



Rev. 7/21

**ACCELERATED MASTER'S PROGRAM (AMP) MEMO OF UNDERSTANDING  
ESTABLISHED BETWEEN**

Department of Biochemistry and Molecular Biology

**AND THE GRADUATE SCHOOL**

AMP in Biochemistry and Molecular Biology

September, 2021

*Sections 1-6 of this memo serve to provide the terms of understanding between departments/special academic units participating in the AMP and the Graduate School. Provide the required information in the sections below. Not all departments will complete Section 2.*

**PURPOSE OF THE ACCELERATED MASTER'S PROGRAM**

Accelerated master's programs (AMP) partner an undergraduate and a master's degree graduate program within or between departments, programs, or SAUs in the same or differing colleges, in a streamlined path that reduces the time to earn a master's degree. Undergraduate students are admitted internally by the participating programs and are guaranteed conditional admission to the partnering graduate program during their undergraduate career. Final admission to the graduate program and Graduate School is granted when students meet the minimum graduate program and Graduate School admissions criteria upon completion of the bachelor's degrees.

Undergraduate and graduate units that partner to build an AMP will create a graduate admission policy for the undergraduate students that guarantees them contingent admission to the partnering graduate program at any point during the student's undergraduate career. Final admission is conferred when the students meet the minimum AMP and Graduate School admissions criteria upon completion of their bachelor's degrees. Students must complete the Graduate Admissions Application.

## **SECTION 1: DESCRIPTION OF AMP (1-2 paragraphs)**

The Biochemistry and Molecular Biology (BMB) Department offers a combined Accelerated Master's Program in which well-prepared undergraduates can complete their B.S. and a research-based, Plan A Master's degree in as little as five years. The Plan A Master's degree requires the completion of an original research thesis. Completion of this program will provide students with intensive didactic instruction and research experience in a specific area of Biochemistry and Molecular Biology.

Both didactic coursework and progression in research that will count toward the completion of the M.S. degree can begin as early as the fall semester of the student's fourth year within the department of Biochemistry and Molecular Biology's Bachelor's degree program. Students from any one of the BMB department undergraduate degree concentrations are encouraged to seek out this opportunity. Students will need to have completed 75 credits of course work, including 15 credits in upper division courses, maintaining a minimum GPA of 3.25 before they apply. In addition, a student must be working in a lab with a Principal Investigator (PI) who is willing to mentor their Plan A Master's research thesis.

**SECTION 2: GENERAL CONDITIONS AND REQUIREMENTS**

1. List the undergraduate and graduate program codes of the participating programs below:

a. Undergraduate program code(s)

BCHM-ASBZ-BS, BCHM-DTSZ-BS, BCHM-HMSZ-BS, BCHM-PPHZ-BS

b. Graduate program code(s)

BCHM-MS

2. List the minimum admission requirements agreed upon by both the undergraduate and graduate programs participating in the AMP. Please note that the Graduate School requires a minimum undergraduate GPA of 3.000 for entrance into an AMP. Students may be internally admitted into the AMP at any point the partnering programs of the AMP so choose. Indicate when an undergraduate student may first apply for admission, for example, sophomore or junior year, etc.

Students must have completed 75 credits of undergraduate coursework including 15 credits of upper division course and the completion of BC401, maintained a minimum GPA of 3.25, and currently be working in a research lab with a principal investigator that is willing to sponsor their research. Students are eligible to apply internally within the BMB Dept. for the AMP in their junior year. Students will then apply to the GS in the last year their undergraduate studies The Request to Double Count Courses must be submitted after admission to the GS and before finishing the BS.

3. If the department(s) have identified the 500-level, regular courses that will be taken by undergraduates, please list those courses. Describe how these courses will satisfy the learning objective requirements of the undergraduate degree.

BC512, BC563, and BC565

The above courses have been designed with three primary purposes in mind. First, each course prepares students to read primary journal articles within the broad topics of physical biochemistry (BC512), molecular genetics (BC563), and cell biology (BC565). Second, to successfully read primary journal articles a student must be well versed in knowledge of the experimental techniques used within each field and how to properly analyze data produced by each experimental technique. Finally, critical thinking skills must be well-developed to properly critique whether the authors of each article have come to proper conclusions given both the data presented within the paper and the established theories and models known to the field. In taking these courses students will be well-prepared to conduct their own scientific research within the program.

4. Please confirm and describe how participating undergraduate students will be advised of the following:

- a. Admitted undergraduate students are guaranteed conditional admission to the partnering graduate program.
- b. Students may enroll in up to nine credits of 500-level regular course work of the graduate program as undergraduates, while paying the undergraduate tuition rate. These credits will be counted toward the undergraduate degree. Regular, 500-level courses with grades of B or better will be transferred and double-counted toward the graduate degree, as courses taken prior to final admission to the graduate program.
- c. There may be implications for federal student aid. Students should contact the Office of Financial Aid for details. Undergraduate students enrolled in graduate level coursework should contact the Office of Financial Aid for information about the availability of financial aid for such coursework.
- d. Students must complete the Graduate School application and pay the application fee during their final year as undergraduates. Graduate applications will not be accepted earlier than one year prior to starting the graduate program.
- e. Students must complete and submit the Request to Double Count Courses Form to the Graduate School during their final undergraduate semester and prior to completing the undergraduate degree.
- f. Final admission to the partnering graduate program and the Graduate School is granted when students meet the minimum graduate program and Graduate School admissions criteria upon completion of their bachelors' degrees.
- g. Students must earn a minimum of 21 credits after admission and must also satisfy regular and non-regular credit requirements accordingly.
- h. If applicable, students will be advised that if the nine credits taken fulfill the requirements of a graduate certificate, the graduate certificate can be awarded once the student is enrolled in the partnering graduate degree. Graduate students must apply for the graduate certificate program and pay the application fee for the certificate to be conferred.

The department will appoint an AMP advising committee comprised of both an undergraduate advisor and a graduate level advisor. Students seeking admission to the program will be required to meet with a member of the committee at which time the student will be advised of both the requirements for entrance into the program as well as all topics listed above. The committee will work closely with the financial aid office to address the unique financial concerns of each individual student. At this time the committee will be comprised of Aaron Sholders Ph.D. and Jennifer DeLuca Ph.D.

### **SECTION 3: EXCEPTIONS AND STUDENT BENEFITS**

**Departments offering AMP programs with unique requirements, incentives or other elements in addition to or instead of those stated in the Graduate and Professional Bulletin and Section 2 of this document must state the specific requirement(s) that would differ from Graduate School policies below.**

Our department has set out GPA requirements that exceed the requirements of the graduate school. Specifically we will require students to have obtained a minimum GPA of 3.25 rather than 3.00. In addition, students will need to have completed 75 credits and BC401 and have a sponsoring PI for their research program.

**State the benefits that the policy exception(s) or unique requirement(s) would provide to the students.**

Regarding the GPA requirement, students will be required to enroll in BC511, BC563, and BC565 in the 4th year of their undergraduate program. These classes are designed to train 1st year Ph.D. candidates and thus are rigorous in nature. The higher GPA standard will ensure that each student will have demonstrated the discipline and academic aptitude to succeed in such an environment. Furthermore, we require that a student will have completed BC401, ensuring that they are at least half-way through their 3rd year as an undergraduate student before being considered for the program.

Finally, given the accelerated nature of the AMP degree program it will be very important that a student will have demonstrated the ability to excel in research. This is best measured by a research mentor. As such, the BMB department will require a letter from such an individual stating that they are willing to allow the candidate for the program to carry out research within their lab to complete their Plan A Master's thesis.

**SECTION 4: POINT OF CONTACT AND PROCESSES**

Provide the contact information and description of responsibilities of each staff member who will manage the AMP.

-Dr. Aaron Sholders, PhD:

-Email: Aaron.Sholders@colostate.edu

-Dr. Sholders will advise undergraduate students seeking information regarding this AMP as well as undergraduate students accepted in the AMP program

Dr. Jennifer DeLuca, PhD:

-Email: Jennifer.DeLuca@colostate.edu

-Dr. DeLuca will advise students in the graduate phase of the AMP

-Kristen DeQuasie

-Email: Kristen.DeQuasie@colostate.edu

-Ms. DeQuasie will assist with administrative aspects of advising students in both the undergraduate and graduate phases of the AMP

**SECTION 5: TERMINATION DATE, REVIEW, REAPPROVAL PROCESSES** This MOU will stand unless there are policy changes in the Graduate and Professional Bulletin and/or the General catalog, or there are significant changes in the programs involved at the graduate and/or undergraduate level.

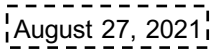
**SECTION 6: SIGNATURES**

Laurie Stargell

PRINT NAME OF GRADUATE DEPT.  
HEAD I DIRECTOR FOR THE AMP



SIGNATURE OF GRADUATE DEPT. HEAD I  
DIRECTOR FOR THE AMP

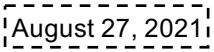
  
DATE

Laurie Stargell

PRINT NAME OF UNDERGRADUATE DEPT.  
HEAD I DIRECTOR FOR THE AMP



SIGNATURE OF UNDERGRADUATE DEPT.  
HEAD I DIRECTOR FOR THE AMP

  
DATE

Jan Nerger

PRINT NAME OF DEAN OF COLLEGE



SIGNATURE OF DEAN OF COLLEGE

September 7, 2021  
DATE

PRINT NAME OF DEAN OF COLLEGE  
(if AMP includes two colleges)

  
SIGNATURE OF DEAN OF COLLEGE  
(if AMP includes two colleges)

September 21, 2021  
DATE

MARY STROMBERGER, GRADUATE SCHOOL DEAN

DATE