



Operational Excellence and Assessment Support

Academic Learning Compacts

**College of Medicine
Burnett School of Biomedical Sciences
Academic Learning Compacts**

Molecular Biology and Microbiology, BS

UCF Molecular Biology and Microbiology graduates will be able to:

Discipline Specific Knowledge, Skills, Behavior and Values Outcomes

1. Identify and use the concepts, principles and theories that constitute the core sub-disciplines of molecular biology and microbiology to include:
 - Microbiology
 - Immunology
 - Molecular Biology
 - Biochemistry/metabolism
2. Demonstrate an understanding of microbial diversity/ cell structure/ function.
3. Demonstrate an understanding of microbial physiology, genetics and metabolism.
4. Describe basic structures of biomolecules and their structure-function relationships.
5. Describe mechanisms of basic processes of molecular biology and their regulation as described in the Central Dogma.
6. Demonstrate knowledge of innate and acquired immunity.

Critical Thinking Outcomes

7. Demonstrate an understanding of host/pathogen interactions.
8. Identify and use the concepts, principles and theories that constitute the core sub-disciplines of molecular biology and microbiology to include:
 - Microbiology
 - Immunology
 - Molecular Biology
 - Biochemistry/metabolism

Communication Outcomes

9. Communicate effectively in the field.

Assessment of Molecular Biology and Microbiology, BS Outcomes

These outcomes will be assessed using a variety of assessment methods, including:

- Written and oral presentations
- Tests/exams
- papers
- Research projects