

**الخطة الدراسية للمقرر مقدمة في الرياضيات (140 ريبض-2)
الفصل الدراسي الأول العام الجامعي 1439-1440هـ**

| Week | Date | | Course Description | REMARKS |
|------|--------------------------|--------------------------|--|-----------------------------------|
| | Hijrah | Gregorian | | |
| 1. | 22/12/1439 26/12/1439 | 2/9/2018 6/9/2018 | ORIENTATION | |
| 2. | 29/12/1439 3/1/1440 | 9/9/2018 13/9/2018 | 1.1 Sets and Real Numbers. 1.2 Exponents and Radicals | |
| 3. | 6/1/1440 10/1/1440 | 16/9/2018 20/9/2018 | 1.3 Rational Expressions. 1.4 Complex Numbers. | |
| 4. | *13/1/1440 17/1/1440 | *23/9/2018 27/9/2018 | 2.1 Linear Equations and Applications. | *23/9/2018 *Saudi national day |
| 5. | 20/1/1440 24/1/1440 | 30/9/2018 4/10/2018 | 2.2 Linear Inequalities. 2.3 Equations and Inequalities Involving Absolute Value. | |
| 6. | 27/1/1440 2/2/1440 | 7/10/2018 11/10/2018 | 2.4 Quadratic Equations and Applications. | 1 ST Midterm exam |
| 7. | 5/2/1440 9/2/1440 | 14/10/2018 18/10/2018 | 3.1 Functions | 1 ST Midterm exam |
| 8. | 12/2/1440 16/2/1440 | 21/10/2018 25/10/2018 | 3.2 Polynomials and Rational Functions | |
| 9. | 19/2/1440 23/2/1440 | 28/10/2018 1/11/2018 | 3.5 Combining Functions | |
| 10. | 26/2/1440 30/2/1440 | 4/11/2018 8/11/2018 | 3.6 Inverse Functions | |
| 11. | 3/3/1440 7/3/1440 | 11/11/2018 15/11/2018 | 4.1 Exponential Functions 4.2 Logarithmic Functions | 2 nd Midterm Exam |
| 12. | 10/3/1440 14/3/1440 | 18/11/2018 22/11/2018 | 4.3 Exponential and Logarithmic Equations | 2 nd Midterm Exam |
| 13. | 17/3/1440 21/3/1440 | 25/11/2018 29/11/2018 | 5.1 Angles and Radian Measure 5.2 Trigonometric Functions | |
| 14. | 24/3/1440 28/3/1440 | 2/12/2018 6/12/2018 | 5.3 Trigonometric Identities | |
| 15. | 2/4/1440 6/4/1440 | 9/12/2018 13/12/2018 | Revision | |
| 16. | 9/4/1440 13/4/1440 | 16/12/2018 20/12/2018 | Final Exam | |
| 17. | 16/4/1440 20/4/1440 | 23/12/2018 27/12/2018 | Final Exam | |

The Syllabus of Calculus (140 Math-2) in term of Exercises

| Chapter | Section | | Example | homework |
|---|----------------|---|---|---|
| Chapter One Basic concepts of algebra | 1.1 | Sets and Real Numbers. | All examples | 2,3,4,5,6,8,10,11,12,13 ,14,16,20,21,22,23,24, 27,28,34,35 |
| | 1.2 | Exponents and Radicals | All examples | 3,4,6,7 ,14,16 |
| | 1.3 | Rational Expressions. | All examples | 2,4,6,7,9,10,11,13,14 |
| Chapter Two Equations and Inequalities | 2.1 | Linear Equations and Applications | All examples | 1,2,3,4,5,6,8,12,13,16, 17, 19 |
| | 2.2 | Linear Inequalities | (2.2.1), (2.2.2), (2.2.3), | (1- 14),15,17,19,20,22,24 |
| | 2.3 | Equations and Inequalities Involving Absolute Value | (2.3.1), (2.3.2), (2.3.3), (2.3.4) | 1,2,4,7,11,12,14,15,19,20 |
| | 2.4 | Quadratic Equations and Applications | (2.4.1), (2.4.2), (2.4.3), (2.4.5) | 1,2, 10,12,13 ,15, 17 |
| Chapter Three Functions | 3.1 | Functions | (3.1.1), (3.1.3), (3.1.4), (3.1.5), (3.1.6), (3.1.7), | 1,4,7,9,10,11,15,16,18,19 , 22, 25, 26, 27,32,35,36, 38, 41, 42(a, c, e, h), 43(b, d, e, f). |
| | 3.2 | Polynomials and Rational Functions | (3.2.1), (3.2.2), (3.2.3), (3.2.4), (3.2.5), | 1,4,5,6,8,12,15,16,18,22, 23,25,28, |
| | 3.5 | Combining Functions | All examples- except (3.5.7), (3.5.8), (3.5.9), | 1,2,4,5,6,9,12,14,15,20 ,21,24,25,27,30,32,33, 35,38,40. |
| | 3.6 | Inverse Functions | (3.6.2)(1) to (3.6.7)(a) Related7(2) only | 1,2,5,6,7,9,10,12,15,16, ,23,25,28,30,31,32,34,35, 39,41,43,44,45,47,48, 51,54,55,56,57 |
| Chapter Four Exponential and Logarithmic functions | 4.1 | Exponential Functions | (4.1.1), (4.1.7), Characteristics of Graphs of Expon- ential Functions | 1,2,3,4,26,27,28,29 |
| | 4.2 | Logarithmic Functions | From example (4.2.1) to (4.2.10), | 1,4,6,7,9,10,11,12,13,14,1 5,17,18,19,21,22,24,25,27 ,29,32. |
| | 4.3 | Exponential and Logarithmic Equations | (4.3.1) , (4.3.2), (4.3.3) , (4.3.5), (4.3.6) , (4.3.7), | 1,2,6,7,9,11,13,16,17,18, 19,21,23,25,27,31,33,36, 37, 39,40,42,44,47,48. |
| Chapter Five Trigonometric Functions | 5.1 | Angles and Radian Measure | All examples | 1,3. |
| | 5.2 | Trigonometric Functions | All examples | 1,2,4,6,8,9,10,13,14,17 ,18,19. |
| | 5.3 | Trigonometric Identities | All examples | 1,3,4,5,7,8,9,11,12,14, 16, 17,19 |

Note: the student should solve all Related Problems and exercises for all chapters.