Date:	Examination No.:	Version:01/09/2022	Start: 11/09/2022
Module Name - Code	Mathematics II- 1109		
Module Language:	English		
Responsible:	Barzan OMAR		
Lecture (s):	Mr. Barzan OMAR/ MSc		
College:	Civil Department-College of Engineering – Salahaddin University		
Duration:	15 week – Fall Semester		
Course outcomes:	At the end of the semester, students would be able to 1. Interpret a function from an algebraic, numerical, graphical and verbal perspective and extract information relevant to the phenomenon modeled by the function. 2. Ability to evaluate the integrals of complex functions. 3. Ability to find the integral value of complex function by approximate method. 4. Ability to evaluate the integral of function with infinite domain and fine the values of integrals.		
Course Content:	Transcendental Functions: Logarithmic, exponential, trigonometric, & hyperbolic functions; Techniques of Integration: Integration by Part, Integration of Rational Function by Partial Fraction, Trigonometric Substitution, Numerical Integration, and Improper Integrals.		
Literature:	1. George B. Thomas, Jr, Maurice D. Weir, Joel Hass, Christopher Heil <<THOMAS' CALCULUS 13/E>> Pub, Pearson, 2010. 2. George B. Thomas, Jr, Maurice D. Weir, Joel Hass, Frank R. Gird <<THOMAS' CALCULUS 11/E>> Pub, Pearson, 2005. 3. Salas Hile <<CALCULUS ONE VARIABLE 9th edition>> pub, John Wiley and sons, 2003. 4. Howard Anton <<CALCULUS WITH ANALYTIC GEOMETRY; 3ed edition>> pub, John Wiley, 1983. 5. James Swart <<CALCULUS 5th edition>> pub, Thomson, 2003. 6. R. Finney and G. Thomas <<CALCULUS AND ANALYTIC GEOMETRY 10th edition>> pub, Addison Wesley, 2003.		
Type of Teaching:	3 hrs. theory per week 1 hr. tutorial per week		
Pre-requisites:	1102		
Frequency:	Yearly in Fall semester		
Requirements for credit points:	For the award of credit points, it is necessary to pass the final module exam if: 1. **The minimum annual effort is 20%.** 2. **Student's attendance is required in all classes**.		
Credit point:	5		
Grade Distribution:	For the award of credit points, it is necessary to pass the module exam. The module exam contains: A mid-term exam, class room activities, quizzes, home works and final exam on June. So, the final grade will be based upon the following criteria: | Mid-term exam	20%			

		Activities and Quizzes	20%	
		Final exam	60%	
		Total	100%	
Work load:	The workload is 120h. It is the result of 60h attendance and 60h self-studies.			