## HUMAN ANATOMY AND PHYSIOLOGY CERTIFICATE, GRADUATE

The graduate certificate in human anatomy and physiology is a three-quarter program in which students study the anatomy and physiology of all of the organ systems. The students complete three courses in the Department of Biology, one course per quarter, all of which are offered at EWU's Cheney campus. Lectures focus on the principles of human physiology and the weekly, three-hour laboratory periods focus on anatomy. Most of the laboratory time is dedicated to the dissection of human cadavers and isolated structures such as cow hearts; students also learn to identify histological preparations of tissues from each organ system and study models of human structures.

This certificate program is intended for those who require advanced knowledge of human physiology and hands-on experience with dissection of human cadavers. It is appropriate for those who plan to apply to professional (graduate) clinical programs, including medical, dental, optometry, physical therapy, pharmacy, physician assistant, and medical laboratory science programs. It also is appropriate for those who wish to pursue teaching opportunities in this discipline. This program is managed by the three faculty members who the teach course sequence, all of whom have participated in clinically-relevant research and graduate coursework, Drs. Jason Ashley, David Daberkow, and Joanna Joyner-Matos.

## **Admission Requirements**

Students who enroll in the graduate certificate will be required to have completed a Bachelor of Science degree in Biology or a related discipline, with a cumulative grade point average ≥3.0, with completed coursework in general chemistry.

## **Required Courses**

Total Credits		15
& 504L	and ADVANCED HUMAN ANATOMY AND PHYSIOLOGY III LAB	
BIOL 504	ADVANCED HUMAN ANATOMY AND PHYSIOLOGY III	5
& 503L	and ADVANCED HUMAN ANATOMY AND PHYSIOLOGY II LAB	
BIOL 503	ADVANCED HUMAN ANATOMY AND PHYSIOLOGY II	5
& 502L	and ADVANCED HUMAN ANATOMY AND PHYSIOLOGY I LAB	
BIOL 502	ADVANCED HUMAN ANATOMY AND PHYSIOLOGY I	5

## Students who earn a Graduate Certificate in Human Anatomy and Physiology from EWU should be able to:

- · compare the physiological functions of each organ system, from the cellular level to the organ system level;
- · compare the processes of homeostatic regulation within and among organ systems;
- demonstrate knowledge of gross anatomical structures associated with organ systems through active dissection of human cadavers;
- · demonstrate knowledge of histological structures associated with each organ system;
- · create written and oral presentations of published primary research articles about human anatomy and physiology.