

Courses Available to Students in the MS in Medical Sciences (3/2023)

May be useful for pre-dental students @ May be useful for pre-medical students

-Fall Semester Listing-

Behavioral Sciences:

BSC 790 Research in Medical Behavioral Sciences

Biochemistry:

BCH 401G Fundamentals of Biochemistry #@

BCH 419G Molecular Basis of Human Disease #@

BCH 604 Structural Biology

BCH 610 Structure and Function of Biomembranes

BCH 611 Advanced Nucleic Acids

BCH 612 Structure and Function of Proteins/Enzyme

BCH 640 Research in Biochemistry

Integrated Biomedical Sciences:

IBS 601 Biomolecules and Metabolism

IBS 602 Molecular Biology and Genetics @

Microbiology:

MI 494G Immunobiology (cross-listed with BIO 494G) #@

MI 582 Virology #@

MI 598 Clinical Microbiology #

MI 720 Microbial Structure and Function (cross-listed with BIO 720)

MI 772 Seminar in Microbiology (**register for section 001**)

MI 798 Research in Microbiology

Neuroscience:

ANA 417G Functional Human Neuroanatomy @

ANA 512 Microscopy and Ultrastructure

ANA 600 Seminar in Anatomy

ANA 605 Neurobiology of CNS Injury and Repair

ANA 636 Advanced Neuroscience (5 credit hours)

ANA 638 Developmental Neurobiology (cross-listed with PGY)

ANA 780 Special Topics in Neurobiology (Neurobiology of Brain Disorders – 3 credit hours)

ANA 790 Research in Anatomy

Nutritional Sciences: (Note. AAMC may not count these courses towards BCPM hours)

NS 550 Drug and Nutrient Interactions (2 credit hours; cross-listed with PHA 550)

NS 601 – Integrated Nutritional Sciences I

NS 603 - Integrated Nutritional Sciences III

NS 605 - Wellness and Sports Nutrition

NS 606 - Molecular Biology Applications in Nutrition (2 credit hours)

NS 609 - Ethics in Clinical Research

NS 704 - Current Topics in Nutrition

NS 771 - Graduate Seminar in Nutritional Sciences

Pharmacology: (Note. AAMC may not count these courses towards BCPM hours)

PHA 421G Pharmacology: Principles of Drug Action

PHA 422G Pharmacology of Treating Human Disease

PHA 424G Pharmacology of Human Endocrinology and Reproduction

PHA 550 Drug and Nutrient Interactions (2 credit hours; cross-listed with NS 550)

PHA 621 Principles of Drug Action

PHA 750 Research in Pharmacology

PHA 770 Seminar in Pharmacology

Physiology:

PGY 401G Human Reproduction, Technology and Society

PGY 412G Principles of Human Physiology #@

PGY 413G Critical Thinking #@

PGY 502 Systems, Cellular and Molecular Physiology

PGY 504 Independent Work in Physiology

PGY 512 Evolutionary Medicine

PGY 520 Mechanisms of Disease

PGY 602 Reading in Systems, Cellular & Molec PGY

PGY 603 Foundation of Experimental Design & Analysis

PGY 615 Teaching of Medical Science

PGY 616 Practicum in Teaching Medical Science

PGY 625 Muscle Forum

PGY 630 Advanced Topics in Physiology

PGY 774 Seminar in Physiology

PGY 791 Research in Physiology

Toxicology: (Note. AAMC may not count these courses towards BCPM hours)

TOX 509 Environmental and Regulatory Toxicology

TOX 663 Drug Metabolism and Disposition @

TOX 770 Toxicology Seminar (Students should sign up for 1 credit hour each for section 001 and section 002)

TOX 780 Special Problems in Toxicology

TOX 790 Research in Toxicology

-Spring Semester Listing-

Behavioral Sciences:

BSC 750 History of Medicine Among Blacks in the U.S.: Implications for Health Disparities

BSC 773 Psychosocial Oncology

BSC 790 Research in Medical Behavioral Sciences

Biochemistry:

BCH 401G Fundamentals of Biochemistry #@

BCH 419G Molecular Basis of Human Disease #@

BCH 625 Scientific Communications

BCH 640 Research in Biochemistry

Integrated Biomedical Sciences:

IBS 603 Cell Biology and Signaling
IBS 606 Physiological Communication
IBS 611 Practical Statistics

Microbiology:

MI 494G Immunobiology (cross-listed with BIO 494G) #@
MI 495G Bacterial Pathogenesis (cross-listed with BIO 495G) #@
MI 616 Biology & Therapy of Cancer @
MI 707 Contemporary Topics in Immunology
MI 725 Mechanisms of Microbial Pathogenesis
MI 772 Seminar in Microbiology (**section 001**)
MI 798 Research in Microbiology

Neuroscience:

ANA 417G Functional Human Neuroanatomy @
ANA 609 Educational Strategies in the Anatomical Sciences
ANA 611 Regional Human Anatomy (5 credit hours)
ANA 780 Special Topics in Neurobiology (Neurobiology of Brain Disorders – 3 credit hours)
ANA 790 Research in Anatomy

Nutritional Sciences: (Note. AAMC may not count these courses towards BCPM hours)

NS 550 Drug and Nutrient Interactions (2 credit hours; cross-listed with PHA 550)
NS 602 – Integrated Nutritional Sciences II
NS 689 Nutrition and Chronic Disease @
NS 771 - Graduate Seminar in Nutritional Sciences
CNU 501 – Nutraceuticals and Functional Foods
CNU 502 – Obesity: Cell to Community

Pharmacology: (Note. AAMC may not count these courses towards BCPM hours)

PHA 425G Neuropharmacology: Treating Disorders of the Brain
PHA 550 Drug and Nutrient Interactions (2 credit hours; cross-listed with NS 550)
PHA 622 Molecular Drug Targets and Therapeutics (4 sections)
 Section 001-Cardiovascular Pharmacology
 Section 002-Neuropharmacology
 Section 003-Chemotherapeutic & Toxicologic Agents
 Section 004-Immunopharmacology and Endocrine Pharmacology
PHA 750 Research in Pharmacology
PHA 770 Seminar in Pharmacology

Physiology:

PGY 401G Human Reproduction, Technology & Society
PGY 412G Principles of Human Physiology #@
PGY 413G Critical Thinking #@
PGY 504 Independent Work in Physiology

PGY 512 Evolutionary Medicine
PGY 520 Mechanisms of Disease
PGY 560 Pathophysiology @
PGY 603 Experimental Design & Analysis
PGY 604 Advanced Cardiovascular Physiology
PGY 608 Advanced Renal Physiology
PGY 615 Seminar in Teaching Medical Science
PGY 616 Practicum in Teaching Med Science
PGY 625 Muscle Forum
PGY 630 Advanced Topics in Physiology
PGY 791 Research in Physiology

Toxicology:

TOX 600 Ethics in Scientific Research
TOX 680 Molecular Mechanisms in Toxicology

Last revised 3/2023

Please note: requests to take EXP 650 must be approved by the MSMS DGS in writing and in advance of course registration. In addition, students may only receive one hour of academic credit for EXP 650.