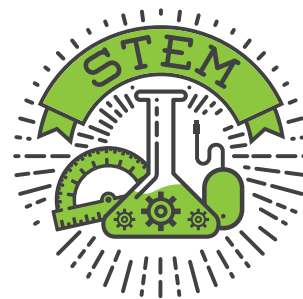


STEM PATHWAY BRIEF

LSU BIOMEDICAL SCIENCES



OVERVIEW

The LSU Biomedical Science Certification Pathway immerses students in the rapidly advancing world of biomedicine. Students are exposed to the myriad of careers in biomedicine, focusing on the health of both animals and humans. This pathway is designed to cultivate the skills and knowledge that will prepare students for immediate workforce entry into biomedicine-related fields or the pursuit of pre-med or other science-related degrees in college. Pathway coursework provides students with authentic opportunities to engage with their community through action research, internships, and guest speakers. Through careful and intentional exposure to scientific writing, presentations, and hands-on team projects, students build critical scientific literacy skills and mature their oral and written communication skills to prepare them for entry into a 21st century biomedical workplace in industry, healthcare, environmental applications, or academia.

COLLEGE AND CAREER CONNECTIONS

College Ready		Career Ready	
<ul style="list-style-type: none"> • Computer Science • Biochemistry • Communication Studies • Biological Engineering • Nursing • Pharmacology • Environmental Engineering • Molecular Engineering • Mass Communications • Microbiology • Genetics • Cellular and Molecular biology • Vertebrate Physiology • Comparative Anatomy and Physiology • Endocrinology • Environmental Chemistry • Analytical Chemistry • Animal Sciences 	<ul style="list-style-type: none"> • Nutritional Studies • Psychology • Kinesiology • Sports Medicine and Training • Human Anatomy • Parasitology • Developmental Biology • Histology • Dairy Sciences • Animal Husbandry • Horticulture • Psychopharmacology • Biostatistics • Bioinformatics • Reproductive Physiology • Neuroscience • Marine Biology • Animal Behavioral Science 	<ul style="list-style-type: none"> • EMT • Veterinary Assistant • Pharmacist Assistant • Research Laboratory Technician • Educational Outreach • Military Medical Personnel • Medical Supply Distribution • Pharmaceutical Sales • Physician Assistant • Physical Therapist Assistant • Dietician 	<ul style="list-style-type: none"> • Personal Trainer • Research Associate • Forensic Technician • Safety Trainer • Swiftwater Rescue Diver • Hazardous Waste Removal Technician • Data Entry Operator • Dental Assistant • Lifeguard • Animal Control

STATEWIDE CREDENTIALS INCLUDED

- **Biomedical Sciences - LSU Partnership Regional Core Credential** will be issued to students who successfully complete the full LSU endorsed pathway
- *Emergency Medical Responder (EMR) **Basic***
- *Certified Nursing Aide (CNA) **Basic***
- *Emergency Medical Technician (EMT) **Advanced***

STEM DIPLOMA SEALS

GOLD SEAL

Students who successfully complete the four required courses and four courses from the Additional Course list will earn a Gold STEM Diploma Seal.

SILVER SEAL

Students who successfully complete the four required courses will earn a Silver STEM Diploma Seal.

STEM PATHWAY

Required Courses (4)					
Course Title	Course Code	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale
Intro to Biomedical Sciences (LSU Partnership)	090811	1	✓	✓	
Intro to Computational Thinking for STEM (LSU Partnership)	061140	1	✓	✓	
Comparative Anatomy & Physiology (LSU Partnership)	312095	1	✓	✓	
Biomedical Capstone (LSU Partnership) OR Data Manipulation and Analysis (LSU Partnership)	Biomedical Capstone (LSU) 090812	1	✓	✓	
	Data Manipulation and Analysis (LSU) 080532	1	✓	✓	
Additional Courses (choose 4)					
Course Title	Course Code(s)	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale
Forensic Science (LSU Partnership)	312095	1	✓	✓	
Genetics (LSU Partnership)	312094	1	✓	✓	
Bioinformatics (LSU Partnership)	090813	1	✓	✓	
Conservation Biology (LSU Partnership)	312094	1	✓	✓	
Data Manipulation and Analysis (LSU Partnership)	080532	1	✓	✓	
Biomedical Capstone (LSU Partnership)	090812	1	✓	✓	
Microbiology: DE BIOL 2103 - General Biology 	149995	1			✓
Biology: DE - CBIO 1013 General Biology I, Biology II, OR Biology II: AP Biology 	Biology (DE) 150321	1			✓
	Biology II 150302	1			✓
	AP Biology 150307	1			✓
Chemistry I: DE - CCEM 1103 Chemistry I, Chemistry II, OR Chemistry II: AP Chemistry 	Chemistry (DE) 150414	1			✓
	Chemistry II 150402	1			✓
	AP Chemistry 150410	1			✓
Environmental Science: AP Environmental Science 	150311	1			✓
Statistical Reasoning OR AP Statistics 	Statistical Reasoning 165031	1			
	AP Statistics 160352	1			✓
Nurse Assistant	090236	1	✓		
Introduction to Health Occupations	090930	1	✓		
Medical Terminology	090151	1	✓		
Psychology OR AP Psychology 	Psychology 222001	1			
	AP Psychology 222004	1			
Anatomy and Physiology	150306	1			
First Responder/Emergency Medical Responder	090711	1	✓		
Emergency Medical Technician	090942	1	✓		
Workplace Safety	311923	1	✓		

For Jump Start Tops Tech Diploma: Required Career Readiness Courses (1)

Course Title	Course Code(s)	Carnegie Credits	CTE 6%	CDF 6%	5-Point Scale
Quest for Success	080411	1	✓	✓	
Agriscience I	010301	1	✓		
Jobs for America's Graduates I	042010	1	✓	✓	

DE: Dual Enrollment, AP: Advanced Placement

CORE COURSES:  MATH  SOCIAL STUDIES  SCIENCE