



**CENTER  
FOR HEALTH  
SCIENCES**



## Graduate Certificate in Medical Sciences

Four Courses (Summer, Fall, Spring) prepare students to become qualified applicants to medical school and/or an M.S. or Ph.D. program.

**BIOM 5122 (2 Credit hours) Clinical Anatomy for Allied Healthcare (Summer).** Gross structure of the human body using a regional approach including topographic and functional anatomy, and clinical correlations as appropriate for athletic trainers and allied healthcare professionals. Descriptive basis for understanding human structure and function encountered in professional practice.

**BIOM 5616 (6 Credit hours) Graduate Medical Physiology (Fall).** The integration of structure and function of the human body with a functional analysis of the organ systems. Comprehension of physiologic principles and control mechanisms that maintain homeostasis. Discussion of all systems of the body and analysis of various interrelationships. The fundamental dynamic view of physiology upon which subsequent clinical learning is dependent. Problem solving techniques utilized to develop and examine student understanding.

**BIOM 5215 (5 Credit hours) Medical Biochemistry (Fall).** Broad survey of the chemical classes and metabolic processes that are consistent with the normal functions of biosystems. Functions and interrelationships of these processes in human metabolism to provide a foundation for understanding the chemistry of disease.

**BIOM 5316 (6 Credit hours) Medical Microbiology and Immunology (Spring).** Similarities and differences among pathogenic microorganisms. Characteristics, pathogenesis and control of medically important microorganisms and disorders of the immune system.

### Admission Requirements:

Earned Bachelor's Degree with coursework in  
English (2 semesters); Biology (2 semesters including laboratory);  
General Chemistry (2 Semesters); Organic Chemistry (2 semesters).

Apply online: <https://gradcollege.okstate.edu/apply>

Application Open: January—May (for summer admission consideration)

For more information, please e-mail: [CHSgradprograms@okstate.edu](mailto:CHSgradprograms@okstate.edu)

For employment disclosures related to the OSU Medical Sciences graduate certificate program, click here.