


Master of Science - Biological Sciences

2 Graduate Program Change 2020-21

I. General Information

The faculty member originating this proposal is to complete sections I and II.

TURN ON help text before starting this proposal by clicking  in the top right corner of the heading. You will need to turn on help text again after any actions that refresh the page including after saving proposals, importing information, or running impact reports.

IMPORT curriculum data from the Catalog by clicking  in the top left corner.

Do not make any changes to any information until the proposal has been launched in Step 4.

Department*

School of Life Sciences

Degree/ Certificate Name*

Master of Science - Biological Sciences

Plan Code*

BIOMS

Degree Type*

Master of Science

Program Type*

Master's

II. Program Changes

FILL IN ONLY fields required marked with an * after importing data. You will not be able to launch the proposal without completing required fields. Do not make proposed changes to the information that was imported until after the proposal has been launched in Step 4. Changes will only be tracked after the proposal is launched




Are you changing admission requirements?*

Yes No

Are you changing course requirements?*	<input type="radio"/> Yes <input checked="" type="radio"/> No
Are you changing degree completion requirements?*	<input type="radio"/> Yes <input checked="" type="radio"/> No
Are you changing the primary instructional mode?*	<input type="radio"/> Yes <input checked="" type="radio"/> No
Are you changing program learning objectives?*	<input type="radio"/> Yes <input checked="" type="radio"/> No
If yes, describe changes to learning objectives:	
Provide a Brief Summary of Proposed Changes	Change admission requirements: Delete "A completed SoLS application form."
Provide a rationale for each proposed change	The SoLS dept. application form is no longer required--only the admission application form through the Graduate College. This causes confusion with prospective students so we need this removed in order to update and remove this from the university's degree program's website.

Do not make any changes to any information until the proposal has been launched in Step 4.

Follow these steps to change the program curriculum:

1. Click on  "View Curriculum Schema." Edit existing cores or click 'Add Core' and name your core (please use a comparable degree program in the current graduate catalog as a template). Edit or add any descriptive text (do not add courses until Step 2). Descriptive text is generally used in the following cores: Plan Description, Plan Admission Requirements, Plan Requirements, Plan Graduation Requirements.
2. There are two options for adding courses (see Step 3 to remove courses): "Add Course" and "Import Course." For courses already in the catalog, click on "Import Course" and find the courses needed. For new classes going through a Curriculog Approval Process click on "Add Course"-- a box will open asking you for the Prefix, Course Number and Course Title.
3. Click on  "View Curriculum Schema." Click on the area/header of the program where you would like to add courses. When you click on "Add Courses" it will bring up the list of courses available from Step 2. Select the courses you wish to add. For removing courses click on the  and proceed.

After you have launched proposal, update prospective curriculum here*

Plan Description

The School of Life Sciences offers an M.S. program with concentrations in Cell and Molecular Biology, Ecology and Evolutionary Biology, Integrative Physiology, Microbiology, and Quantitative Biology and Bioinformatics. This degree is less research-intensive than the Ph.D. and is designed to prepare students for a diverse set of science-related careers. For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Application deadlines Applications available on the UNLV Graduate College website. Applications for fall admission that are completed by the posted deadline will be given priority for state-funded graduate assistantships. Admission is based on a combination of criteria that may differ from one year to another, however, most successful applicants have a minimum of a 3.0 undergraduate grade point average (junior and senior years) and score in the upper 50th percentile on all sections of the GRE. Decisions for fall applicants will be made by April 1 if not sooner. Please note that the M.S. and Ph.D. degrees from the School of Life Sciences (SoLS) are research degrees. Applicants must look through the faculty web pages to identify one or more potential mentors as part of their application. They are required to contact these faculty directly regarding the possibility of joining their lab. Applications are not considered complete unless they contain: A completed Graduate College Application with Official transcripts and two Letters of Recommendation. Official GRE score report; subject GREs are not required. A two-page personal statement describing why the applicant wishes to obtain the MS degree. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements. Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below. Subplan 1: Cellular and Molecular Biology Track Subplan 2: Ecology and Evolutionary Biology Track Subplan 3: Integrative Physiology Track Subplan 4: Microbiology Track Subplan 5: Quantitative Biology and Bioinformatics

Subplan 1 Requirements: Cellular and Molecular Biology Track

Total Credits Required: 30

Course Requirements

Required Course – Credits: 1

BIOL 701 Ethics in Scientific Research 1 - 2

Core Courses – Credits: 6

Complete 6 credits from the following list of courses:

BIOL 607 Molecular Biology	3
BIOL 625 Genomics	
BIOL 645 Cell Physiology	3
CHEM 772 Nucleic Acid Chemistry	3

Didactic Course – Credits: 3

Complete 3 credits of an advisor-approved didactic course.

Seminar Courses – Credits: 4

Complete 4 credits from any combination of the following courses:

BIOL 793A Advanced Topics in Life Sciences: Ecology and Evolution	1 - 2
BIOL 793B Advanced Topics in Life Sciences: Organismal Physiology	1 - 2
BIOL 793C Advanced Topics in Life Sciences: Cell and Molecular Biology	1 - 2
BIOL 793D Advanced Topics in Life Sciences: Microbiology	1-2
BIOL 796 Graduate Seminar	1 - 2

Elective Courses – Credits: 10

Complete 10 credits of advisor-approved independent study, colloquium, seminar, core, or didactic courses.

Thesis – Credits: 6

BIOL 797 Thesis

3 – 6

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 2 Requirements: Ecology and Evolutionary Biology Track

Total Credits Required: 30

Course Requirements

Required Course – Credits: 1

BIOL 701 Ethics in Scientific Research

1 - 2

Didactic Courses – Credits: 9

Complete 9 credits of advisor-approved didactic courses.

Seminar Courses – Credits: 4

Complete 4 credits from any combination of the following courses:

BIOL 793A Advanced Topics in Life Sciences: Ecology and Evolution	1 - 2
BIOL 793B Advanced Topics in Life Sciences: Organismal Physiology	1 - 2
BIOL 793C Advanced Topics in Life Sciences: Cell and Molecular Biology	1 - 2
BIOL 793D Advanced Topics in Life Sciences: Microbiology	1-2
BIOL 796 Graduate Seminar	1 – 2

Elective Courses – Credits: 10

Complete 10 credits advisor-approved independent study, colloquium, seminar, or didactic courses.

Thesis – Credits: 6

BIOL 797 Thesis	3 – 6
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Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 3 Requirements: Integrative Physiology Track

Total Credits Required: 30

Course Requirements

Required Course – Credits: 1

BIOL 701 Ethics in Scientific Research

1 - 2

Didactic Courses – Credits: 12

Complete 12 credits of advisor-approved didactic courses.

Seminar Courses – Credits: 4

Complete 4 credits from any combination of the following courses:

BIOL 793A Advanced Topics in Life Sciences: Ecology and Evolution	1 - 2
BIOL 793B Advanced Topics in Life Sciences: Organismal Physiology	1 - 2
BIOL 793C Advanced Topics in Life Sciences: Cell and Molecular Biology	1 - 2
BIOL 793D Advanced Topics in Life Sciences: Microbiology	1-2
BIOL 796 Graduate Seminar	1 - 2

Elective Courses – Credits: 7

Complete 7 credits of advisor-approved independent study, colloquium, seminar, or didactic courses.

Thesis – Credits: 6

BIOL 797 Thesis

3 - 6

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 4 Requirements: Microbiology Track

Total Credits Required: 30

Course Requirements

Required Course – Credits: 1

BIOL 701 Ethics in Scientific Research

1 - 2

Core Courses – Credits: 3

Complete one of following courses:

BIOL 609 Virology

BIOL 618 Microbial Ecology

BIOL 653 Immunology

BIOL 660 Microbial Physiology

BIOL 664 Bacterial Pathogenesis

BIOL 685 Microbial Genetics

3

3

3

4

Didactic Courses – Credits: 6

Complete 6 credits of advisor-approved didactic courses.

Seminar Courses – Credits: 4

Complete 4 credits from any combination of the following courses:

BIOL 793A Advanced Topics in Life Sciences: Ecology and Evolution	1 - 2
BIOL 793B Advanced Topics in Life Sciences: Organismal Physiology	1 - 2
BIOL 793C Advanced Topics in Life Sciences: Cell and Molecular Biology	1 - 2
BIOL 793D Advanced Topics in Life Sciences: Microbiology	1-2
BIOL 796 Graduate Seminar	1 - 2

Elective Courses – Credits: 10

Complete 10 credits of independent study, colloquium, seminar, core, or didactic courses.

Thesis – Credits: 6

BIOL 797 Thesis	3 – 6
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Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 5 Requirements: Quantitative Biology and Bioinformatics Track

Total Credits Required: 30

Course Requirements

Required Course – Credits: 1

BIOL 701 Ethics in Scientific Research

1 - 2

Core Courses – Credits: 6

Complete two of the following courses:

BIOL 611 Molecular Evolution	3
BIOL 616 Bioinformatics	3
BIOL 625 Genomics	
BIOL 628 Biometry	3
BIOL 680 Introduction to Biological Modeling	3
BIOL 714 Population Genetics	3

Didactic Courses - Credits: 3

Complete 3 credits of advisor-approved didactic courses.

Seminar Courses - Credits: 4

Complete 4 credits from any combination of the following courses:

BIOL 793A Advanced Topics in Life Sciences: Ecology and Evolution	1 - 2
BIOL 793B Advanced Topics in Life Sciences: Organismal Physiology	1 - 2
BIOL 793C Advanced Topics in Life Sciences: Cell and Molecular Biology	1 - 2
BIOL 793D Advanced Topics in Life Sciences: Microbiology	1-2
BIOL 796 Graduate Seminar	1 - 2

Elective Courses – Credits: 10

Complete 10 credits of independent study, colloquium, seminar, core, or didactic courses

Thesis – Credits: 6

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Plan Degree Requirements

Complete a minimum of 30 credit hours beyond the undergraduate degree. At least 18 of these hours must be completed at the 700-level. Students may request a maximum of 15 graduate credits taken at UNLV prior to admission into SoLS's Graduate Program to be counted towards the 30 credit hour minimum graduation requirement, provided that those credits were not used to fulfill undergraduate requirements and that a minimum grade of "B" (3.00) was earned in each course. At least 50 percent of the total credits required to complete the master's degree must be earned at UNLV after admission into the Graduate Program. Students should register for at least nine (9) credits each semester if they are receiving financial support from SoLS; otherwise they must register for at least six (6) credits each semester. Students working on their thesis must register for at least three (3) credits each semester (excluding summer) until the Master's Thesis is completed and given final approval.

Plan Graduation Requirements

The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public. After the thesis defense, the student must electronically submit a properly formatted pdf copy of their thesis to the Graduate College for format check. Once the thesis format has been approved by the Graduate College, the student will submit the approved electronic version to ProQuest. Deadlines for thesis defenses, format check submissions, and the final ProQuest submission can be found [here](#).


The [Degrees Directory](#) provides current and consistent degree information. Submission of this form indicates acknowledgment and understanding that every department is responsible creating and maintaining accurate and updated program information on the UNLV Degrees Directory.


If the changes included on this form impact the program handbook attach the updated handbook before submitting this form. If you need a Word version of the most recent handbook please email GradCurriculum@unlv.edu.

Degrees Directory Program Entry*	<input checked="" type="checkbox"/> Check this box to acknowledge the above statement.
Changes will be applicable to*	<input type="radio"/> Current Students <input checked="" type="radio"/> New Students <input type="radio"/> Both Current and New Students
If applicable to current students, changes are	<input checked="" type="radio"/> Mandatory <input type="radio"/> Optional
Effective Date*	Fall 2020

4. LAUNCH proposal by clicking  in the top left corner.

5. After launching the proposal, make all changes and fill in all additional fields.


6. Finish the launch of your proposal by clicking the icon  located in the Proposal Toolbox on left side at top. Make your decision, comment is optional, and click on "Make decision".

You can check the status of the proposal by clicking  in Proposal Toolbox to verify that the proposal has gone to the next step.

III. Department Vote Information

Note: This section is to be filled out by the Department Chair on behalf of the committee.

(The role has been assigned to the corresponding person on this step. If incorrect, please notify GradCurriculum@unlv.edu)

1. Review the proposal. Discuss and make appropriate revisions.
2. Fill in vote information.
3. Then go to the proposal toolbox at the top right side. Click on  and select the corresponding decision for the committee. This will enable the proposal to go to the next person on the workflow.


You can check the status of the proposal by clicking  in Proposal Toolbox to verify that the proposal has gone to the next step.

Date faculty voted on proposal	2-7-20	Result of vote	20-0
Manner of vote	in person		

IV. Unit Vote Information

Note: This section is to be filled out by the College Committee Chair on behalf of the committee.

(The role has been assigned to the corresponding person on this step. If incorrect, please notify GradCurriculum@unlv.edu)

1. Review the proposal. Discuss and make appropriate revisions.
2. Fill in vote information.
3. Then go to the proposal toolbox at the top right side. Click on  and select the corresponding decision for the committee. This will enable the proposal to go to the next person on the workflow.

You can check the status of the proposal by clicking  in Proposal Toolbox to verify that the proposal has gone to the next step.

Date faculty voted on proposal	13 Feb, 2020	Result of vote	5 in favor - no opposed
Manner of vote	In person		

V. Processing Notes (Graduate College/Registrar Use Only)

**Program Alerts (E.g.
This program is no
longer accepting
applications)**

PS Processing Notes

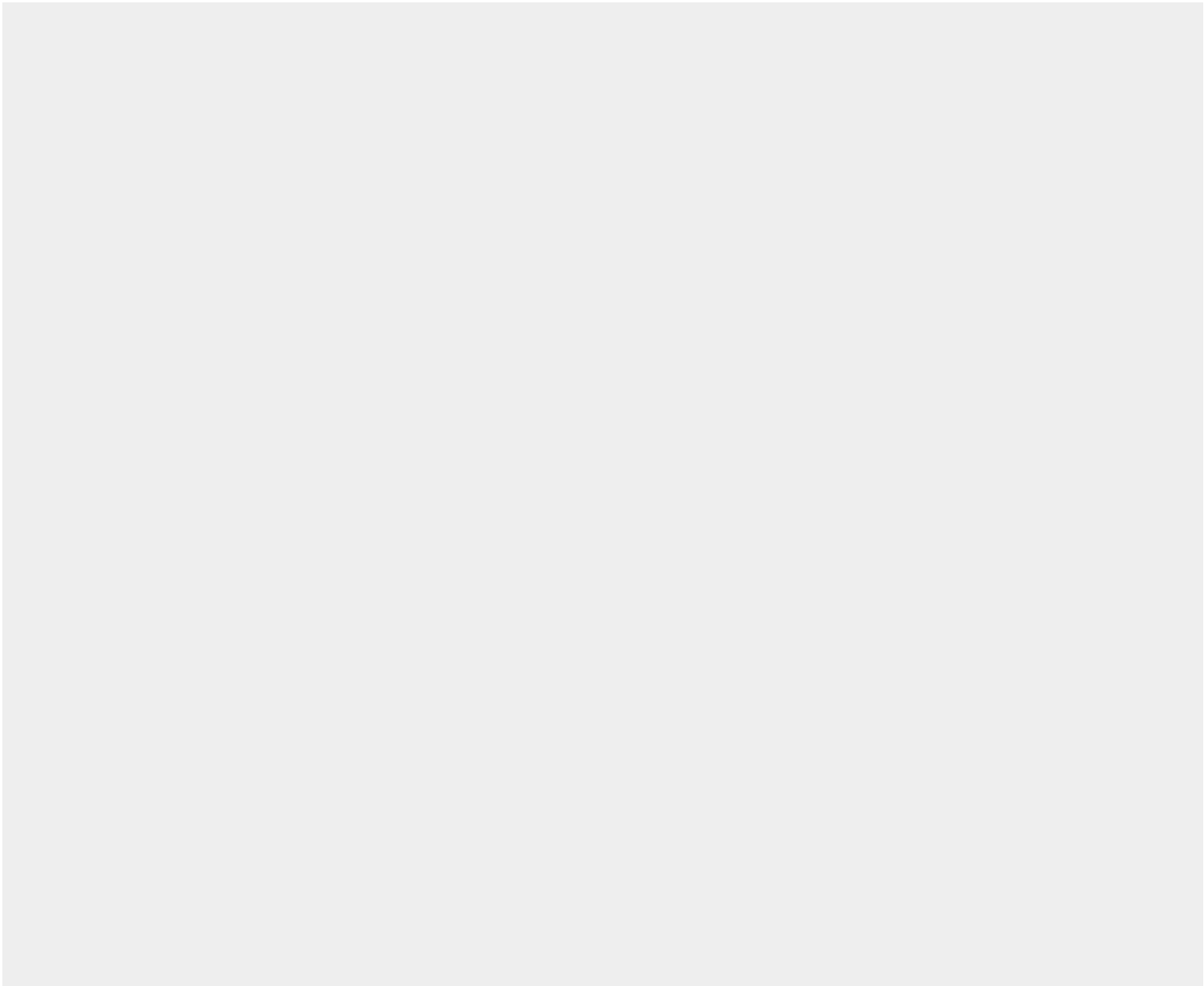
PS Processing Date

Initials

**Aalog Processing
Notes**

**Aalog Processing
Date**

Initials



Comments for Master of Science - Biological Sciences

Curriculog	4/8/2020 3:43 pm Reply
Emily Lin has approved this proposal on Graduate College Dean.	
Curriculog	4/8/2020 12:20 pm Reply
Graduate Curriculum has approved this proposal on Graduate Programs Committee.	
Gregory Moody	4/7/2020 5:49 pm Reply
11 in favor - WebEx Meeting	
Curriculog	4/7/2020 5:49 pm Reply
Gregory Moody has approved this proposal on Graduate Programs Committee.	
Andrew Andres	2/18/2020 4:45 pm Reply
The College of Sciences' Curriculum Committee approved this proposal on 2/13/20 by a vote of: 5 yes, 0 no, and 0 abstentions.	
Curriculog	2/18/2020 4:45 pm Reply
Andrew Andres has approved this proposal on School/College Associate Dean for Graduate Studies/ Dean.	
Curriculog	2/18/2020 1:44 pm Reply
Rohan Dalpatadu has approved this proposal on School/College Committee.	
Curriculog	2/12/2020 3:06 pm Reply
Life Sciences Chair has approved this proposal on Department Chair.	
Life Sciences Graduate Coordinator	2/12/2020 12:50 pm Reply
Looks good! SoLS Votes need to be added by Director; Y20, N0, Abs0	
Curriculog	2/12/2020 12:50 pm Reply
Life Sciences Graduate Coordinator has approved this proposal on Graduate Coordinator.	

Curriculog

2/11/2020 12:52 pm [Reply](#)

Graduate Curriculum has approved this proposal on Technical Review.

Curriculog

1/30/2020 11:55 am [Reply](#)

Keala Kiko has approved this proposal on Originator.

Curriculog

1/30/2020 11:40 am [Reply](#)

Keala Kiko has launched this proposal.