**Master of Science Program in Biology**

**Name of Degree:** Master of Science (Biology)

**Abbreviation:** M.Sc. (Biology)

**Admission Requirements**

 **Plan A Type A 1:**

The Plan A Type A 1 Master of Science in Biology is a thesis graduate degree program without coursework.

**Plan A Type A 2**:

The Plan A Type A 2 Master of Science in Biology is a thesis graduate degree program with coursework.

**To compete successfully for admission, applicants should have:**

Successfully completed a Bachelor's degree in Biology or studied in the last semester of a Bachelor's degree in Biology.

The completion of at least 16 credits in Biology courses is required for applicants who hold a Bachelor's degree in different major.

**Curriculum**

**Total Credits**

 Plan A Type A 1 36 Credits

Plan A Type A 2 36 Credits

**Curriculum Structure** **Type A 1** **Type A 2**

Required Courses (\*) 1 (Non credit) 5 Credits

Elective Courses (\*\*) - 15 Credits

Thesis 36 16 Credits

**Total 36 36 Credits**

|  |  |
| --- | --- |
| **First Year, 1st Semester** | **Number of Credit** |
| **Course number** | **Course title** | **Plan A Type A 1** | **Plan A Type A 2** |
| 311 898\* | Thesis | 9 | - |
| 311 xxx\*\* | Elective | - | 9 (x-x-x) |
| **Total credits** | **9** | **9** |
| **Cumulative credits** | **9** | **9** |

|  |  |
| --- | --- |
| **First Year, 2nd Semester** | **Number of Credit** |
| **Course number** | **Course title** | **Plan A Type A 1** | **Plan A Type A 2** |
| 311 891\* | Seminar in Biology | 1 (1-0-2) Non Credit | 1 (1-0-2) |
| 311 893\* | Research Method in Biology | - | 2 (2-0-4) |
| 311 894\* | Special Studies in Biology |  | 2 (0-6-3) |
| 311 898\* | Thesis | 9 | - |
| 311 899\* | Thesis | - | 1 |
| 311 xxx\*\* | Elective  | - | 3 (x-x-x) |
| **Total credits** | **9** | **9** |
| **Cumulative credits** | **18** | **18** |

|  |  |
| --- | --- |
| **Second Year, 1st Semester** | **Number of Credit** |
| **Course number** | **Course title** | **Plan A Type A 1** | **Plan A Type A 2** |
| 311 898\* | Thesis | 9 | - |
| 311 899\* | Thesis | - | 6 |
| 311 xxx\*\* | Elective | - | 3 (x-x-x) |
| **Total credits** | **9** | **9** |
| **Cumulative credits** | **27** | **27** |

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| --- | --- |
| **Second Year, 2st Semester** | **Number of Credit** |
| **Course number** | **Course title** | **Plan A Type A 1** | **Plan A Type A 2** |
| 311 898\* | Thesis | 9 | - |
| 311 899\* | Thesis | - | 9 |
| **Total credits** | **9** | **9** |
| **Cumulative credits** | **36** | **36** |

**Elective Courses for the 1st Semester**

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Number of credit** |
| 311 710\*\* |  Plant Growth and Development | 3 (3-0-4) |
| 311 711\*\* |  Plant Metabolism | 3 (3-0-6) |
| 311 714\*\* |  Phytogeography | 3 (2-3-6) |
| 311 715\*\* |  Plant Tissue and Cell Culture | 3 (2-3-6) |
| 311 719\*\* |  Taxonomy of Grasses And Sedges | 3 (2-3-6) |
| 311 720\*\* |  Modern Methods in Plant Taxonomy | 3 (2-3-6) |
| 311 725\*\* |  Gene Transfer Technology in Higher Plants | 3 (2-3-6) |
| 311 726\*\* |  Palynology | 3 (2-3-6) |
| 311 732\*\* |  Anatomical Systematics of Plant | 3 (2-3-6) |
| 311 735\*\* |  Mineral Nutrients of Plants | 3 (3-0-6) |
| 311 752\*\* |  Molecular Genetics | 3 (3-0-6) |
| 311 758\*\* |  Population Genetics and Human Evolution | 3 (3-0-6) |
| 311 771\*\* |  Protozoology | 3 (2-3-6) |
| 311 777\*\* |  Reproductive Physiology | 3 (2-3-6) |
| 311 778\*\* |  Histochemistry | 3 (1-6-5) |
| 311 779\*\* |  Freshwater Biology | 3 (2-3-6) |
| 311 782\*\* |  Animal Microtechniques | 3 (1-6-5) |
| 311 784\*\* |  Biology of Amphibians | 3 (2-3-6) |
| 311 871\*\* |  Biology of Reptile | 3 (2-3-6) |
| 311 874\*\* |  Biology of Fish | 3 (2-3-6) |

**Elective Courses for the 2nd Semester**

|  |  |  |
| --- | --- | --- |
| **Course number** | **Course title** | **Number of Credit** |
| 311 701\*\* |  Advanced Cell Biology | 3 (3-0-6) |
| 311 702\*\* |  Bioinformatics and Information Technology | 3 (2-3-6) |
| 311 705\*\* |  Electron Microscopy for Biology | 3 (2-3-6) |
| 311 707\*\* |  Advanced Population Biology | 3 (3-0-6) |
| 311 708\*\* |  Advanced Cell Biology Laboratory | 1 (0-3-2) |
| 311 714\*\* |  Phytogeography | 3 (2-3-6) |
| 311 715\*\* |  Plant Tissue and Cell Culture | 3 (2-3-6) |
| 311 720\*\* |  Modern Methods in Plant Taxonomy | 3 (2-3-6) |
| 311 725\*\* |  Gene Transfer Technology in Higher Plants | 3 (2-3-6) |
| 311 728\*\* |  Plant Molecular Biology | 3 (3-0-6) |
| 311 736\*\* |  Post-Harvest Plant Physiology | 3 (3-0-6) |
| 311 737\*\* |  Plant Molecular Systematics | 3 (2-3-6) |
| 311 752\*\* |  Molecular Genetics | 3 (3-0-6) |
| 311 758\*\* |  Population Genetics and Human Evolution | 3 (3-0-6) |
| 311 770\*\* |  Aquatic Toxicology | 3 (2-3-6) |
| 311 771\*\* |  Protozoology | 3 (2-3-6) |
| 311 777\*\* |  Reproductive Physiology | 3 (2-3-6) |
| 311 778\*\* |  Histochemistry | 3 (1-6-5) |
| 311 780\*\* |  Aquatic Insects | 3 (2-3-6) |
| 311 781\*\* |  Freshwater Zooplankton | 3 (2-3-6) |
| 311 783\*\* |  Zoogeography | 3 (3-0-6) |
| 311 789\*\* |  Fresh and Brackish Water Malacology | 3 (2-3-6) |
| 311 871\*\* |  Biology of Reptile | 3 (2-3-6) |
| 311 872\*\* |  Ornithology | 3 (2-3-6) |
| 311 873\*\* |  Mammalogy | 3 (2-3-6) |

**Program Lecturers**

1. Prof.Dr. Pranom Chantaranothai

2. Prof.Dr. La-orsri Sanoamuang

3. Prof.Dr. Arunrat Chaveerach

4. Assoc.Prof.Dr. Sumontip Bunnag

5. Assoc.Prof.Dr. Narumon Sangpradub

6. Assoc.Prof.Dr. Piyada Theerakulpisut

7. Assoc.Prof.Dr. Pinich Wangsomnuk

8. Assoc.Prof.Dr. Manit Kosittrakun

8. Assoc.Prof.Dr. Alongklod Tanomtong

10. Assoc.Prof.Dr. Wattana Pattanagul

11. Asst.Prof.Dr. Somphong Sithiprom

12. Asst.Prof. Preeyawut Vatcharanon

13. Asst.Prof.Dr. Pornpimol Jearranaiprepame

14. Asst.Prof.Dr. Preeya Wangsomnuk

15. Asst.Prof.Dr. Nathpapat Tantisuwichwong

16. Asst.Prof.Dr. Nisarat Tungpairojwong

17. Asst.Prof.Dr. Amornrat Prajaksood

18. Asst.Prof.Dr. Praweena Maneerattanarungroj

19. Asst.Prof.Dr. Pimwadee Pornpongrungrueng

20. Asst.Prof.Dr. Chantip Chuaynkern

21. Asst.Prof.Dr. Sujeephon Athibai

22. Asst.Prof.Dr. La-iad Nakkrasae

23. Asst.Prof.Dr. Wibhu Kutanan

24. Asst.Prof. Wuttipong Mahakham

25. Dr. Sumpars Khunsook

26. Dr. Kanlaya Kong-ngern

27. Dr. Kanlaya Sriprateep

28. Dr. Monthira Monthatong

29. Dr. Yodchai Chuaynkern

30. Dr. Watanachai Lontom

31. Mr. Jirapat Chunthapong