Date:	Examination No.:	Version:2023-2024	Start:3/09/2023
Module Name - Code	Math-III- 0109		
Module Language:	English		
Responsible:	Arazoo Mustafa Aziz (Lecture)		
Lecture (s):	None		
College:	College of Engineering – Salahaddin University-Erbil		
Duration:	15 week – (Fall- semester)		
Course outcomes:	At the end of the semester, students would be able to Understand the function one or more than one variables. Find area by using double integral instate one integral or line integral and find volume by triple integral instate single integral. Complex variable and function of a complex variables.		
Course Content:	Representation of Function more than one variables: The six types of Quadric surfaces, the quadric surfaces is the graph of three variables. The derivatives of two or three variables are called partial derivatives, also chain rules for two and three variables and high order of partial derivatives. Multiple integral: Double integral for rectangular and polar coordinates. Triple integral for rectangular, cylindrical and spherical coordinates. Function of complex variables.		
Literature:	-C.P. GANDHI, "Solutions to engineering mathematics", VOL III. -Technical Publications Pune," Engineering Mathematics-II" ,2ND edition. -Stanley I. Grossman, "Calculus", part1, 1977. -Stanley I. Grossman, "Calculus", part2, 1977.		
Type of Teaching:	-4 hrs. in lectures - Face to Face - Flipped Classroom - Kinesthetic Learning (for hands on experience)		
Pre-requisites:	0108		
Preparation Modules:	Atomic Structure of Elements		
Frequency:	Fall-Semester		
Requirements for credit points:	For the award of credit points, it is necessary to pass the module exam. It contains: Two examination during the academic semester, Quizzes and Final examination. **Student's attendance is required in all classes**.		
Credit point:	5		

Grade Distribution:	The following grade system is used for the evaluation of the module exam: The module exam is based on the summation of two categories of evaluations: **First: (40%)** of the mark is based on the academic semester effort which includes -One examination during the academic semester = 20%. - T h r e e **Quizzes=15%** **- Assignments=5**%. **Second: (60%)** of the mark is based on final examination that is comprehensive for the whole of the study materialsreviewed during the academic semester.
Work load:	The workload is 150hrs. It is the result of 60 hrs. attendance and 90 hrs. self-studies (Assignments, preparation for exam and applications).