

King Saud University
Department of Mathematics
Math 104 – Syllabus
Semester II, 1435-1436 H

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Office Hours: Monday: 10:00 am – 11:30 am, Wednesday: 8:00 am – 9:00 am or by appointment

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- ✓ Also contacts or announcements between the instructor and the students are supposed to be held on Learning Management System (LMS)

Title: General Mathematics (2)

Credit hours: 3

Prerequisite: Math 150

Language of instruction: English

Textbook: Anton, H.; Calculus with analytic geometry. 2nd Edition, John Wiley, New York.

Additional Reference: - Lecture Notes on general mathematics (2) by Tariq Al-Fadhil

- أساسيات الرياضيات لطلبة الكليات العلمية , د. مسعود أبو نخل , د. مساعد عبداللطيف

Course Evaluation Policy:

Activities	Weight
Quizzes, homework and class work	10%
Exam 1	25%
Exam 2	25%
Final exam	40%

- The date, time and the place of the Exams will be announced later.

Syllabus at a Glance

Week	Topics
Week 1	Conic Sections: Parabola
Week 2	Conic Sections: Ellipse - Hyperbola
Week 3	Matrices and Determinants: Matrices
Week 4	Matrices and Determinants : Determinants
Week 5	Systems of Linear Equations: Cramer's Rule - Gauss Elimination Method – Gauss-Jordan Method
Week 6	Integration: Indefinite integral - Integration by substitution
Week 7	Integration: Integration by parts - Integration of rational functions
Week 8	Applications of integration : Area
Week 9	Applications of integration : Volume (Disk or washer method)
Week 10	Applications of integration : Volume (Cylindrical shells method)
Week 11	Partial derivatives: Functions of several variables - Partial derivatives
Week 12	Partial derivatives: Chain Rules - Implicit differentiation
Week 13	Differential equations : Definition of a differential equation - Separable differential equations
Week 14	Differential equations : First-order linear differential equations
Week 15	Revision.

*****Best Wishes for a Pleasant Semester*****