

Honors Mathematics II

Course Title	Honors Mathematics II		
Course Code	MAT151	Course Type	Free Elective
Credit	4	Contact Hours	60
Prerequisites	MAT150	Co-Requisites	None
Duration	15 weeks	Class Type	Lecture

SolBridge GACCS Objectives	%	Learning Objectives
1. Global Perspective	0	Be equipped with wide applications for quantitative analysis of business systems as well as fundamentals of modern science and technology, important components of Creative Management
2. Asian Expertise	0	
3. Creative Management Mind	0	
4. Cross Cultural Communication	0	
5. Social Responsibility	0	

Course Description

This course is designed to introduce advanced algebra, calculus and geometry to students who do not have the background in elementary mathematics. The course is intended to teach students applied mathematics and covers selected topics from differential and integral calculus which have wide applications for quantitative analysis of business systems as well as fundamentals of modern science and technology.

Learning and Teaching Structure

This is the second part of a two-semester course intended to teach the students applied mathematics. In this semester we will cover selected topics from differential equations, sequences and infinite series, vector analysis, and linear algebra which have wide applications for quantitative analysis of business systems as well as fundamentals of modern science and technology, important components of Creative Management. It is offered for the students interested in SolBridge's 2+2 Transfer Program with Georgia Institute of Technology. Studies on linear algebra will be enhanced by applications of an important software package, MATLAB. Students are required to solve some problems using MATLAB. Homework problems solution and Q&A will be presented at the recitation classes. At a minimum, you are expected to attend all lecture and recitation classes and complete all assigned homework sets. Mathematics is NOT a spectator sport, and we will move at a very fast pace. Do not attempt to rely on your "abilities," you will only succeed in this class through effort and hard work.

Assessment	%	Text and Materials
Attendance	20	Title: Calculus: One and Several Variables Edition: 10th Edition (Published in 2007) Authors: Salas, Hille, and Etgen Publisher: John Wiley & Sons (ISBN: 978-0471-69804-3)
Homework	20	
Midterm Examination	20	
Final Examination	40	

Course content by Week

1	Introduction
2-4	Differential Equations
5	Sequences and Infinite Series
6-7	Vectors
8	Midterm Examination
9-11	Matrices, Basics of MATLAB
12-13	Numerical Linear Algebra
14-15	Review and Final Examination