

## Biology Pathway, AS

Program Learning Outcomes (PLOs)		Measurable Student Learning Outcomes (MSLOs)- PLO Alignment								
		CHM151	CHM152	CHM235	CHM236	MAT162	MAT221	BIO181	BIO182	ENG101
1. Explain the relationship between structure and function at the molecular, cellular, and organismal levels.		✓		✓	✓			✓	✓	
2. Apply fundamental theories of physical and life sciences to explain the diversity of living things and modes of energy exchange.		✓	✓	✓	✓			✓	✓	
3. Apply the scientific method to investigate fundamental and novel questions regarding natural phenomena.		✓	✓	✓	✓	✓	✓	✓	✓	
4. Utilize technology to conduct experiments and collect, analyze and communicate data.		✓	✓	✓	✓	✓	✓	✓	✓	
5. Adhere to standard safety protocols when performing experiments and collecting data.		✓	✓	✓	✓			✓	✓	
6. Critically evaluate the internal and external validity of scientific studies to inform decisions.		✓	✓	✓	✓	✓	✓		✓	
7. Effectively communicate orally, visually and in writing in an articulate, respectful and culturally responsive manner.		✓	✓	✓	✓	✓		✓	✓	✓
8. Collaborate with diverse individuals to solve problems.								✓	✓	✓
9. Demonstrate dependability, adaptability and persistence to set and achieve goals.				✓	✓					✓
10. Integrate social and ethical responsibility in decision making and actions.						✓			✓	✓