

# STUDENT INFORMATION FOR SPRING 2017 REGISTRATION

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

## REGISTRATION FOR SPRING 2017

Registration windows open as follows:

- Seniors: 11/21 (7 a.m. – 11/30 (11:59 p.m.)
- Juniors: 11/28 (7 a.m.) – 11/30 (11:59 p.m.)
- Sophomores: 12/6 (7 a.m.) – 12/8 (11:59 p.m.)
- Freshman: 12/1 (7 a.m.) – 12/5 (6:00 p.m.)
- Web registration reopens 12/9/2016 at 8 a.m. and closes 1/31/2017 at 4:30 p.m.

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

## NEW & NOTABLE FOR SPRING 2017

- BMCB 760 – Pharmacology (Xuanmao Chen)
- BMS 623 – Comparative Histology (Brian Stevens)
- GEN 713 – Microbial Ecology & Evolution (Cheryl Andam)

## COURSES NOT OFFERED IN SPRING 2017

- NUTR 405 Food and Society
- NUTR 740 Nutrition for Children with Special Needs

## COURSES LIKELY TO REACH MAXIMUM CAPACITY

(REGISTER EARLY!)

BIOL 411	BMS 561	BMS 718
BMCB 605	BMS 602	BMS 730
BMCB 659	BMS 640	INCO 403
BMS 503	BMS 641	NUTR 560
BMS 508	BMS 650	NUTR 650
BMS 560	BMS 711	NUTR 720

## COURSES LIKELY TO HAVE ENROLLMENT CAPACITY

- BMCB 750 – Physical Biochemistry – Krisztina Varga  
BMCB 755 – Lab Biochem. & Molecular Biology – Clyde Denis  
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 740 – Human Microbiome – Timothy Montminy  
GEN 704 – Genetics of Prokaryotic Microbes – Cheryl Whistler  
GEN 772 – Evolutionary Genetics of Plants – Thomas Davis  
NUTR 506 – Nutrition and Wellness – Kevin Pietro  
NUTR 730 – Seed to Sea/Sustainable Food – Joanne Burke  
NUTR 751 – Nutritional Biochemistry of Micronutrients – M. Katherine Lockwood  
NUTR 780 – Critical Issues in Nutrition – Maggie Dylewski-Begis

## MISCELLANEOUS

- 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 [Closed MCBS Course Form](#). Submitting this form does not ensure that you will be admitted into the course you desire. In fact, during the online registration period, your best strategy is to regularly check the availability of the course/section that you desire to get into, in the event that another student drops the course you want. *For Chemistry courses, contact Cindi Rohwer ([cindi.rohwer@unh.edu](mailto:cindi.rohwer@unh.edu)) to be put on a waitlist.*

*Please see the following pages for highlights of some of the exciting courses being offered in spring 2017.*

# Selected courses being offered in Spring 2017 semester

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## BMCB 750 – Physical Biochemistry

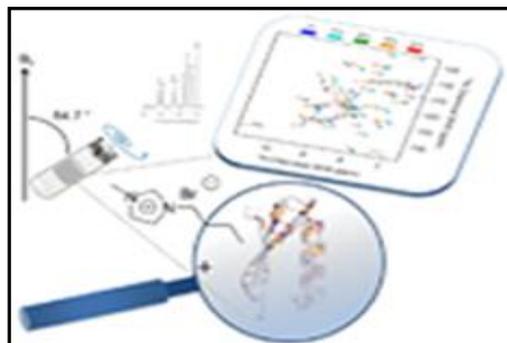
Credits: 3.00

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 (CRN 57173)

Tues/Thurs 3:40 to 5:00 p.m.; Rudman 110

Instructor: Krisztina Varga



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## BMCB 760 – Pharmacology

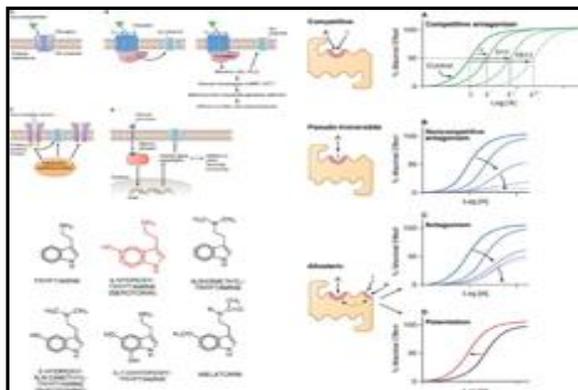
Credits: 4:00

This course is for both undergraduate (junior-senior level) and graduate students who want to understand the **basic principles, terms, and concepts of pharmacology**, and appreciate the **therapeutic effects and molecular mechanisms of medical agents**. It will be useful for anyone who aims to advance to a professional degree in health care, or who is interested in pursuing career that requires basic pharmacology knowledge. Lecture topics include pharmacogenomics, neuropharmacology, therapeutics used in different systems, and chemotherapy. Prereq: one semester biochemistry or permission.

BMCB 760 (CRN 57094)

Time: Tues/Thurs 5:10 to 7:00 p.m.; KING N328

Instructor: Xuanmao (Mao) Chen



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## BMS 623 – Comparative Histology

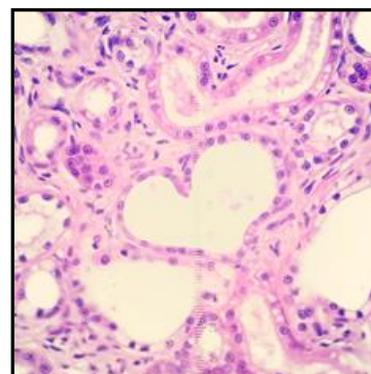
Credits: 4.00

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 57093)

Mon/Wed/Fri 8:10 – 9:00 a.m.; Spaulding 230

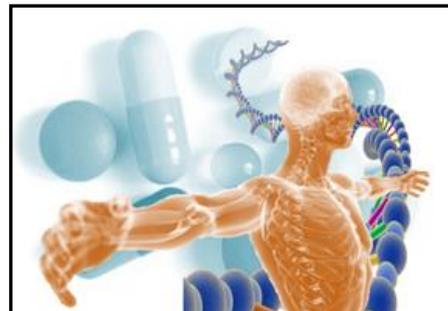
Instructor: Brian Stevens



## BMS 650 – Molecular Diagnostics

Credits: 3.00

This course covers the fundamental principles of **molecular technology and techniques used in clinical and research laboratories** such as nucleic acid extraction, amplification, electrophoresis, hybridization, and sequencing. It also emphasizes the application of these techniques to **prediction and detection of human disease** including identity testing, molecular oncology, chromosome analysis, infectious disease, and inherited diseases, as well as the associated ethical issues. GEN 604 and BMCB 659 are highly recommended.



BMS 650.01 (CRN 56509) – BMS:MLS, BMS:MM, and BMS:MVS majors only  
Tues/Thurs 11:10 a.m. – 12:30 p.m.; Spaulding G26  
Instructor: Meng Chen

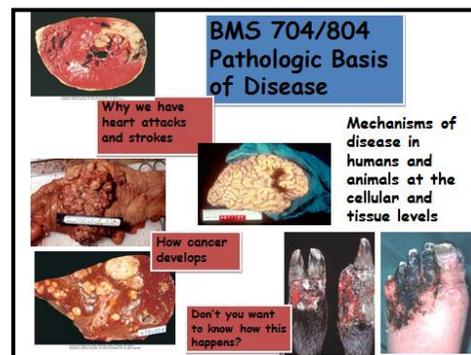
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## BMS 704 – Pathologic Basis of Disease

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 is recommended, but not required.

BMS 704.01 (CRN 52666) – BMS:MVS majors only  
BMS 704.02 (CRN 53909) – all but BMS:MVS majors  
Mon/Wed/Fri 9:10 – 10:00 a.m.; Spaulding G26  
Instructor: David Needle



## BMS 740 – The Human Microbiome

Credits: 4.00

The human microbiome is a new, rapidly growing field of microbiology that has already made important contributions to the understanding of human health. This **laboratory course** will utilize current research methodology to **investigate the microbiome of the human skin**. Students will gain hands-on experience in PCR, genomics, bioinformatics, and modern clinical identification techniques. They will also 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.

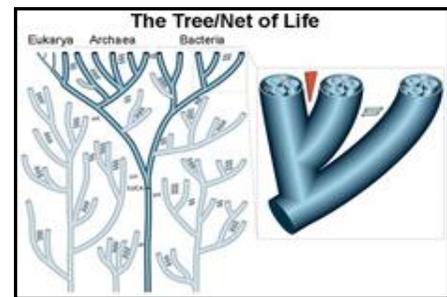
BMS 740 (CRN 54573)  
Recitation: TBD (1 hour)  
Lab: Tues/Thurs 2:10 – 5:00 pm.; Rudman G40  
Instructor: Tim Montminy



## 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). The course focuses on the **functional roles of microorganisms, their population dynamics and interactions, and their mechanisms of evolutionary change** in a variety of environment settings, including natural communities and laboratory microcosms. **Writing intensive.**



GEN 713 (CRN 57036)

Mon/Wed 2:10 – 4:00 p.m.; Kendall 202

Instructor: Cheryl Andam

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## GEN 772 – Evolutionary Genetics of Plants

Credits: 4.00

What are the **mechanisms of genetic change** in plant evolution, domestication, breeding, and genetic engineering? Topics include Darwinian Theory; speciation and hybridization; origins and co-evolution of nuclear and organelle genomes; gene and genome evolution; transposable elements, chromosome rearrangements, and polyploidy. Lab gives direct experience with bioinformatics, and phylogenetics, as well as with writing and presentation skills. **Writing intensive.** Prereq: GEN 604 or equivalent.



GEN 772 (CRN 55526)

Lecture: Tues/Thurs 9:40 – 11:00 a.m.; Spaulding G16

Lab: Fri 1:10 – 3:00 p.m.; Spaulding G16

Instructor: Thomas Davis

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Photo Credits: UNH organic Farm, USDA and <http://www.photolib.noaa.gov/>

## NUTR 730 – From Seed to Sea: Examining Sustainable Food Systems

Credits: 4.00

Explore food system structure and function from a coupled human and natural systems perspective. Topics include: use of natural resources to meet growing population demands; conflicting views on meeting food and nutrition requirements; impacts of increased stress on natural resources; inequities and discrimination in the food system; impact of dietary guidelines on the environment. Study of diverse human and natural system interactions are integrated to understand issues in food system sustainability.

NUTR 730 (CRN 54054)

Tues/Thurs 8:10 – 9:30 a.m.; Rudman 110

and Tues 9:40 – 10:30 a.m.; Rudman 110

Instructor: Joanne Burke