STUDENT INFORMATION FOR SPRING 2018 REGISTRATION

You can search for spring courses at: http://courses.unh.edu/

REGISTRATION FOR SPRING 2018

Registration windows open as follows:

- Seniors: 11/20 (7 a.m.) – 11/29 (11:59 p.m.)
- Juniors: 11/27 (7 a.m.) – 11/29 (11:59 p.m.)
- Freshman: 11/30 (7 a.m.) – 12/4 (6:00 p.m.)
- Sophomores: 12/5 (7 a.m.) – 12/7 (11:59 p.m.)

Web registration reopens 12/8/2017 at 8 a.m. and closes 1/30/2018 at 4:30 p.m.

If you haven't already done so, contact your academic advisor to discuss your spring courses and to obtain your RAC for online registration.

NEW & NOTABLE FOR SPRING 2018

- GEN 715 – Molecular Evolution (David Plachetzki) *This course will not be offered again until Spring 2020*
- GEN 606 – Genetics Lab is restricted to Genetics and Genetics:Genomics majors until Dec. 7 and then will be open to other majors if seats are available

COURSES NOT OFFERED IN SPRING 2018

- GEN 721 – Comparative Genomics - will be offered in Spring 2019
- GEN 772 – Evolutionary Genetics of Plants
- GEN 774 – Techniques in Plant Genetic Engineering & Biotechnology

COURSES LIKELY TO REACH MAXIMUM CAPACITY

REGISTER EARLY!

BIOL 411	BMS 407	BMS 503/504
BMS 508	BMS 602	BMS 730
BMS 711	BMS 718	BMCB 658/659
GEN 706		

COURSES LIKELY TO HAVE OPEN SEATS

BMCB 605 – Eukaryotic Cell and Development Biology – Brian Barth & Paul Tsang
BMCB 750 – Physical Biochemistry – Krisztina Varga
BMCB 752 – Principles of Biochemistry – Feixia Chu
BMCB 755 – Laboratory in Biochemistry and Molecular Biology – Clyde Denis
BMS 623 – Comparative Histology – Brian Stevens
BMS 658 – Medical Biochemistry – Meng Chen
BMS 659 – Clinical Chemistry Lab – Meng Chen
BMS 704 – Pathologic Basis of Disease – David Needle
BMS 706 – Virology – Aaron Margolin
BMS 720 – Mycology, Parasitology, Virology – Juan Rojo
BMS 740 – Human Microbiome – Timothy Montminy
GEN 704 – Genetics of Prokaryotic Microbes – Cheryl Whistler

UNABLE TO REGISTER?

Unable to register for an MCBS-sponsored course that is full? Alert the instructor of your interest in gaining admission into the course with the online MCBS Closed Course Form.

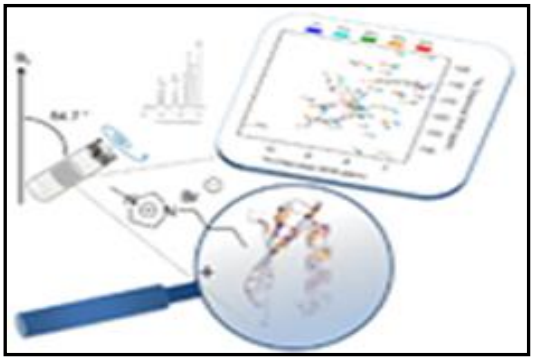
Submitting this form does not ensure that you will be admitted into the course. In fact, during the online registration period, your best strategy is to regularly check availability in the course/section that you desire to get into via WebCat, in the event that another student drops the course.

For Chemistry courses, contact Cindi Rohwer (cindi.rohwer@unh.edu) to be put on a waitlist.

Check out the following pages for highlights of some of the exciting courses being offered in spring 2018.

Selected courses being offered in Spring 2018 semester

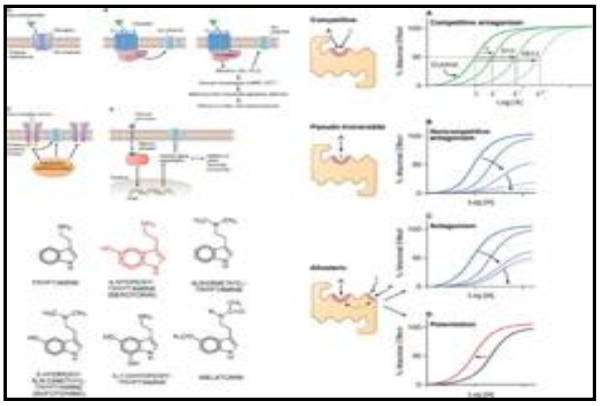
BMCB 750 – Physical Biochemistry
Credits: 3.00



This course is a survey of **structure, interactions, and physical-chemical properties of biomolecules**. Topics include principles of thermodynamic, kinetic, and spectroscopic methods for the study of proteins and nucleic acids.
Prereq: 2 semesters organic chemistry, 1 semester of calculus; or permission.

BMCB 750 (CRN55597)
Tues/Thurs 3:40 to 5:00 p.m.; Rudman 110
Instructor: Krisztina Varga

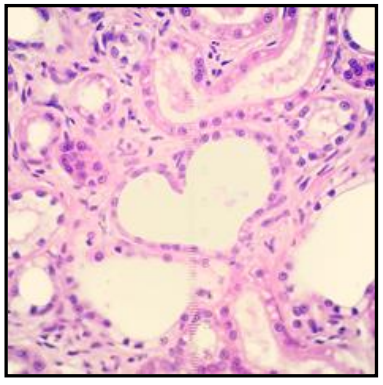
BMS 720 – Mycology, Parasitology, and Virology
Credits: 3.00



Theoretical basis of the pathogenesis, epidemiology, and diagnosis of fungal, parasitic, and viral infections.
Prereq: BMS 602 and BMS 603.
Seats not filled during regular registration period will become available to other majors during late registration.

BMS 720.01 (CRN 52084) – BMS:MLS Majors
BMS 720.02 (CRN 55700) – Juniors & Seniors
Tues/Thurs 8:10 to 9:30 a.m.; Spaulding G70
Instructor: Juan Rojo

BMS 623 – Comparative Histology
Credits: 4.00



This course will not only study the beautiful **structure of cells at the microscopic level**, but also investigate **how each cell type differs** and how these differences allow organ systems to function in unique ways. Histology is typically learned through the lenses of a microscope, so an **online laboratory** component utilizing digital microscopic images will help build on topics covered in lecture and allow students to practice their cell identification skills.
Prereq: ANSC 511 & 512 or BMS 507 & 508.

BMS 623 (CRN 55528)
Mon/Wed/Fri 8:10 – 9:00 a.m.; Spaulding 230
Instructor: Brian Stevens

BMS 650 – Molecular Diagnostics
Credits: 4.00

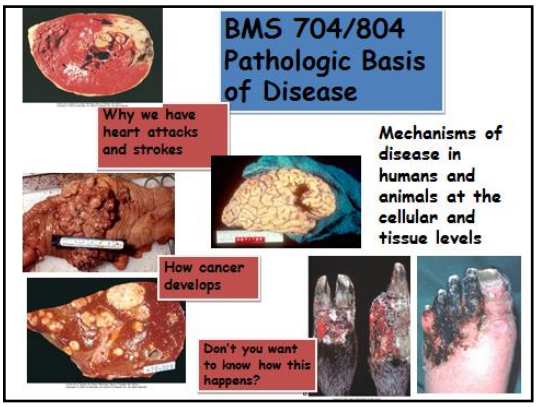
Looking for **an ETS Discovery** with a medical emphasis? BMS 650 introduces you to the fundamental principles of molecular technology and techniques used in clinical laboratories such as nucleic acid extraction, amplification, sequencing, hybridization, electrophoresis, chromosome analysis, and microarrays.

Learn about the **prediction and detection of human disease** (infectious disease, cancer, and other inherited disease), and applications on identity testing, molecular epidemiology, pharmacogenetics, and relevant ethical issues.

Previous knowledge and lab experience of genetics and biochemistry lab techniques is highly recommended.

BMS 650.01 (CRN 55038)
Tues/Thurs 11:10 a.m. – 12:30 p.m.; Spaulding G26
Instructor: Meng Chen

BMS 704 – Pathologic Basis of Disease
Credits: 4:00

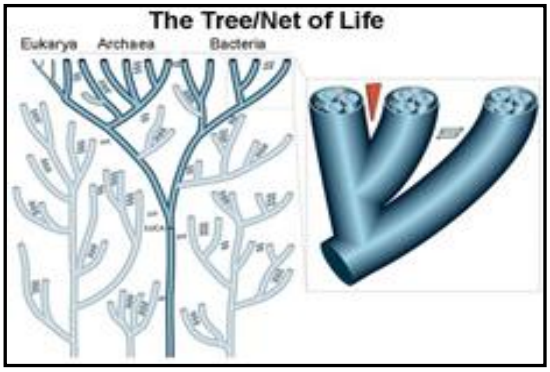


This course explains the **principles and mechanisms of disease at the cellular and tissue levels**, including responses to cell injury, death and adaptation, inflammation, circulatory disturbances, disorders of the immune system, and neoplasia.

Prereq: ANSC 511/512 or BMS 507/508 are recommended, but not required.

BMS 704.01 (CRN 52284) – BMS:MVS majors only
BMS 704.02 (CRN 53438) – all but BMS:MVS majors
Mon/Wed/Fri 9:10 – 10:00 a.m.; Spaulding G26
Instructor: David Needle

GEN 713 – Microbial Ecology & Evolution
Credits: 4:00



Evolutionary and ecological forces have generated the tremendous diversity of microbial life on Earth (viruses, archaea and bacteria). GEN 713 focuses on the **functional roles of microorganisms, their population dynamics and interactions, and their mechanisms of evolutionary change** in a variety of environmental settings, including natural communities and laboratory microcosms. **Writing intensive**.
Prereq: GEN 604, BMS 503 and BMS 504; or permission.

GEN 713 (CRN 55475)
Mon/Wed 2:10 – 4:00 p.m.; Kendall 202
Instructor: Cheryl Andam

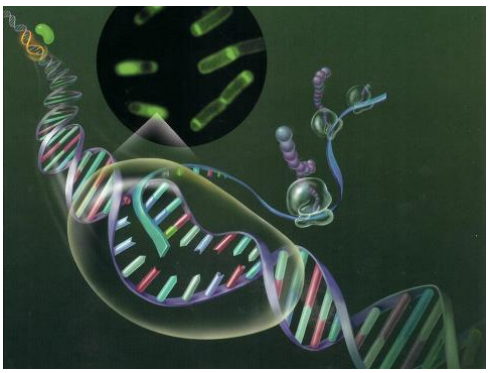
BMS 740 – The Human Microbiome
Credits: 4.00

The human microbiome is a new, rapidly-growing field of microbiology that is making important contributions to the understanding of human health. This **laboratory course** utilizes current research methodology to **investigate the microbiome of the human skin**. Students gain hands-on experience in PCR, genomics, bioinformatics, and modern clinical identification techniques. Students generate primary data allowing them to make their own contribution to this important field of research. This course is a **capstone for BMS:MM majors**.

Prereq: GEN 604; BMS 501 or BMS 503 and BMS 504. Special fee.
Seniors only. BMS:MLS, BMS:MM, BMS:MVS, GEN, GEN:Genomics majors only.

BMS 740 (CRN 53967)
Recitation: TBD (1 hour)
Lab: Tues/Thurs 2:10 – 5:00 pm.; Rudman G40
Instructor: Tim Montminy

GEN 704 – Genetics of Prokaryotic Microbes
Credits: 5.0



In this lecture/lab course, you learn how the genetic material in bacteria and their viruses is maintained, exchanged, and expressed. Get experience with the contemporary methods used to understand the function of genes and the applications of these methods to basic science, biomedical research, and biotechnology .
Prereq: BMS 503 and BMS 504; GEN 604; or permission. Special fee.
Writing intensive.

GEN 704.01 (CRN 51691)
Mon/Wed/Fri 11:10 – 12:00 p.m.; Rudman G89
Wed 1:10 – 5:00 p.m.; Rudman G40
Instructor: Cheryl Whistler

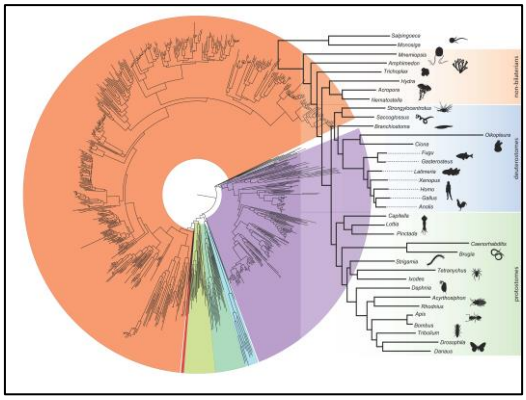
GEN 606 – Genetics Lab
Credits: 4.00

GEN 606 provides hands-on experience with some of the important model organisms used for research in genetics (fruit flies, bacteria, yeast, nematodes, and plants). Experiments include: PCR amplification, cloning, and sequencing a gene and submitting to GenBank; using RNAi to silence a gene in *C. elegans;* crossing Drosophila and analyzing the phenotypes of the offspring; and selecting for specific phenotypes in yeast and *E. coli.*

Prereq: GEN 604. Special fee.
GEN 606 will initially be restricted to Genetics and Genomics majors but, after Dec. 8, will be open to other majors by permission. Contact Dr. Hrabak at estelle.hrabak@unh.edu if you are interested in taking the class..

GEN 606.01 (CRN 52303) Tues 2:10 - 6:00 p.m. and Thurs 2:10 -5:00 p.m.; Rudman G51
GEN 606.02 (CRN 57092) Mon 2:10 – 6:00 p.m. and Wed 2:10 – 5:00 p.m.; Rudman G51
Instructor: Estelle Hrabak

GEN 715 – Molecular Evolution
Credits: 4.00



Have you wondered about what forces drive evolution at the molecular level? How mutation and selection result in the biodiversity we see today? GEN 715 explores the **rates and patterns of evolutionary change in biomolecules and the molecular mechanisms of organismal evolution**. The course draws on concepts from genomics, biochemistry, population genetics and organismal studies. During the computer lab, you learn methods for reconstructing phylogeny and detecting the evolutionary signatures of natural selection using molecular sequences.
Prereq: GEN 604. Some knowledge of statistics is recommended.

GEN 715.01 (CRN 56724) – Genetics and Genetics:Genomics majors only
GEN 715.02 (CRN 56725) - Genetics and Genetics:Genomics majors NOT allowed
Mon/Wed/Fri 10:10 – 11:00 a.m.; Spaulding 230
Wed 12:40 – 2:00 p.m.; Hewitt 301
Instructor: David Plachetzki