

Course Description Form Mathematics and Statistics

1. Course Name:	
Mathematics and Statistics	
2. Course Code:	
COA-1202	
3. Semester / Year:	
First Semester/ 2024-2025	
4. Description Preparation Date:	
15/01/2025	
5. Available Attendance Forms:	
Full time (theoretical lecture and practical lecture) weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
5 hours (2 hours theoretical and 3 hours practical per week) for 14 weeks, number of units 3.5 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Prof. Ahmed Sulaiman Abdullah, Asraa Yaarub Youssef Email: ahmed_alogaidi_eng@uodiyala.edu.iq	
8. Course Objective	
Course Objectives	<ol style="list-style-type: none"> 1. Enable students to think critically and find new solutions to problems using mathematics. 2. Develop the ability to apply mathematical concepts to realworld challenges in agriculture, such as improving productivity and reducing negative environmental impacts. 3. Engage in scientific research in agriculture and the environment, where agricultural research relies on the analysis and use of mathematical data and information
9. Teaching and Learning Strategies	
Strategy	In-person lectures for 15 weeks, including two monthly exams and daily exams.
10. Course Structure	
The theoretical part	

Week	Hours	Required Learning Outcome	Unit or Subject Name	Learning Method	Evaluation Method
1	2	Function and its graphs	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
2	2	The Range and Domain of Functions	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	2	Limits of Functions	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
4	2	Continuity	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
5	2	Derivation of Function	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
6	2	Indefinite Integration	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
7	2	Derivative and integral of trigonometric functions and their properties	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
8	2	Derivative and integral of logarithmic	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final

		functions and their properties			exams and daily reports
9	2	Statistical symbols	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
10	2	Display and summarize data	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
11	2	Frequency distribution tables	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
12	2	Graphical presentation	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
13	2	Normal distribution	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
14	2	Measures of central tendency	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
15	2	Measures of Dispersion or Variation	Mathematics and Statistics	Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

11. Course Evaluation

Exams

Daily exams and discussion questions within the lecture
The degree of participation in questions related to the academic subject

12. Learning and Teaching Resources

Required Textbook (curricular books, if any)	<ul style="list-style-type: none">- Al-Rawi, Khashi Mahmoud, 1985. Introduction to Statistics, University of Baghdad, College of Agriculture- George B. Thomas, 2003. Calculus and Analytic Geometry.
Mean references (sources)	Al-Rawi, Khashi Mahmoud, 1985. Introduction to Statistics, University of Baghdad, College of Agriculture
Recommended books and references (scientific journals, reports...)	Iraqi academic scientific journals
Electronic references, Websites	