

## Math B6A Analytic Geometry and Calculus I

Student Learning Outcomes or AUO	Measure	PLO	ILO	GE
1. Translate application problems, such as related rates, optimization, and velocity-displacement. Solve and interpret solutions using calculus.	Embedded exam question	PLO 2	II	B.2.14
		PLO 5	I	
			III	
2. Apply appropriate algorithms to evaluate limits, derivatives, and integrals to formulate solutions.	Embedded exam question	PLO 1	III	B.2.14
		PLO 2	II	
3. Demonstrate the concepts of calculus by communicating in written, verbal and graphical form.	Embedded exam question	PLO 2	II	B.2.14
		PLO 3	I	
			III	
		PLO 4	I	
			II	
			III	

### *PLOs:*

- 1. Demonstrate an understanding of functions from multiple perspectives.*
- 2. Use numerical, graphical, symbolic, and verbal representations to solve problems and communicate with others.*
- 3. Use technology as a tool for exploring mathematical concepts.*
- 4. Demonstrate an ability to work with mathematical abstractions, analyze mathematical relationships, make plausible conjectures, and develop proofs.*
- 5. Synthesize mathematical knowledge.*

### *ILOs:*

- I. Think critically and evaluate sources and information for validity and usefulness.*
- II. Communicate effectively in both written and oral forms.*
- III. Demonstrate competency in a field of knowledge or with job-related skills.*
- IV. Engage productively in all levels of society – interpersonal, community, the state and nation, and the world.*

### *GELOs:*

*Use the GE categories from the catalog if this is a GE course. Areas A-E*  
*General Education Learning Outcomes for Mathematics*

## *B.2 Mathematics and Logic (Analytic Thinking)*

- 14. Apply formal systems of reasoning in solving problems or analyzing arguments.*