

KINESIOLOGY: BIOMECHANICS AND MOTOR CONTROL MINOR

KNES498 Special Topics in Kinesiology (KNES498V Clinical Biomechanics: Musculoskeletal Injury)

Total Credits

16-17

Program Director: Polly Sebastian-Schurer

The Kinesiology minor in Biomechanics and Motor Control provides a depth of knowledge to enhance students' chosen major, so they excel in their careers after graduation. This minor focuses on the study of human movement and the physical and physiological principles upon which it depends and the influence of growth and development upon human and motor performance. Note: The Biomechanics and Motor Control minor is not open to declared Kinesiology majors. Minor courses are offered over summer/winter and students may need to utilize these offerings to complete the minor.

Program Learning Outcomes

1. Students will interpret, synthesize, and critically analyze research underlying the kinesiological dimensions of physical activity and health that are specific to biomechanics and motor control.
2. Students will develop principled reasoning skills necessary to apply and extend kinesiology knowledge to address problems that are relevant to physical activity and the health of diverse populations in relation to biomechanics and motor control.
3. Students will integrate, interrogate, and communicate the connection between the scholarship of kinesiology and the goals of public health in relation to biomechanics and motor control.
4. Students will engage in physical activities both within their formal curriculum with the goal of asserting the importance of lifelong physical activity.
5. Students will integrate their physical activity experiences with kinesiology sub-disciplinary knowledge of biomechanics and motor control.

REQUIREMENTS

Students are required to have BSCI170 and BSCI201 or PHYS121 (or equivalents) completed.

Course	Title	Credits
KNES1XX	(Physical Activity Course)	1-2
Choose five of the following:		15
KNES226	The Cybernetic Human	
KNES265	Mathematical, Physical, & Statistical Basis of Kinesiology	
KNES300	Biomechanics of Human Motion	
KNES306	Prosthetics for Limb Amputations	
KNES350	The Psychology of Sports & Exercise	
KNES370	Motor Development	
KNES385	Motor Control and Learning	
KNES402	Biomechanics of Sport	
KNES462	Neural Basis of Human Movement	
KNES474	Quantitative Methods in Cognitive Motor Behavior - MATLAB	