**BIOMEDICAL SCIENCE (BMSC)**

**BMSC F214**  
**Introduction to Biomedical Research**  
(s)  
2 Credits  
Offered Fall  
This seminar aims to introduce students to research methods by providing students who are new to research and research methods opportunities to learn about, discuss and conduct ethical activities in a low stress, small group seminar setting. Organized in a small group, seminar format, the ultimate objective is for seminar participants to develop self-efficacy and interest in pursuing research methods courses and research opportunities early on and throughout their undergraduate studies.  
**Lecture + Lab + Other:** 2 + 0 + 0

**BMSC F224**  
**Entering Research: Undergraduate Research Experience**  
2 Credits  
Offered Spring  
Required course for BLaST scholars and open to all UAF students. This course will facilitate mentored research experience for undergraduate students. Students will participate in advanced research topics from outside the usual undergraduate laboratory offerings. Students will be required to actively participate in research activities and report on progress and growth throughout the course. Course will conclude with a semester research report and presentation on research activities.  
**Prerequisites:** BMSC F214.  
**Lecture + Lab + Other:** 1 + 3 + 0

**BMSC F314**  
**Research Project Foundations**  
1 Credit  
Offered Fall  
Supports undergraduate research projects with strategies and methodologies when establishing a scientific research project. Also foster the personal, academic and career growth of the student. Topics include personal wellness, academic and career planning, mentoring relationships, project management, scientific writing, and communication strategies.  
**Prerequisites:** BMSC F224.  
**Lecture + Lab + Other:** 1 + 0 + 0

**BMSC F324**  
**Biomedical Research Skills**  
1 Credit  
Offered Spring  
Biomedical Research Skills supports student research projects by highlighting foundational skills, methodologies and techniques commonly used in biomedical research. Guest speakers from UAF and BLaST research community present and share their experience with students through discussions, primary literature and visits to UAF laboratories. Open to any UAF undergraduate student.  
**Prerequisites:** BMSC F314.  
**Lecture + Lab + Other:** 1 + 0 + 0

**BMSC F401**  
**Fundamentals of Pharmacology**  
3 Credits  
Offered Fall Even-numbered Years  
This course emphasizes human and veterinary medical applications for aspiring health practitioners and biomedical scientists. It is an introduction to the science of drugs. Topics include excretion, absorption, movement of drugs throughout the body, receptor-drug binding, signal transduction, dose-response relationships, and associated physiological effects (beneficial and adverse).  
**Prerequisites:** BIOL F310, BIOL F360, CHEM F351 or CHEM F360.  
**Crosslisted with** BIOL F401.  
**Lecture + Lab + Other:** 3 + 0 + 0