APPLIED ANATOMY, MS

Degree: Master of Science (MS)
Field of Study: Applied Anatomy

Program Overview

The **Applied Anatomy** program is designed for students who seek a comprehensive education in the anatomical sciences, particularly those pursuing careers as medical health professionals or as teachers who desire an advanced degree to enhance their skills and credentials.

The four courses of the Anatomical Sciences Core Curriculum (ASCC) emphasize the traditional aspects of anatomical structure, function, and nomenclature with critical aspects of cell and developmental biology, biochemistry, and physiology of cells, tissues, and organs integrated into their content. Elective courses allow curriculum flexibility for students to emphasize their diverse individual interests. The Master of Science (MS) in Applied Anatomy serves as excellent preparation for subsequent studies in schools of medicine, dentistry, and nursing.

The knowledge of the human body and its physiological processes gained through this program also forms a solid foundation for physician assistants, physical therapists, dental technicians, and university and K-12 life sciences teachers. Case Western Reserve University medical students earning the joint MD/MS degree program benefit from advanced training in the anatomical sciences. The joint MD/MS program is undertaken and completed concurrently with the medical curriculum.

Each student in the Applied Anatomy program has a faculty advisor from the Department of Anatomy Graduate Executive Committee who coordinates the program and works with the student to develop their Program of Study. Contact the Department of Anatomy for additional program and application information.

Admission

Acceptance into the Master of Science in Applied Anatomy program (non-thesis or thesis) requires a baccalaureate degree from an accredited institution and is based on undergraduate and/or graduate GPAs, letters of recommendation, a personal statement, and results of admission examinations (GRE, MCAT, DAT), if provided (optional). An Educational Credential Evaluation and Authentication Report is required for foreign transcripts, and foreign applicants must provide documentation of English language skills (TOEFL).

Acceptance into the joint MD/MS program requires: (1) that the medical student be in good academic standing in the CWRU medical curriculum at the time of matriculation into the program; and (2) approval from their respective Associate ('Society') Dean of Student Affairs.

No direct tuition or stipend support is currently provided with acceptance into the MS in Applied Anatomy program (non-thesis or thesis). No additional tuition is required for enrolled medical students who pursue the joint MD/MS degree.

Graduate Policies

For graduate policies and procedures, please review the **School of Graduate Studies** section of the General Bulletin.

Program Requirements

The MS in Applied Anatomy degree requires a minimum of 30 credit hours. Required courses include 17 credit hours of the Anatomical Sciences Core Curriculum; the remaining credits are elective courses selected to fulfill individual student interests and goals. Dual degree MD/MS students are required to take at least one surgical anatomy course (ANAT 515 or ANAT 516), typically during their final year. A research thesis is required only for students pursuing the Plan A MS in Applied Anatomy degree; students pursuing the Plan B MS in Applied Anatomy degree can gain research experience by enrolling in ANAT 499 with individual faculty members.

Code	Title	Credit Hours
Required Courses:		
ANAT 411	Gross Anatomy	6
ANAT 412	Histology and Ultrastructure	4
ANAT 414	Neurological Anatomy	4
ANAT 491	Embryology	3
Electives		13
Total Credit Hours		**30**

A comprehensive written (Plan B) or oral (Plan A) exam covering the basic scientific principles presented in the core curriculum must be passed after successful completion of the formal coursework comprising the Anatomical Sciences Core Curriculum. All degree requirements must be completed within five years. Most students complete the degree requirements in two years; they can be completed in one year, but this is not generally recommended.

Sample Plan of Study

The sequence of classes below shows the order in which the courses are typically taken to complete the Master of Science in Applied Anatomy degree. The four required courses comprising the Anatomical Sciences Core Curriculum (17 credit hours) are listed individually; elective courses (13 credit hours minimum) are not specified since they vary significantly among students. Students become eligible to take the MS Comprehensive Examination upon successful completion of the ASCC courses.

First Year		
Fall		**Credit Hours**
ANAT 412	Histology and Ultrastructure	4
ANAT 491	Embryology	3
Elective		3-4
	Credit Hours	**10-11**
Spring		
ANAT 411	Gross Anatomy	6
(Medical students apply to MD/MS program)		
	Credit Hours	**6**
Summer		
Elective(s)		3-6
	Credit Hours	**3-6**
Second Year		
Fall		
ANAT 414	Neurological Anatomy	4

Elective	4
Credit Hours	**8**
Spring	
Elective	3
Master of Science ASCC Comprehensive Examination	
Credit Hours	**3**
Total Credit Hours	**30-34**

Dual Degrees

- **Applied Anatomy, MS/Medicine, MD**