

Master of Science in Applied Anatomy (Plan A)
Department of Anatomy, Case Western Reserve University
[Effective January 1, 2020]

Description

The Plan A Master of Science in Applied Anatomy degree is a thesis graduate degree program. It provides advanced exposure to anatomical sciences for interested professionals, additional training for those wishing to resume or change careers, and additional preparation in human morphology and biology for students interested in pursuing professional studies in the health sciences. Students are required to write a Master of Science thesis. The program is overseen by the Graduate Executive Committee (GEC) of the Department of Anatomy.

School of Graduate Studies Requirements:

General: Grade point average of 2.50 after two semesters or 12 hours, 2.75 after four semesters or 21 hours, and 3.00 cumulative to graduate; program of study to be completed within five years.

Plan A Master's Degree: 30 credit hours of study, including 18-21 semester hours of coursework plus thesis work equivalent to 9-12 semester hours of registration. At least 18 credit hours of course work, including thesis, must be at the 400-level or above. Courses taken at the 300 level are only be allowed when no 400-level course is available or under unusual circumstances and must be approved in advance via a petition to Graduate Studies.

Department of Anatomy Requirements

Coursework

The Anatomical Sciences Core Curriculum (ASCC) consists of four courses totaling 17 credit hours. A student must earn a grade of "B or better" in each ASCC course. Should this grade not be achieved, the student may repeat the course once to earn a "B or better" grade. A student may not repeat an ASCC course more than once; a second unsatisfactory performance makes the student ineligible for the MS in Applied Anatomy degree. [Note that credits of a repeated course do not contribute to the 30-credit-hour minimum but are included in the total credit count and count toward GPA calculation.]

Required courses:

Anatomical Sciences Core Curriculum:

ANAT 411	Human Gross Anatomy/lab (6 cr.)	Spring semester
ANAT 412	Histology and Ultrastructure/lab (4 cr.)	Fall semester
ANAT 414	Neurological Anatomy/lab (4 cr.)	Fall semester
ANAT 491	Embryology (3 cr.)	Fall semester

Other:

ANAT 651	Thesis: Master of Science (6 cr.)	All semesters
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TOTAL required Anatomy coursework: 23 credit hours (but see below)

A student may petition the GECO to take only three ASCC courses rather than all four, but one of the three courses must be ANAT 411. Such a petition may be granted by the GECO if it can be demonstrated that this additional flexibility in requirements will enable the student to take elective coursework necessary for developing the MS thesis.

The Plan A MS requires a minimum of 6 credits of ANAT 651 (Thesis: Master of Science). This is a variable-credit course that is graded as satisfactory or non-satisfactory; a student can take 1-9 credits/semester, and there is no maximum number of credits a student can earn. Once registered for ANAT 651, a student must continue to register for ANAT 651 registration each fall and spring semester until graduation. Registering for the course during the summer is optional.

Elective coursework must be approved by the GECO.

Program of Study

The Office of Graduate Studies requires that a Program of Study be prepared by the student and faculty advisor upon matriculation. This plan must be submitted via the Student Information System (SIS) for approval by the student's academic advisor. The Program of Study may be amended at any time until graduation by submitting an amended plan following the same process.

Leave of Absence

Students are expected to pursue their studies according to a systematic plan coordinated through their academic advisor. Students must maintain continuous registration unless a Leave of Absence (LoA) is requested and granted. Failure to register will trigger separation from the program. A 24-month registration lapse requires reapplication to program.

A Leave of Absence must be requested in writing by submitting the LoA request form to the department, and subsequently to the Dean of Graduate Studies, for approval. A LoA is granted only when circumstances prevent continuation of studies. It is not to exceed two consecutive semesters, has a four-semester maximum, and does not extend implicitly the time (5 year) limitation for completion of the degree requirements. During a LoA the student must not utilize university resources, which includes not seeking aid from faculty, taking exams, or defending theses. A LoA may affect an international student's visa status.

A student must be enrolled in order to graduate. Note: The student (rather than department) must submit the Application to Graduate form.

Master of Science Comprehensive Examination

For students pursuing the Type A Master of Science in Applied Anatomy, the thesis defense (see below) will serve as the comprehensive exam for the degree. In order to prepare for the course-based component of the oral defense, a student may choose to take the ASCC comprehensive exam, but this is not required.

Thesis and Defense

Thesis-based (Plan A) MS degree students are encouraged to identify a thesis advisor and a potential thesis topic by the end of their first semester. The thesis advisor

must have a faculty appointment at CWRU but need not have an appointment in the Anatomy Department. If you are unsure about how to go about choosing an advisor or a thesis topic, discuss this with your academic advisor.

The thesis committee and thesis topic should be solidified by the middle of a student's second semester. The specific thesis topic should be based on one or more specific, testable hypotheses and use appropriate methods to test those hypotheses. Its scope should be appropriate for completion within the student's chosen timeframe for graduation. The thesis committee must consist of at least three CWRU faculty members, including the thesis advisor; at least two members of the committee must have a faculty appointment in Anatomy (primary, secondary, or adjunct), one of which must be a primary appointment. The thesis advisor, thesis topic, and thesis committee must be approved by the GEC0 at least one year prior to the student's anticipated date of graduation.

Near the beginning of the third semester, the student should schedule a meeting of their committee. The purpose of this meeting is to solidify the scope of the thesis, provide a report on progress, and create a general timeline for completion and defense. The student should provide an oral summary of the thesis at this meeting and should prepare a rough timeline for completion in advance of the meeting.

The thesis must be an original work written only by the student; joint theses are not permitted. The thesis must conform to regulations concerning format, quality, and time of submission as established by the Dean of Graduate Studies. Detailed instructions can be found on this page of the School of Graduate Studies website.

A public thesis seminar, followed by a closed thesis defense, are required for graduation. The date for the seminar and defense should be scheduled with the committee by the end of the third week of the semester in which the defense will take place; this date must be reported to both the Department Administrator and the GEC0. The student must meet with their committee at least four weeks prior to the defense in order to establish the specific topics that will be covered during the course-based portion of the thesis defense. The thesis must be provided to committee members at least two weeks prior to the defense.

The thesis defense will include two parts: one focused on the student's coursework and the other based on the student's thesis. Following the defense, the committee will make one of the following recommendations: (1) Pass: if all three examiners agree that the student has passed; (2) Fail, with recommendation for reexamination in one or both parts of the exam: if at least one of the examiners votes to fail candidate on one or both parts of the exam; (3) Fail: all three examiners vote to fail the student and do not recommend re-examination OR one or more examiners vote to fail a candidate on one or both parts of a reexamination. In the case of a failed thesis defense, the candidate may appeal to the GEC0 for review. The GEC0 may: (1) schedule another examination or reexamination; or (2) sustain the committee's decision.

Students become eligible to graduate once they have successfully completed all coursework and thesis requirements (including defense). The student must apply to graduate in SIS within the first four weeks of the semester in which they plan to graduate. For this and other important deadlines, refer to this page of the School of Graduate Studies website.

The School of Graduate Studies requires that a student be registered for at least one credit hour of ANAT 651 during the semester in which they defend and/or graduate. If a student cannot meet the deadlines to complete all the requirements to graduate in one term but can finish before the next term begins, it is possible to apply for a waiver of registration for the next term. A student must be registered for at least one credit hour in the semester preceding the one in which the waiver will be used (including summer). Consult [this page](#) of the School of Graduate Studies website for details about MS graduation process and requirements.

Academic Probation and Program Separation

A student must maintain minimum academic requirements and continuous progress to remain in the Applied Anatomy program. The GECO reviews the academic performance and progress of students after the fall and spring semesters. In situations of academic probation and/or lack of progress, a student may be separated from the program.

Possible bases for separation include:

- insufficient grade point average
- earning a 'C' grade in two ASCC courses
- failure to make continuous academic progress
- failure to pass the MS Comp Exam
- failure to complete and defend the MS thesis

Transfer of Credit

The CWRU School of Graduate Studies has established guidelines for giving credit for previous experience and knowledge obtained from formal education programs. Transfer of graduate credit from another university toward the master's degree requirements is limited to six semester hours of graduate-level, biomedical courses taken in excess of degree requirements at that university. No credit for thesis research may be transferred from another university. Transfer of credit is subject to approval by the GECO and by the Office of Graduate Studies. Transfer of credit cannot be used for the required ASCC courses.

The Graduate School distinguishes between a professional degree and a university degree. Courses taken for a professional degree, such as the MD or DDS, do not qualify for credit toward a university degree, such as MS or PhD. Biomedical graduate courses taken by professional students that were beyond the requirements for their professional degree can be considered for transfer of credit. Exceptions to these guidelines exist, provided approval is obtained from the GECO and the Office of Graduate Studies.

Transferring from Plan B to Plan A

If a student currently enrolled in the Type B MS in Applied Anatomy program wishes to transfer to the Type A track, they must petition the GECO. Such a petition must include the name of a thesis advisor and a potential thesis topic; it should be submitted prior to earning 15 credits or at least one year prior to the anticipated graduation date. The GECO is the final authority on whether such a petition will be granted.

Advisor

A member of the GEC of the Department of Anatomy will be assigned as an academic advisor for each incoming student. This faculty member will assist the student in academic matters for the duration of the student's tenure as a MS in Applied Anatomy student.

Graduate Executive Committee

The Graduate Executive Committee (GEC) of the Department of Anatomy is composed of the course directors of the Anatomical Sciences Core Curriculum (ASCC). It is the responsibility of the GEC to oversee all academic matters involving graduate students in the department seeking the Master of Science degree. The committee:

- serves as the Admissions Committee for the department and, as such, makes recommendations to the CWRU School of Graduate Studies;
- acts as the Curriculum Committee for the Department;
- defines the requirements for earning the MS in Applied Anatomy degree;
- approves thesis advisors, committees and topics for the Type A degree;
- adjudicates failed thesis defenses in cases of appeal;
- should be consulted whenever a question concerning departmental requirements for graduate students arises; and
- tracks the academic progress of each student/candidate; in situations of academic probation and/or lack of progress, determines a student's continuance or separation from the Applied Anatomy program.