## MATH 093 – Intermediate Algebra

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## Instructor Information

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| Name | Sabahat Malik Awan | | |
| Office | E-10 | Phone | 07 221 0500 (Ext. 1168) |
| Office Hours (Tentative) | 2:00pm- 3:00pm Sunday | Email | [sabahat.awan@aurak.ac.ae](mailto:sabahat.awan@aurak.ac.ae) |

1. **Class Description**

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| --- | --- | --- | --- |
| Credit Hours | 3 | Prerequisite | Passing Score on the Math Placement Test |

**Important Dates to Remember:**

* + Last day to add/drop: September 3
  + Eid Al Adha holidays: September 22, 23 and 24
  + Last date to withdraw without grade 'F': October 29
  + Midterm grades report due: Nov 1
  + Last day of classes: December 19
  + Winter Break: December 20- January 9
  + **Final Exam: Wednesday Jan 13’ 2016, 5pm-7pm, Room no. B102**

1. **Evaluation Plan:** Dates are subject to change depending on the course progress.

|  |  |  |  |
| --- | --- | --- | --- |
| \*\*Quizzes | Midterm  Tuesday Oct 20 | \*Final | \*\*Assignments &  Classwork |
| 40 | 20 | 30 | 10 |

* + **\* Final: Wednesday Jan 13’ 2016, 5pm-7pm, Room no. B102**
  + **\*\* One quiz at the end of each chapter, homework will be assigned frequently during the term.**

## Grade Scale

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | F |
| 95-100 | 90-94 | 87-89 | 84-86 | 80-83 | 77-79 | 74-76 | 70-73 | 67-69 | 64-66 | 60-63 | 0-59 |

1. **Course description:**

MATH103 prepares students to take MATH108 (Calculus for Business) and prepare them to have command of basic algebraic skills as well as essential concept of functions. Topics cover linear and non-linear equations, basic functions such as Quadratic, Polynomial and Rational functions.

1. **Course Material:**

* Text Book: Intermediate Algebra (6th edition) by John Tobey and Jeffrey Slater.

PEARSON. Tobey/ Slater/ Blair Series.

ISBN 978-0-321-57829-5

* Additional handouts as needed

## Course Goals and Objectives/Student Learning Outcomes

Goals:

* To make students master essential techniques of algebraic operations with equations and functions.
* To prepare students for MATH108

Student Learning Outcomes

At the end of the course students are expected to demonstrate understanding of how to apply the following techniques to modeling problems that arise in the sciences.

|  |
| --- |
| * Be able to do basic algebraic skills such as factoring, solving equations and a thorough knowledge of the rules of exponents and radicals. * polynomial, rational, exponential and logarithmic functions. |
| and a thorough knowledge of the rules of exponents and radicals. |
| * Be able to do algebra with function such as finding domains and zeros, transforming and composing functions. |
| transforming and composing functions. |
| * Be able to do algebra with polynomial and rational functions such as dividing, finding real zeros and graphing. |
| dividing, finding real zeros and graphing. |

## Weekly Topics (Tentative)

|  |  |  |
| --- | --- | --- |
| **Chapters** | **Week** | **Topic** |
| 2 | 1-2 | Linear Equations and Inequalities |
| 3 | 3-4 | Equations and Inequalities in two variables and Functions |
| 4 | 5 | System of Linear Equations |
| 5 | 6-9 | Polynomials |
| 6 | 10-11 | Rational Expressions and Equations |
| 7 | 11-13 | Rational Exponents and Radicals |
| 8 | 13-15 | Quadratic Equations and Functions |
|  | **Final exam** | **Thursday Jan 14’ 2016, 8am-10am, CONF Room** |

1. **Teaching and learning methodology**

Math is best learned through practice, and there is a great emphasis in this course on problem solving. Main themes of teaching contain the following:

* 1. Lecture
  2. Group work
  3. Problem solving in class and home practice.
  4. Quizzes
     + To reward students for continual studying, assist them to pace their work.
     + To allow the teacher to monitor students’ performance, both individually and as a group, in order to detect any difficulties in a timely manner.
  5. Midterm Exam to allow students to practice preparing for the final exam.

## Academic Misconduct.

**Relevant Policies**

**The Honor Code and Honor System**

The Honor Code is an integral part of university life. Students are responsible, therefore, for understanding the code’s provisions. Cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor

Code violations. In the spirit of the code, a student’s word is a declaration of good faith acceptable as truth in all academic matters. To maintain an academic community

according to these standards, students and faculty must report all alleged violations to the Honor Committee.

AURAK expects its students to uphold high standards of academic integrity and conduct. In particular, students are required to:

* + Attend classes regularly and punctually.
  + Be actively involved in class discussions and other course related classroom activities.
  + Complete assignments on time.
  + Meet the requirements for course and program completion.
  + Abide by high standards of academic integrity, ethics, and honesty.
  + Refrain from cheating on homework and examinations, plagiarizing other people’s work by submitting it as their own, or any other forms of academic

dishonesty.

* + Adhere to the published test or examination rules and regulations.
  + Make every effort to maintain good academic standing.

Given the Internet and easy access to information and knowledge sources, the University is committed to students’ learning in an ethical manner. For all academic assignments, project work, and presentations, students need to ensure that due acknowledgement is given to the source of any information which they incorporate in their work. The following are some examples of academic misconduct:

* + Cheating/using unfair means in examinations
  + Significant paraphrasing in written academic work that is unacknowledged
  + Unacknowledged use of information or ideas unless such ideas are commonplace Citing sources which student has not read or referred to Breaching the word limit of assignments and mentioning wrong word count

1. **Concerns about grades or other course matters**. Students are responsible for their learning experiences. If you are concerned about a class matter, first discuss it with the instructor. If the matter is not resolved, the next step is to meet with the Chair of the department that the offers the course. If you still have a concern, meet with the Dean. The matter is likely to be resolved before it reaches that point, but if it is not, then the following positions are next on the organization chart: the Deputy Vice Chancellor for Academic Affairs, and, finally, the Vice Chancellor. Students who decide to “jump to the top” will be referred back to the appropriate next step.

## Attendance.

## University policy is that students are to attend all classes and to arrive on time. Verified emergencies may require an absence or delay, but habitual tardiness or absence affects your learning and disrupts the class. Your presence is important since student contributions are a significant part of classroom activity and absence deprives others of your contributions.

According to current University Regulations for attendance,

Student with 2 absences: receives 5% warning

Student with 3 absences: receives 10% warning

Student with 5 absences: receives 15% and fails the course

## Electronic devices:

* + Mobile phone: All mobile phones, pagers and/or any other communication and electronic devices should be turned off before entering the classroom. If this

principle is violated you will be asked to leave the class and it will count as an

absence.

* + Calculators: No calculators allowed except on problems where it is explicitly stated that you can us a calculator.

1. **Diversity and the Use of English.** English is the common language of the AURAK campus, the use of which includes everyone. It is the only language to be used in the classroom.