

Syllabus: Microbial Community Ecology

ZOO6927(30202)/BOT6935(30204)

Instructor: Mathew Leibold

Credit hours: 2, graded.

Time and location: Fridays, 3:00 – 4:55pm - Carr Hall 222

Zoom participation link (if needed by prearrangement): <https://ufl.zoom.us/j/93797537941>

Description: With the development of increasingly sophisticated methods to identify, quantify and describe microbes involving metagenomics, metabolomics, meta-transcriptomics and other meta-omics the field of microbial ecology has exploded. In this class we will focus more specifically on the community ecology of microbes. Although it seems clear that microbial community ecology follows principles that differ substantially from that of ‘macrobes’, why and how these differences arise (and why they don’t always differ) are not very clear. This class will try to explore progress in this area by focusing largely on the primary literature with an eye to finding generalities and syntheses. We will also look at methodological advances that relate to microbial community data. Students will be expected to be active participants in deciding on course content (what topics to address and what papers to read) and in evaluating and discussing the consequences.

The course will be conducted in a ‘seminar’ format with students taking turns selecting and leading discussion on topics/paper. Toward the end of the class we will consider writing a review paper on our findings that can hopefully result in a publication.

Grading: Grading will consist of general participation (40%) and quality of preparation and leadership in sessions lead by each student (40%). Contribution to final group review or project will count for 20%.

Grading Scale: A ≥ 93%; A- ≥ 90%; B+ ≥ 87%; B ≥ 83%; B- ≥ 80%; C+ ≥ 77%; C ≥ 73%; C- ≥ 70%; D+ ≥ 67%; D ≥ 60%; D- ≥ 57%; E < 57%