

Microbiology track

The four-year Bachelor of Science in Biology (BS BIO) curriculum major in Microbiology (MIC) enables the students to have an in-depth knowledge in all the vital fundamentals of the science of life enabling them to qualify for a career in Medical Science or Doctor of Medicine.

The BS BIO-MIC track provides a thorough understanding of microorganisms encompassing the study of bacteria, algae, protozoa, fungi and viruses in terms of their ecology, biochemistry, physiology, genetics and role in disease processes. This track particularly emphasizes on the following fields; Mycology, Bacteriology, Microbial Systematics, Virology, Pathology, Immunology, Food Microbiology and Industrial Microbiology and Biotechnology.

The program also prepares a career in private or government institutions as quality control microbiologists or as research technicians and associates in hospitals, including those specializing in genetic engineering.

A practicum is a part of the BS BIO-MIC curriculum which is geared towards students' exposure to the actual microbiology laboratory setting or environment.

Preliminary skills in microbiology research is another major feature of this track. Students' research skills are developed by training the students in appropriate research methodologies. A research colloquium is part of the curriculum where students will showcase their research outputs.

First Year

First Semester

- BIO1101** – Organic Chemistry (Lecture)
- BIO1102** – Organic Chemistry (Laboratory)
- BIO1201** – General Botany (Lecture)
- BIO1202** – General Botany (Laboratory)
- GED0101** – College Academic Skills in English
- GED0103** – Mathematics in the Modern World
- GED0105** – Wika, Kultura at Lipunan
- NST0101** – National Service Training Program 1
- WRP0101** – Wellness and Recreation Program 1

Total units: 22.5

Second Semester

- BIO1103** – Analytical Chemistry (Lecture)
- BIO1104** – Analytical Chemistry (Laboratory)
- BIO1203** – General Zoology (Lecture)
- BIO1204** – General Zoology (Laboratory)
- GED0108** – Retorika at Panitikan ng Pilipinas
- GED0109** – Speech Communication
- GED0110** – Understanding the Self
- NST0102** – National Service Training Program 2
- WRP0102** – Wellness and Recreation Program 2

Total units: 22.5

Second Year

First Semester

BIO1105 – Biochemistry (Lecture)

BIO1106 – Biochemistry (Laboratory)

BIO1205 – Systematics Biology (Lecture)

BIO1206 – Systematics Biology (Laboratory)

GED0104 – Science, Technology and Society

GED0111 – Purposive Communication

GED0112 – Scholarly Inquiry

GED0113 – The Filipino in the Contemporary World

WRP0103 – Wellness and Recreation Program 3

Total units: 23.5

Second Semester

BIO1207 – Cell Biology (Lecture)

BIO1208 – Cell Biology (Laboratory)

BIO1225 – Introduction to Public Health

BIO1226 – Introduction to Public Health (Related Learning Experience or RLE)

GED0106 – Art Appreciation

GED0107 – Readings in Philippine History

GED0114 – Applied Ethics in Contemporary Times

GED0115 – Pag-aaral ng Wika at Kulturang Rehiyonal

WRP0104 – Wellness and Recreation Program 4

Total units: 23.5

Third Year

First Semester

BIO1107 – Biophysics (Lecture)

BIO1108 – Biophysics (Laboratory)

BIO1109 – Biostatistics (Lecture)

BIO1110 – Biostatistics (Laboratory)

BIO1211 – Evolutionary Biology (Lecture)

BIO1212 – Evolutionary Biology (Laboratory)

BIO1213 – Human Anatomy and Physiology (Lecture)

BIO1214 – Human Anatomy and Physiology (Laboratory)

BIO1215 – Genetics (Lecture)

BIO1216 – Genetics (Laboratory)

WRP0105 – Wellness and Recreation Program 5

Total units: 23.5

Second Semester

BIO1217 – Developmental Biology (Plants and Animals) (Lecture)

BIO1218 – Developmental Biology (Plants and Animals) (Laboratory)

BIO1219 – Ecology (Lecture)

BIO1220 – Ecology (Laboratory)

BIO1221 – Microbiology (Lecture)

BIO1222 – Microbiology (Laboratory)

BIO1301 – Thesis I

GED0102 – The Life and Works of Rizal

WRP0106 – Wellness and Recreation Program 6

Total units: 22.5

Summer Term

BIO1401 – Practicum

Total units: 3

Fourth Year

First Semester

BIO1302 – Thesis II

BMC1101 – Mycology (Lecture)

BMC1102 – Mycology (Laboratory)

BMC1103 – Bacteriology (Lecture)

BMC1104 – Bacteriology (Laboratory)

BMC1105 – Microbial Systematics (Lecture)

BMC1106 – Microbial Systematics (Laboratory)

BMC1201 – Food Microbiology (Lecture)

BMC1202 – Food Microbiology (Laboratory)

BMC1203 – Industrial Biotechnology

WRP0107 – Wellness and Recreation Program 7

Total units: 22.5

Second Semester

BIO1303 – Thesis III

BMC1107 – Pathology

BMC1108 – Virology (Lecture)

BMC1109 – Virology (Laboratory)

BMC1110 – Immunology

BMC1111 – Epidemiology

BMC1112 – Medical Parasitology (Lecture)

BMC1113 – Medical Parasitology (Laboratory)

WRP0108 – Wellness and Recreation Program 8

Total units: 20.5