

Date:	Examination No.:	Version:2022-2023	Start: 1/9/2022
<b>Module Name - Code</b>	Mathematics III- 0109		
<b>Module Language:</b>	English		
<b>Responsible:</b>	Ms. Khatoon Yaseen		
<b>Lecture (s):</b>	Ms. Khatoon Yaseen		
<b>College:</b>	College of Engineering – Salahaddin University		
<b>Duration:</b>	15 week – 3 <sup>rd</sup> semester		
<b>Course outcomes:</b>	At the end of the semester, students would be able to understand and apply the concepts of vectors and demonstrate problem solving skills. Solve polar equations and graph equations of polar coordinates and calculate the area enclosed by polar curves. Solve differential equations of first order using various analytical methods. Understand the basic concepts of functions involving more than one real variable and the ability to compute partial derivatives of functions of several variables.		
<b>Course Content:</b>	Vectors (vector representation, operation & product), polar coordinates system, differential equations, functions of more than one variable.		
<b>Literature:</b>	<ul style="list-style-type: none"> <li>Calculus, International Edition, By Thomas', 2005.</li> <li>Thomas' Calculus 12th edition, Thomas, Weir and Hass, Pearson.</li> </ul>		
<b>Type of Teaching:</b>	3 hrs. in lectures. 1 hr. in tutorial.		
<b>Pre-requisites:</b>	It is necessary to pass Mathematics II Module (0108).		
<b>Frequency:</b>	Yearly in fall semester		
<b>Requirements for credit points:</b>	For the award of credit points it is necessary to pass the module exam. The module exam contains: - Homework and quizzes, mid-term exam and final exam. - <b>Student should pass 50% of continuous exams to attend the final exam.</b> - <b>Student's attendance is required in all classes. Students with more than 15% absence can't attend the final exam.</b>		
<b>Credit point:</b>	5		
<b>Grade Distribution:</b>	The Grade is generated from the examination result(s) with the following weights (w): 60% final exam Homework, quizzes and other activities 20% Mid-Term exam: 20%		
<b>Work load:</b>	The workload is 135hrs. It is the result of 60hrs attendance and 75hrs self-studies.		