

# CLINICAL LABORATORY SCIENCE 4+1 TRACK (B.S.)

## Student Learning Outcomes

1. Students will demonstrate knowledge of discipline- specific content related to macro- principles describing the 3 domains of biology and the molecular nature of life.
2. Students will use critical thinking by demonstrating the ability to recognize the components of a problem, formulate a strategy to solve the problem, apply comprehensive scientific knowledge to execute a solution and then evaluate the effectiveness of the solution.
3. Students will demonstrate communication skills reflective of professional standards consistent biology-related associations (i.e.FASEB).
4. Students will demonstrate discipline- specific core laboratory and calculation- based skills related to the characterization and classification of life forms, their components and habitats and in the molecular analysis of living species.
5. Students will demonstrate readiness for post-baccalaureate entry into a workforce or acceptance into graduate or professional programs in Biology and/or health professions.
6. Students will demonstrate global perspective in their understanding of how biological factors affect economics, health, technology and the environment.

CHEM 102L	Principles of Chemistry II:Lab	1
CHEM 110L	Gen Org/Biochem II: Lab	1
CHEM 221	Essentials of Organic Chemistry	4
<b>Mathematics</b>		
MATH 155	Elementary Functions I	3
	or MATH 156 Elementary Functions II	
MATH 221	Statistics	3
<b>Philosophy</b>		
PHIL 304	H3:Bioethics	3
Total Hours		49-55

*Student also must fulfill requirements of hospital-based program. See Division Chair for program details.*

## Recommended

- Global Learning Experience

## Required

- General Education Requirement
- Internship

Code	Title	Hours
<b>Biology</b>		
BIO 101	T1:Principles of Biology I	3
BIO 101L	Principles of Biology I: Lab	1
BIO 102	Principles of Biology II	3
BIO 102L	Principles of Biology II: Lab	1
BIO 200	Medical Terminology	1
BIO 206	Microbiology	3
BIO 206L	Microbiology: Lab	1
BIO 211	Anatomy and Physiology	3
BIO 211L	Anatomy & Physiology Lab	1
BIO 304	Immunology	3-4
BIO/CHEM 307	Essential Biochemistry	3-4
BIO 402	DV:Genetics	3-4
<b>BIO/CHEM Electives</b>		1-4
BIO/CHEM elective(s) 300-level or higher; 2 credits minimum of BIO/CHEM 411/412; BIO/CHEM 390 counts		
<b>Chemistry</b>		
CHEM 101	T1: Principles of Chemistry I	3
CHEM 101L	Principles of Chemistry I: Lab	1
CHEM 102	Principles of Chemistry II	3