



University of Southeastern Philippines  
College of Arts and Sciences

**MASTER OF SCIENCE IN BIOLOGY**

CMO No. 06 Series of 2011

CMO No. 15 Series of 2019

Approved per BOR Resolution No. 01, series of 2023

Approved per BOR Referendum No. 01, s. 2023, confirmed per BOR Resolution No. 01, s. 2023

Effective S.Y. 2022-2023

**I. CORE COURSES**

| Course No. | Course Title                      | Units | Prerequisites            |
|------------|-----------------------------------|-------|--------------------------|
| Bio 212    | Advanced Ecology                  | 3     | General Ecology          |
| Bio 7112   | Advanced Systematics              | 3     | Taxonomy or Systematics  |
| Bio 215    | Advanced Genetics                 | 3     | Genetics                 |
| Bio 214    | Advanced Cell & Molecular Biology | 3     | Cell & Molecular Biology |
| Bio 7122   | Research Methods in Biology       | 3     |                          |

**II. MAJOR COURSES**

| Course No. | Course Title                              | Units | Prerequisites |
|------------|---|-------|---------------|
| Bio 7123   | Advanced Biostatistics (required)         | 3     |               |
| Bio 231    | Advanced Plant Morphology and Development | 3     |               |
| Bio 233    | Advanced Economic Botany                  | 3     |               |
| Bio 234    | Taxonomy of Angiospermae                  | 3     |               |
| Bio 232    | Advanced Plant Physiology                 | 3     |               |
| Bio 243    | Advanced Invertebrate Zoology             | 3     |               |
| Bio 7316   | Advanced Biodiversity and Conservation    | 3     |               |
| Bio 252    | Aquatic Ecology                           | 3     |               |
| Bio 7318   | Terrestrial Ecology                       | 3     |               |

*Note: Twelve (12) units of Major courses are required.*

**III. SEMINAR**

| Course No. | Course Title                     | Units | Prerequisites |
|------------|----------------------------------|-------|---------------|
| Bio 250    | Contemporary Concepts in Biology | 1     |               |

**IV. ELECTIVES**

| Course No.  | Course Title | Units | Prerequisites |
|-------------|--------------|-------|---------------|
| Elective 1* |              | 3     |               |

*Note: Three (3) units are required for Electives.*

**V. THESIS**

|         |                 |   |   |
|---------|-----------------|---|---|
| BIO 300 | Master's Thesis | 6 | Pass or exempted in the comprehensive examination |
|---------|-----------------|---|---|

**Note:** A plan of coursework will be required from the first-year students to determine the major and elective courses they choose to enroll for the 2nd semester and onwards.

**THESIS Track: Academic**

**LIST OF ELECTIVE COURSES**

BIO 221 Advanced Microbiology  
EBio 7320 Wildlife Biology  
EBio 7321 Biochemistry of Nucleic Acids  
SCE 208 Selected Topics in Environmental Science  
EBio 7323 Advanced Biophysics

\*Course offering from other disciplines of student's interest

**WE BUILD DREAMS WITHOUT LIMITS**

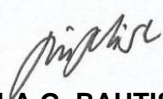
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| SUMMARY                      | UNITS           |
|------------------------------|-----------------|
| Core Courses                 | 15              |
| Major Courses                | 12              |
| Seminar                      | 1               |
| Electives                    | 3               |
| Thesis                       | 6               |
| <b>TOTAL NUMBER OF UNITS</b> | <b>37 Units</b> |

Prepared by:



**MAJELLA G. BAUTISTA**  
Program Head

Recommending Approval:



**EVEYTH P. DELIGERO**  
Dean, OAS

Approved:



**BONIFACIO G. GABALES, JR.**  
Vice President for Academic Affairs



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### I. Program Outcomes

- PGO 1** Recognize, analyze, and solve meaningful research problems in Biology.
- PGO 2** Work effectively as leader or team member to work effectively as a team
- PGO 3** Demonstrate responsible citizenship and ethical conduct in scientific gatherings
- PGO 4** Grasp advanced knowledge in the areas of Biology.  
Apply computational methods, appropriate experimental designs and analysis in research problems in Biology.
- PGO 5** Possess the ability to write and present orally a scientific paper.
- PGO 6** Appreciate the role of the chosen profession as a career.  
Demonstrate interest in learning Biology, conducting and/or analyzing researches, and pursue advanced studies

### II. Type of Graduate Program (Master of Science (MSc) Academic Track)

Major Requirement and Student Output (CMO 15, S. 2019)

- Passing the comprehensive examination
- Thesis (6 units)
- At least one (1) publication in a refereed journal or juried creative work outlet

### III. Admission Requirements

Applicants for the Master of Science in Biology (MSBIO) program need to meet the following qualifications:

1. Hold a bachelor's degree in biology or any related field with 6 units of thesis.
2. Has completed the following pre-requisite undergraduate courses:
  - a. Ecology
  - b. Taxonomy/Systematics
  - c. Statistics
  - d. Physiology
  - e. Genetics
  - f. Cell and Molecular Biology
3. For non-biology majors: Probationary admission is given provided that the lacking courses stated in No. 2 shall be enrolled and passed within the first semester.
4. As a rule, applicants should comply with other requirements of the Office of Admission and the Office of Administration Student Records (OASR).
5. A GSAT score of 80% or better shall qualify for admission in the program provided that the applicant satisfies the requirements stipulated in No. 1 and 2.
6. Applicants may be granted admission to the MS Biology program on a probationary status if their GSAT score falls between the range of 70% to 79%, provided that the student's grade point average is 2.0 or better at the end of the first semester.

### IV. Retention Policy

1. The requirements for the MS in Biology degree include 31 units of course work, comprehensive examination, 6-unit master thesis and publication.
2. As a retention policy in the graduate program, a grade of 2.0 or better shall be given credit.


3. A comprehensive examination will be given upon completion of the academic courses. An average of 2.0 is required to be able to take the comprehensive exam.
4. If the student does not meet the required General Point Average (GPA) of 2.0, s/he may enroll additional elective course to increase the GPA.
5. The masters' thesis is one of the requirements. An approved thesis outline will be conducted after the comprehensive examination.

V. Publication of either brief communication, special problems and research brief leading to a student's thesis, in scientific journals is a requirement for graduation.

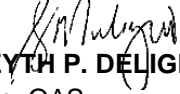
#### VI. Other Requirements

To be able to complete the program and obtain the Master of Science in Biology degree the student must comply all the requirements of the Graduate School relating to academic's credits retention, residence requirement, time limit for completion of the program, comprehensive examination, thesis, and the policy on disqualification from the program.

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