

Department: MCB

Course No.: 240W

Title: Bacterial Diversity and Ecology

Credits: 4

Contact: Kenneth M. Noll

WQ: W

Catalog Copy: MCB240W Bacterial Diversity and Ecology. First semester. 4 credits. Two lecture periods and two 3-hour laboratory/discussion periods.

A study of the ecophysiology of diverse bacterial types with particular emphasis on the activities of bacteria in situ. Investigative laboratory includes individual projects. Leadbetter Enrollment Requirement Group: MCB 229 or instructor consent; ENGL 105 or 110 or 111 or 250; open to juniors or higher. Recommended preparation MCB 204 or 203.

W Criteria: 51% of the final grade is based on the writing aspect of this course. The papers are reports of the results of laboratory investigations carried out by each student. Each of 5 or 6 "manuscripts" are in the form and format of the American Society of Microbiology journals, the directions for which are found in the first issue of a calendar year. The papers will vary from 3-5 pages to 10+ pages, not including references. The instructor will suggest an appropriate length for each paper reflecting the student's accomplishments in the lab projects. The writing will be based on the individual student's project activities. The first paper will be due about 4 weeks after the course begins; the others at 2 or 3 week intervals after that. Due dates will be announced during the semester. The writing will aid the students in understanding and assessing the strengths and limitations of these written reports, both their own and those of other students. The written assignments also illustrate the importance of unambiguous description of methodologies and technical manipulations in communications.

The primary modes of instruction will be through examinations and studies of others' primary literature reports in joint class discussions, the use of 'style' guides, and the instructor's comments about specific aspects of their writing are among the modes of instructions/analyses.

Papers will be returned, repeatedly if necessary, until both scientific grammar and "regular" grammar are clear and proper in the final submission. After submission of reports, one-on-one discussions of the papers will often take place, affording an opportunity for necessary revision.

The student cannot pass the course without passing the W component.

Role of Grad Students: One graduate assistant is currently assigned to this course, but is only involved in preparations and supervision of the laboratory exercises, not the writing assignments.

