Program Information for Prospective Students

Master of Sciences in Biology

MSc Biology
University of Colorado Colorado Springs
College of Letters, Arts, and Sciences
Department of Biology
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Colorado 80918
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August 2017
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The Department of Biology offers a program leading to the degree of Master of Sciences (MSc) with options in Molecular & Cellular Biology, Exercise Science, and Ecology & Evolution. Graduate students pursue coursework in biology and one other science discipline (e.g., physics, chemistry, mathematics, geography), providing students with a diverse curriculum and an understanding of how various science disciplines relate to each other.

This interdisciplinary program offers students a broad science education with few restrictive requirements compared to traditional graduate science programs. It allows for development of a plan based on individual needs.

The MSc degree is designed for students intending to become professional biologists. The standard MSc degree plan requires a thesis and is appropriate for those seeking advanced graduate work. See “Requirements of the Thesis Option” Section below for more information.

**MSc Discipline Options**

In consultation with the major advisor, students may choose to focus their graduate studies in one of the following options:

- Ecology and Evolution
- Exercise Science
- Molecular and Cellular Biology
MSc Advisors

Dr. Jeremy Bono  
  evolution and ecology  
  (719) 255-3668; jbono@uccs.edu

Dr. Jeffrey Broker  
  exercise science and biomechanics  
  (719) 255-3441; jbroker@uccs.edu

Dr. Lisa Hines  
  epidemiology  
  (719) 255-3192; lhines@uccs.edu

Dr. Robert Jacobs  
  human bioenergetics  
  (719) 255-3638; rjacobs@uccs.edu

Dr. Meghan Lybecker  
  microbial pathogenesis  
  (719) 255-4101; mlybecke@uccs.edu

Dr. Emily Mooney  
  ecology  
  (719) 255-3616; emooney@uccs.edu

Dr. Olesnicky Killian  
  neurobiology  
  (719) 255-3727; eolesnic@uccs.edu

Dr. James Pearson  
  integrative physiology  
  (719) 255-3292; jpearso5@uccs.edu

Dr. Jon Pigage  
  wildlife biology and ecology  
  (719) 255-3835; jpigage@uccs.edu

Dr. Andrew Subudhi  
  exercise science and integrated physiology  
  (719) 255-3938; asubudhi@uccs.edu

Dr. Thomas Wolkow  
  yeast molecular and cellular biology  
  (719) 255-3663; twolkow@uccs.edu

The MSc Program Advisor is the primary point of contact for additional information:

Dr. Sandy Berry-Lowe  
OSCE B337; (719) 255-7552; sberrylo@uccs.edu
Duration of Program

Students must be enrolled continuously and those enrolled in the thesis option should expect to dedicate a minimum of 15 hours per week in the laboratory or field doing research. Therefore, the MSc Program in Biology usually requires 2-3 years to complete. Students who plan on continuing their education by applying to a professional school (e.g., veterinary, medical and dental school) or to graduate school (towards a Ph.D.) should be aware that many of these schools do not accept students until they have completed the MSc.

Financial Aid

Applicants to the MSc Program in Biology may be offered a MSc Biology Graduate Teaching Assistantship. This award provides a stipend for teaching 2 sections of a laboratory course both fall and spring semesters for up to two years. A second component of the award is a scholarship. Some faculty may be able to support a graduate student with grant money as well. Prospective students should discuss this with potential Major Advisors. Prospective students should also contact the Office of Financial Aid at UCCS for information about student loans (for domestic students, FASFA must be completed). Students are encouraged to apply for external fellowships as well as research options for scholarship through the Graduate School office.

Leave of Absence

Under extraordinary circumstances a student may request one leave of absence of up to one year from the program.

- This request must be in writing and have the approval of the Major Advisor and the Program Advisor.
- At the end of this term, the student must inform the MSc Program Advisor in writing if he/she wishes to return to, or withdraw from, the program.
- Upon return, the student must reapply to the program before enrolling in courses.
- The student will be admitted back to work with the same Major Advisor unless the student enters into a verbal or other agreement with another mentor and completes a new sponsor form.
Applying to the MSc program

Requirements for regular admission

- A Bachelor’s degree from an accredited College or University
- An undergraduate GPA of 3.0 or higher
- Completion of 40 hours of natural and physical science and mathematics courses.
- Two semesters of calculus or one semester of calculus and one semester of statistics.
- GRE, general test

Required application materials

- Online graduate application: [http://www.uccs.edu/graduateschool/prospective-students/admissions.html](http://www.uccs.edu/graduateschool/prospective-students/admissions.html)
- A cover letter stating intent and interest in obtaining an MSc degree in Biology.
- Resume or curriculum vitae
- One copy of official transcripts from all institutions of higher education attended.
- Three letters of recommendation
  - The letters should not be mailed to faculty or to the MSc Biology program advisor.
  - The names of those recommending the applicant are included in the online application. Once the application has been submitted, they will be contacted by UCCS for their recommendation letter.
- Original GRE results
- A sample of written work if required by the Major Advisor.
- A Sponsor Agreement form will be required upon acceptance into the program.

All application materials should be submitted using the online application, including the letters of recommendation.

Transcripts should be submitted by mailing one official copy to the following address:

Admissions Services, Main Hall 108
University of Colorado Colorado Springs
1420 Austin Bluffs Parkway
Colorado Springs, CO  80918
Provisional admission

Under certain circumstances, applicants not meeting the criteria for admission as a regular degree student may be recommended by the faculty for admission as a 'provisional admissions' student. The department may assign course work and/or examinations that must be taken to make up deficiencies. When the conditions for regular status are met, the Program Advisor will reclassify the student to regular status.

Transfer credits

From CU campuses

Up to 12 credit hours of appropriate upper-level course work with a grade of B or better that are not counted toward a degree and earned at any CU campus may be requested for transfer into the MSc program. Double counting of undergraduate and graduate courses is not allowed. These credit hours are computed into the students’ graduate GPA but the undergraduate transcripts remain unchanged (i.e., there is no physical movement of courses on the transcripts).

From Outside Institutions

Up to 9 credit hours of appropriate upper-level course work with a grade of B or better that are not counted toward a degree and completed at an institution other than the University of Colorado may be requested for transfer into the MSc program. These credit hours are not computed into the students’ graduate GPA.

The Application Process

- The MSc Program in Biology reviews applications annually.
- All application materials are due December 15.
- Applicants are encouraged to contact potential sponsors before beginning the application process.
- Qualified applicants will not be accepted into the program unless they have a sponsor. Please see below for information about the sponsor and the sponsor agreement.
- Applicants will be notified of their acceptance into the program by March 2 for the following fall semester.
The Major Advisor and Sponsor Agreement

The Sponsor is any faculty member on the Graduate Faculty who agrees to function as a Major Advisor and mentor to the student during their tenure as a graduate student. Thus, the Sponsor is the Major Advisor and the term Major Advisor will be used throughout this document. Faculty will decide if they wish to sponsor a student when applicants are being considered for the program. Although applicants do not need a Sponsor to apply to the MSc program, the ‘Sponsor Agreement’ form must be signed by both student and Sponsor before the student will be accepted into the program. The form is available online: http://www.uccs.edu/Documents/biology/SponsorForm13.pdf

Finding a sponsor/major advisor

• Current students at UCCS should meet with the appropriate faculty member about graduate school and discuss the possibility of working with that faculty member.
• Students new to UCCS should make an appointment with potential faculty advisors (see list on page 5) to discuss the possibility of working with that faculty member.
• Prospective students who are living out-of-state are encouraged to contact potential advisors by email or telephone and arrange a visit to UCCS prior to applying.
• Alternatively, prospective students may familiarize themselves with UCCS and potential advisors by enrolling in a course as an ‘unclassified student’.

Changing sponsors

During the first year in the MSc program the student may determine that he/she wishes to change his/her project, and therefore his/her Major Advisor.

• The student must meet with his/her Major Advisor to discuss the change.
• If an alternative faculty member agrees to function as the Major Advisor, a new ‘Sponsor Agreement’ form will be completed and put into the student's file.
• If there is no alternative faculty member the student may decide to withdraw from the MSc program. The student must then give written notification to the MSc Program Advisor.
Course Requirements of the Thesis Option

- A total of 30 hours of upper-level coursework is required.
  - Biol 5010, Graduate Seminar, must be taken three times. The student must enroll during his/her second semester (spring).
  - The student must enroll in Biol 6000, Introduction to Scientific Communication.
  - The student must enroll in a total of 6 hours of Masters Thesis (Biol 7000).
  - A maximum of 6 hours of Independent Study, Research Practicum, or Externships will count toward the degree.

- A minimum of 24 hours of 5000-level courses with the remaining at the 4000-level is required.
  - The student must enroll in the 5000-level of any course offered at both 4000-level and 5000-level to receive credit.
  - Courses taken pass/fail will not count toward the degree.
  - All courses must be taught by faculty appointed to the Graduate Faculty.

- At least one course must be taken from another department participating in the MSc program (e.g., chemistry, physics, geography, health sciences, mathematics).

- A 3.0 GPA or higher must be maintained.
  - Any course in which the student receives a grade of C (C+, C-, or lower in courses where + and – are used) will not be counted toward the degree.
  - The student will be allowed to retake any one course in which he/she receives a C or lower; if a B- or above is not achieved on the retake, the student will be dismissed from the program.
  - Two consecutive grades of C (C+, C, C-) or lower will be cause for dismissal from the program.

Additionally,

- Students must be able to commit ~15 hours per week performing research toward the completion of the thesis research.