

LEARNING OUTCOMES: MICROBIOLOGY, PHD

Learning Outcomes for the degree of Doctor of Philosophy in Microbiology

Students graduating with a PhD in Microbiology will have:

1. Effective oral communication skills that are developed via one or more of the following tasks: group discussions in courses; presentations in departmental seminar courses; discussion of scientific topics in courses; defending their work in a preliminary exam; acting as a teaching assistant for at least 2 semesters; giving yearly student seminars.
2. Effective written communication skills that are developed via one or more of the following tasks: writing at least one original, full-length manuscript that has been accepted for publication in a refereed journal; writing a dissertation; writing an NIH-style grant for the preliminary exam.
3. A level of competency and research independence commensurate with the degree, such that they can obtain an initial science-related placement in a job that uses critical thinking components.
4. Demonstrated ability to organize and execute a research project that uses critical-thinking components and problem-solving expertise, hypothesis-driven, and fills a gap in knowledge.
5. Knowledge of the discipline and acquired technical skills in general Microbiology and in their specialized Microbiology research area.