educational resources	Participation, Assignment, and Final exam
5.	analyze Correlation and Regression	Online Lectures and Discussion sessions, distance presentation, pre-designed videos, google research, moodle and open educational resources	Participation, and Final exam

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Quiz 1	10%
Quiz 2	10%
Midterm Exam	20%
Assignment	10%
Participation	10%
Final exam	40%
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve 3 credit hours for this course by achieving a minimum overall score of 50% and attending at least 80% of class lectures.

6.	COURSE CONTENT (Indicative)
Lecti	ure Topic
CH1:	The Nature of Probability and Statistics
CH2:	Frequency Distributions and Graphs
CH3:	Data Description
CH4:	Probability and Counting Rules
CH5:	Discrete probability Distributions
CH6:	The Normal Distribution
CH7: Confidence Intervals and Sample Size	
CH8:	Hypothesis Testing



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CH9: Testing the difference Between Two Means	
Ch10: Correlation and Regression	
Two-week Final Exams,	
TOTAL HOURS	45
Plus RECOMMENDED INDEPENDENT STUDY HOURS	0
TOTAL COURSE HOURS	45

7. RECOMMENDED REFERENCES

Core text/s:

Textbook: Elementary Statistics, by Allan Bluman(Author), 9th Edition, ISBN-13: 978-0078136337ISBN-10: 0078136334

Library + online resources:

Open Educational Resources:

2. Reference (OER) :Probability and Statistics:

https://www.merlot.org/merlot/viewMaterial.htm?id=435101

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Google research

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