

Application:

# Global Scholars Program at University of Western Australia

University of Denver, College of Natural Sciences and Mathematics  
Department of Biological Sciences



UNIVERSITY of  
DENVER

NATURAL SCIENCES & MATHEMATICS  
Biological Sciences

Programs in Biotechnology

**Deadline: October 15**

The Global Scholars program is a partnership between the Biology Departments at the University of Denver and the University of Western Australia (UWA) in Perth. Students will earn a Bachelor's Degree in Biology or Molecular Biology (BS) from DU and a Master's Degree in Biotechnology with specialization in Biochemistry & Molecular Biology or Genetics & Genomics from UWA (MS). The first 3 years are spent at DU completing common curriculum requirements, all major degree requirements and minors, excluding upper-level elective credits that will be taken at UWA. The 4th year will be spent at UWA where the student will take upper division elective classes in Biology to complete the BS and begin an independent research project that will be finished as a MS thesis during the 5th year. Students will apply separately for the MS degree (their 5th year of the program) while in Australia and will have to pay the tuition for this degree.

*To apply, students must submit this application by October 15 of their sophomore year.* Only students that are completing a BS major in Biology or Molecular Biology are eligible and they must have at least a 3.5 GPA at the time of application. Applicants must also maintain a 3.5 GPA in their degree program and major throughout their academic progress at University of Denver until time of departure to UWA.

Submit your completed application (pages 3-4 of this document) as a single PDF to Dr. Nancy Lorenzon ([Nancy.Lorenzon@du.edu](mailto:Nancy.Lorenzon@du.edu)); please name your PDF file "UWA\_Your Last Name\_GS Application".

## Program Timeline

There are 3 application processes to be admitted to the Global Scholars program:

- First, students apply to the DU Biology Department for admission to the program.
- Second, students apply to study abroad as with any study abroad opportunity.
- Third, students apply to the MS degree program at UWA during their first year in Perth.

Below is an outline of important dates for students to follow.

### Sophomore Year

**Oct 15** Application deadline to Biology (this document)  
**Nov** Interview with Dr. Lorenzon and other faculty  
**Jan** Admission granted, letter sent by Internationalization  
**April** Meet with Dr. Lorenzon and Academic Advising to ensure student will finish all requirements for all majors and minors by the end of their Junior year

### Junior Year

**Fall** Maintain a 3.5 GPA  
**Dec** Begin UWA study abroad application  
**Jan** Finalize UWA study abroad application  
Meet with Internationalization to get visas started, etc.  
**Winter** Make sure to finish all required coursework by end of Spring quarter

### Senior Year

Study in Australia to finish BS degree!  
Apply for UWA MS program

## Course Requirements to be Completed at DU Before the End of Junior Year

Students must be pursuing a BS degree majoring in either Biological Science or Molecular Biology at DU, and they must declare an interest in Biotechnology because these are the topics of focus for the MS degrees at UWA and require different course preparations. For the BS in Biological Sciences or Molecular Biology, students must minor in Chemistry and also have one additional minor. Students must also complete all general education requirements and also are required to take the 2-credit course INTZ 2501: Exploring Global Citizenship: Preparing for Study Abroad.

Additionally, the following are required:

1. Students pursuing an emphasis in **Biochemistry and Molecular Biology** must take Human Molecular Biology (BIOL 3800), Molecular Biology Lab (BIOL 3560), Biochemistry I: Proteins (CHEM 3811) and Biochemistry II: Membranes & Metabolism (CHEM 3812).
2. Students pursuing an emphasis in **Genetics and Genomics** are strongly recommended, but not required, to take Human Molecular Biology (BIOL 3800), Molecular Biology Lab (BIOL 3560).

*Note that many required classes are only offered during certain quarters. Please plan ahead to make sure you can take all required courses before the end of your third year at DU because many of these classes cannot be taken in the same quarter:*

**Fall:** Cell Structure and Function (BIOL 2120/2121, sometimes available in summer), Biochemistry I: Proteins (CHEM 3811, fall & winter, sometimes summer)

**Winter:** Evolution, Heredity and Biodiversity (BIOL 1011/1021), Genetics (BIOL 2510/2511), Biochemistry I: Proteins (CHEM 3811, fall & winter, sometimes summer), Biochemistry II: Membranes & Metabolism (CHEM 3812, winter & spring)

**Spring:** Physiological Systems (BIOL 1010/1020), Human Molecular Biology (BIOL 3800), Molecular Biology Lab (BIOL 3560), Biochemistry II: Membranes & Metabolism (CHEM 3812, winter & spring)

Note that some courses are also offered in the summer (Cell Structure & Function, possibly Biochem I)—so taking them off cycle might be an option if you will be here in the summer.

## Possible Course Map for the BS Degree in Biological Sciences

You are required to map out your plan for finishing your undergraduate BS requirements by the end of your 3rd year at DU as part of this application (see page 3). Below is a possible schedule of the courses that are required for the biology major that allows students to finish within the required three years. General education requirements are not included below, you will need to add these to your schedule. Students are also required to take the 2-credit course INTZ 2501, Exploring Global Citizenship: Preparing for Study Abroad.

\* Indicates courses that are required or suggested for one or all master's program specializations.

	Fall Quarter	Winter Quarter	Spring Quarter
<b>First Year</b>	CHEM 1010 (Gen Chem I) CHEM 1240 (Gen Chem I lab) MATH 1951 (Calc I)	BIOL 1011 (Evol Hered Biodiv) BIOL 1021 (Evol Hrd Biodiv lab) CHEM 1020 (Gen Chem II) CHEM 1250 (Gen Chem II lab) MATH 1952 (Calc II)	BIOL 1010 (Physiol Systems) BIOL 1020 (Phys Syst lab) CHEM 2131 (Chem of Elements) CHEM 2141 (Chem of Elem lab) #MATH 1953 (Calc III)
<b>Second Year</b>	BIOL 2120 (Cell Structure) BIOL 2121 (Cell Struc lab) CHEM 2451 (OChem I) CHEM 2461 (OChem I Lab)	BIOL 2510 (Genetics) BIOL 2511 (Genetics lab) CHEM 2452 (OChem II) CHEM 2462 (OChem II Lab)	*BIOL 3800 (Human Molec Bio) *CHEM 2453 (OChem III) *CHEM 2463 (OChem III Lab)
<b>Third Year</b>	BIOL 2010 (Gen Ecology) BIOL 2011 (Gen Ecology lab) #BIOL 2090 (Biostats) *CHEM 3811 (Biochem I) PHYS 1111 (Gen Phys I + lab)	*CHEM 3812 (Biochem II) PHYS 1112 (Gen Phys II + lab)	*BIOL 3560 (Molec Bio Lab) PHYS 1113 (Gen Phys III + lab)

## Possible Course Map for the BS Degree in Molecular Biology

You are required to map out your plan for finishing your undergraduate BS requirements by the end of your 3rd year at DU as part of this application (see page 3). Below is a possible schedule of the courses that are required for the biology major that allows students to finish within the required three years. General education requirements are not included below, you will need to add these to your schedule. Students are also required to take the 2-credit course INTZ 2501, Exploring Global Citizenship: Preparing for Study Abroad.

\* Indicates courses that are required or suggested for one or all master's program specializations.

# Indicates that students can take Calc III or Biostats to satisfy the Biology math requirement.

	Fall Quarter	Winter Quarter	Spring Quarter
<b>First Year</b>	CHEM 1010 (Gen Chem I) CHEM 1240 (Gen Chem I lab) MATH 1951 (Calc I)	BIOL 1011 (Evol Hered Biodiv) BIOL 1021 (Evol Hrd Biodiv lab) CHEM 1020 (Gen Chem II) CHEM 1250 (Gen Chem II lab) MATH 1952 (Calc II)	BIOL 1010 (Physiol Systems) BIOL 1020 (Phys Sys lab) CHEM 2131 (Chem of Elements) CHEM 2141 (Chem of Elem lab) #MATH 1953 (Calc III)
<b>Second Year</b>	BIOL 2120 (Cell Structure) BIOL 2121 (Cell Struc lab) CHEM 2451 (OChem I) CHEM 2461 (OChem I Lab)	BIOL 2510 (Genetics) BIOL 2511 (Genetics lab) CHEM 2452 (OChem II) CHEM 2462 (OChem II Lab)	BIOL 3800 (Human Molec Bio) *CHEM 2453 (OChem III) *CHEM 2463 (OChem III Lab)
<b>Third Year</b>	#BIOL 2090 (Biostats) *CHEM 3811 (Biochem I) PHYS 1111 (Gen Phys I + lab)	*CHEM 3812 (Biochem II) PHYS 1112 (Gen Phys II + lab)	*BIOL 3560 (Molec Bio Lab) PHYS 1113 (Gen Phys III + lab)

### Applicant General Information

Student name: \_\_\_\_\_

Year admitted: \_\_\_\_\_

Planned BS completion (quarter and year): \_\_\_\_\_

Which BS major are you enrolled in?

- Biology     Molecular Biology

Which emphasis are you interested in?

- Biochemistry & Molecular Biology     Genetics & Genomics

Is your GPA 3.5 or higher?

- Yes     No

Major GPA: \_\_\_\_\_ Overall GPA: \_\_\_\_\_

Do you have financial aid, work-study, or scholarships? (This information will not affect your application, but we must be aware of any forms of financial aid.)

- Yes     No

If your answer above was yes, please list any financial aid, work-study, or scholarships:

\_\_\_\_\_

\_\_\_\_\_

Please arrange to have **two** letters of recommendation submitted on your behalf (emailed directly to Dr. Nancy Lorenzon). List name and email for each recommendation:

\_\_\_\_\_

\_\_\_\_\_

### Degree Progress

Please use the table below to map out your plan for finishing your undergraduate BS requirements by the end of your third year at DU. Be sure to include **all** required classes for your degree. Feel free to contact Dr. Lorenzon if you would like advice on how to finish the Biology major or Associate Dean of NSM if you need help with the general curriculum requirements.

	Fall Quarter	Winter Quarter	Spring Quarter
<b>First Year</b>			
<b>Second Year</b>			
<b>Third Year</b>			

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## **Application and Research Narratives**

1. Please include a short narrative (300 words or fewer) that explains why you would like to participate in this opportunity and why you want to pursue a MS degree in Biotechnology.

2. Please include a short narrative (300 words or fewer) about any research or internship experiences in which you have participated. If you have research experience in a lab at DU, please include your PI's name.