**MOLECULAR, CELLULAR AND BIOMEDICAL SCIENCE (MCBS)**

# Course numbers with the # symbol included (e.g. #400) have not been taught in the last 3 years.

**MCBS 801 - Introduction to Careers in Biotechnology**  
**Credits:** 1  
Overview of careers in the biotechnology and biopharmaceutical industries. Professional development activities include defining career goals, preparing a professional resume and cover letter to prospective employers, identification of potential internship opportunities, and networking. The course will also include an overview of the types of positions available within the biotechnology/biopharma sector, presentations by biotechnology career professionals, and presentations by UNH faculty whose research disciplines are relevant to the field of biotechnology and biopharmaceutics.  
**Repeat Rule:** May be repeated for a maximum of 2 credits.  
**Grade Mode:** Graduate Credit/Fail grading

**MCBS 895 - Special Topics**  
**Credits:** 1-4  
Special topics course.  
**Grade Mode:** Letter Grading

**MCBS 899 - Master's Thesis**  
**Credits:** 1-10  
May be repeated to a maximum of 10 credits. Cr/F.  
**Repeat Rule:** May be repeated for a maximum of 10 credits.  
**Grade Mode:** Graduate Credit/Fail grading

**MCBS 901 - Introduction to Research in the Life Sciences**  
**Credits:** 2  
This two-credit graduate course is designed to acquaint first-year master’s and doctoral students with facilities and tools for designing, conducting, and communicating research. Topics include: acquiring proper background information; the art of oral presentation; effective writing; data analysis and graphics using computers; ethics in science; and issues in research.  
**Grade Mode:** Letter Grading

**MCBS 905 - Contemporary Topics in Molecular, Cellular and Biomedical Sciences**  
**Credits:** 1  
Presentation, discussion, and critical evaluation of current research literature in molecular/cellular life sciences and in biomedical sciences. Topics will vary each semester. Cr/F.  
**Repeat Rule:** May be repeated for a maximum of 5 credits.  
**Grade Mode:** Graduate Credit/Fail grading

**MCBS 910 - Cell Signaling Networks Across the Kingdoms**  
**Credits:** 3  
This course is a survey of contemporary problems in microbial, plant, protozoan, and animal cell and biosystems signaling. Topics to be covered include: evolution of extracellular signals, receptor systems, and signal transduction pathways that govern cell proliferation, survival, and development; current technical approaches for discovery and characterization of signal transduction factor networks; corrupted signal transduction in disease; disease control or therapy. Students should have knowledge of cell biology, biochemistry, genetics and/or molecular biology.  
**Grade Mode:** Letter Grading

**MCBS 913 - Applied Bioinformatics**  
**Credits:** 3  
Genome-enabled biology is the exploration of basic biological questions by combining high-throughput data gathering approaches, such as DNA sequencing, with computational skills in the area of Bioinformatics. Course is designed to provide an opportunity for graduate students in the life sciences to develop sophisticated methods of data analysis by participating in a collaborative project.  
**Repeat Rule:** May be repeated for a maximum of 6 credits.  
**Grade Mode:** Letter Grading

**MCBS 995 - Special Topics**  
**Credits:** 1-4  
Special topics course.  
**Grade Mode:** Letter Grading

**MCBS 997 - Seminar**  
**Credits:** 1  
Graduate student and faculty presentations on current topics in the molecular life sciences and biomedical sciences. Graduate students are expected to present one seminar per year and attend all seminars each semester. Cr/F. (Offered both fall and spring).  
**Repeat Rule:** May be repeated for a maximum of 8 credits.  
**Grade Mode:** Graduate Credit/Fail grading

**MCBS 999 - Doctoral Thesis**  
**Credits:** 0  
Cr/F.  
**Grade Mode:** Graduate Credit/Fail grading