



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

Course Name:
Pre-Calculus

1	Course title	Pre-Calculus
2	Course number	0301099
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	None
5	Program title	B.Sc.
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Science
9	Department	Mathematics
10	Level of course	College requirement
11	Year of study and semester (s)	1 st year, all Semesters
12	Final Qualification	B.Sc.
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	1.11.2018

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

As stated in the approved study plan.

Algebraic expressions; factorization; exponents; logarithms; Cartesian coordinates; straight lines; parabolas; equations: linear, linear and quadratic, exponential, logarithmic; inequalities; functions; sequences; Binomial theorem.

19. Course aims and outcomes:**A- Aims:**

This course aims to prepare students, with weak mathematical background, for studying calculus. Students should be able to

1. Solve algebraic equations.
2. Find equation of a straight line.
3. Solve exponential and logarithmic equations.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

A. Knowledge and Understanding Skills: Student is expected to

- A1. Identify the equation of a straight line.
A2. Identify exponential and logarithmic equations.

B. Intellectual Analytical and Cognitive Skills: Student is expected to

- B1. Use the Binomial Theorem.

C. Subject- Specific Skills: Student is expected to

- C1. Solve algebraic equations (linear, quadratic).
C2. Factor an algebraic expression.
C3. Solve exponential and logarithmic equations.

D. Creativity /Transferable Key Skills/Evaluation: Student is expected to

- D1. Sketch graphs of simple functions on the Coordinate plane.
D2. Sketch the graph of exponential and logarithmic functions

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Chapter 1: Real numbers	1-2				
Chapter 2: Algebraic Expressions	3-4				
Chapter 3: Cartesian Coordinates	5				
Chapter 4: Equation of the straight line	6				
Chapter 5: Solving linear and quadratic equations	7-9				
Chapter 6: Solving inequalities	10-11				
Chapter 7: Exponents	12				
Chapter 8: Logarithms	13				
Chapter 9: Solving exponential and logarithmic equations	14-16				

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

In order to succeed in this course, each student needs to be an active participant in learning – both in class and out of class.

- Class time will be spent on lecture as well as discussion of homework problems and some group work.
- To actively participate in class, you need to prepare by reading the textbook and doing all assigned homework before class (homework will be assigned each class period, to be discussed the following period).
- You should be prepared to discuss your homework (including presenting your solutions to the class) at each class meeting - your class participation grade will be determined by your participation in this.

- You are encouraged to work together with other students and to ask questions and seek help from the professor, both in and out of class.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

ILO/s	Learning Methods	Evaluation Methods	Related ILO/s to the program
	Lectures	Exam	

23. Course Policies:

According to university regulations, attendance is mandatory. If a student is unable to attend a class, then he/she should contact the instructor. If a student misses more than 10% of the classes without excuse, then he/she will be assigned a failing grade in class.

In cases of extreme emergency or serious illness, the student will be allowed to make up the missed exams. Times and dates for make up exams will be assigned latter.

There are severe sanction for cheating, plagiarizing and any other form of dishonesty. The university regulations on cheating will be applied to any student who cheats in exams or on homework.

24. Required equipment:

Data Shows

25. References:

A- Required book (s), assigned reading and audio-visuals:

Calculus by J. Stewart, 8th Edition.

26. Additional information:

Name of Course Coordinator : Prof. Emad Abuosba Signature: ----- Date : -----

Head of curriculum committee/Department: Signature : -----

Head of Department : Dr. Morad Ahmad Signature : -----

Head of curriculum committee/Faculty : ----- Signature : -----

Dean : Prof. Mahmoud Aljaghoub Signature : -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File