

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**College of General Studies, Prep-Year Math Program**  
**SYLLABUS**  
**MATH001 – TERM 251**

| Week  | Date              | Sec.                                      | Topic  |
|---|-------------------|---|--|
| 1   | Aug 24 - Aug. 28  | Review                                    | Review of Some Arithmetic Operations                                     |
|   |                   | P.2                                       | Real Numbers   |
| 2   | Aug. 31 - Sep. 04 | P.2                                       | Real Numbers ( <i>Continue...</i> )                                      |
|   |                   | P.3                                       | Integer Exponents and Scientific Notation                                |
| 3   | Sep. 07 - Sep. 11 | P.4                                       | Rational Exponents and Radicals  |
|   |                   | P.5                                       | Algebraic Expressions  |
| 4   | Sep. 14 - Sep. 18 | P.6                                       | Factoring  |
|   |                   | P.7                                       | Rational Expressions   |
| 5   | Sep. 21 - Sep. 25 | P.8                                       | Solving Basic Equations  |
|   |                   | SAUDI NATIONAL HOLIDAY: 23 September 2023 |  |
|   |                   | 1.1                                       | The Coordinate plane   |
| MAJOR EXAM I: SUNDAY, 28 <sup>TH</sup> SEPTEMBER 2025 [P.2 – P.8]   |                   |   |  |
| 6   | Sep. 28 - Oct. 02 | 1.2                                       | Graphs of Equations in Two Variables; Circles                            |
|   |                   | 1.3                                       | Lines  |
| 7   | Oct. 05 - Oct. 09 | 1.4                                       | Solving Quadratic Equations  |
|   |                   | 1.5                                       | Complex Numbers  |
| 8   | Oct. 12 - Oct. 16 | 1.6                                       | Solving Other Types of Equations   |
|   |                   | 1.7                                       | Solving Inequalities   |
| 9   | Oct. 19 - Oct. 23 | 1.8                                       | Solving Absolute Value Equations and Inequalities                        |
|   |                   | 2.1                                       | Functions  |
| MID-TERM VACATION: 26 <sup>TH</sup> – 30 <sup>TH</sup> October 2025 |                   |   |  |
| 10  | Nov. 02 - Nov. 06 | 2.2                                       | Graphs of Functions;<br>Getting Information from the Graph of a Function |
|   |                   | 2.3                                       |  |
|   |                   | 2.5                                       | Linear Functions   |
| MAJOR EXAM II: SUNDAY, 09 <sup>TH</sup> NOVEMBER 2025 [1.1 – 2.5]   |                   |   |  |
| 11  | Nov. 09 - Nov. 13 | 2.6                                       | Transformations of Functions   |
|   |                   | 2.7                                       | Combining Functions  |
| 12  | Nov. 16 - Nov. 20 | 3.1                                       | Quadratic Functions  |
|   |                   | 3.3                                       | Dividing Polynomials   |
| 13  | Nov. 23 - Nov. 27 | 3.4                                       | Real Zeros of Polynomials  |
|   |                   | 3.2                                       | Polynomial Functions and Their Graphs                                    |
| 14  | Nov. 30 - Dec. 04 | 3.2                                       | Polynomial Functions and Their Graphs ( <i>Continue...</i> )             |
|   |                   | 3.5                                       | Complex Zeros and the Fundamental Theorem of Algebra                     |
| 15  | Dec. 07 - Dec. 11 | 3.6                                       | Rational Functions   |
|   |                   |   | Final Exam Review  |
| 16  | Dec. 14           |   | Final Exam Review  |
| FINAL EXAM: TO BE ANNOUNCED [P.2 – 3.6]                             |                   |   |  |