INSTRUCTOR: Paul Matheus  
office: 403 Bunnell  
phone: 6304  
office hours: Tues, Thurs 10:00 - 11:00 am or by appointment


MEETINGS: 9:15 - 10:15 am MWF Bunnell 313

SPECIAL FEES: $5 xeroxing (explained below)

This is a senior level course covering the processes that regulate community/ecosystem structure and function, and the history of these processes through time. It assumes previous completion of BIOL 271, Principle of Ecology.

The textbook is one which has been used in this department before and there may be copies floating around for you to buy or borrow. Unfortunately, the publishers just came out with a new edition. This 3rd edition has improvements, so get it if you can, but the 2nd edition will suffice. We only will be directly using the last 1/3 if the book this semester, but since the text covers more than just communities and ecosystems, it is a good reference for basic ecological concepts which you may want to refer back to in this course. Also, the same text most likely will be used next semester for BIOL 471, Population Ecology, so think about hanging on to your copy at the end of the semester. From the schedule below, you will see that the last two weeks of the course covers the history of communities and ecosystems (paleoecology). Instead of requiring another (expensive) book for this section, I will be xeroxing papers for you to use as reference and as a source of discussion. That is the reason for the $5 xeroxing fee.

SCHEDULE

SECTION 1  Definitions, Perspectives, Diversity, Rank-Abundance, Succession, Energy/Matter Fluxes  
Readings: Chapters 17, 18, 19  
Approximate Exam Date: Oct. 10

SECTION 2  Competition, Predation, and Disturbances (their effect on Community Structure)  
Readings: Chapters 20, 21  
Approximate Exam Date: Nov. 3

SECTION 3  Food Webs/Trophic Structure, Colonization, Biogeography, Stability, Richness  
Readings: Chapters 22, 23, 24  
Approximate Exam Date: Nov. 28

SECTION 4  History and “Evolution” of Communities and Ecosystems—Paleoecology  
Readings: Handouts  
Exam: Included in final exam

FINAL EXAM: Monday, Dec. 15 8:00 - 10:00 am (comprehensive plus Paleoecology)

GRADING: 75% exams (3 x 25%)  
20% final  
5% take home assignments