

# Syllables of General Mathematics-1<sup>st</sup> Year (2<sup>nd</sup> semester)

2020-2021

**INSTRUCTOR: Marwan T. Hassan**

## **Class Hours:**

Group A: 8:30 AM -10:00 AM on Tuesday

Group B: 12:15 PM -1:45 PM on Tuesday

Group C: 10:00 AM -11:30 AM on Tuesday

This syllabus contains the policies and expectations I have established for General Mathematics Class. Please read the entire syllabus carefully before starting in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course

## **Help and Office Hours**

- Right after lecture is always a good time to ask question.
- Office (My room is next to Department of Statistics)
- Appointment can be made by e-mail ([marwan.hasan@su.edu.krd](mailto:marwan.hasan@su.edu.krd))
- phone: 0750 4863396

## **Grading policy**

During the course there will be two exams; class participation, quizzes, homework; and a cumulative final exam. All exams will be **close book** and **closed notes**. There will be a total of 100 points to be earned during the year with the following breakdown

Class Participation, Report, Quizzes and homework	10 grades
Midterm Exam	30 grades
Final Exam	60 grades

- Late Homework and Report submission will be rejected.

## **Policy**

- We will start the class on time and will finish on time.
- Raise your hand and tell me immediately if I go over the time limit
- Mobile phones *must* be turned off or set in silent mode.
- Feel free to stop me when I talk too fast or too slow.
- Points on quizzes/ exercises/ exams are generally based on your entire solution, not your final answer.
- Cheating will not be tolerated.

## Outlines:

Week	Outline	No. of Hours
1	Derivatives The derivative by definitions Techniques of differentiation	2
2	The Chain Rule. Higher-Order Derivatives The Implicit Differentiation	2
3-4	Derivatives of algebraic Trigonometric and exponential functions and their inverses.	2
5	Hyperbolic functions and their derivative. The derivatives of functions like $u^v$ Partial derivatives	2
6	L'Hopital Rule Maxima and Minima	2
7	Integration Ant derivatives and Indefinite Integration	2
8	Integrals of trigonometric functions	2
9	Integrals of inverse trigonometric functions Integrals of hyperbolic functions	2
10	Method of Integration Integration by parts	2
11-12	Integral involving Partial Fractions	2
13	Integration by trigonometric substitution	2
14-15	<b>Application of integrals</b> Area between two curves Double integrals	2

### Course Reading List and References:

- ❖ Howard Anton, *Calculus with Analytic Geometry (Fifth Edition)*, 1995.
- ❖ Thomas, *Calculus (Eleventh Edition)*.
- ❖ William V. Smith., *The Calculus*, 2001 available free at
- ❖ <http://math.byu.edu/~smithw/Calculus/>
- <http://www.wolframalpha.com/>