

# BACHELOR of SCIENCE in MEDICINE

## Medical Technology - Course Offerings

*Understanding and integrating medical technology in healthcare practice is critical in the future of health care. Professionals able to understand and communicate the physiological and technological aspects of new treatments are in high demand. Students seeking a Bachelor of Science in Medicine with an emphasis in Medical Technology study the basis of technology systems, while attaining a core understanding of the biology of human function. The degree is designed to provide students with opportunities to learn about the application of personal medical devices in cutting-edge medical/healthcare research as well as educate students on the effective use of medical devices and biomedical data to evaluate disease presentations and/or disease risk factors and help understand therapy options.*

Course	Units
<a href="#">BE 205 Engineering Analytics and Problem Solving</a>	3
<a href="#">BE 310 Introduction to Biosystems Analytics</a>	3
<a href="#">BE 413 Applied Biostatistics</a>	3
<a href="#">BE 434 Biosystems Engineering</a>	3
<a href="#">BE 486 Biomaterial-Tissue Interactions</a>	3
<a href="#">BME 477 Introduction to Bioinformatics</a>	3
<a href="#">BME 481A Innovation, Translation and Entrepreneurship</a>	2
<a href="#">BME 493B Clinical and Translational Research Experience</a>	3
<a href="#">BSM 319 Medical Technology - Past Present and Future</a>	2
<a href="#">BSM 391 Preceptorship</a>	1-3
<a href="#">BSM 401 Virtual Medical Care Training &amp; Education in the Digital Age</a>	2
<a href="#">BSM 498H Honors Thesis</a>	6
<a href="#">CHEM 241B &amp; CHEM 243B O. CHEM II w/ lab</a>	4
<a href="#">CMM 465 Fundamentals of Light Microscopy and Digital Imaging</a>	3
<a href="#">ECE 175 Computer Programming for Engineering Applications</a>	3
<a href="#">HSD 410 Device Design in the Health Sciences: Developing Tools for Healthcare Solutions using Design Thinking</a>	3
<a href="#">ISTA 130 Computational Thinking and Doing</a>	4
<a href="#">LAW 476A Drug Discovery, Development, and Innovation to Reach the Marketplace</a>	3
<a href="#">LAW 480B - Data Privacy &amp; Cybersecurity in Healthcare</a>	3
<a href="#">LAW 480C - Health Information Technology</a>	3
<a href="#">LAW 480D - Telehealth Law &amp; Policy</a>	3
<a href="#">LAW 488A - Translational Pathways for Medical Devices</a>	3
<a href="#">NEUR 450 Regenerative Medicine</a>	3
<a href="#">PHCL 386 Intro to Tech Transfer in Medicine</a>	3

# BACHELOR of SCIENCE in MEDICINE

## Basic Medical Science - Course Offerings

Healthcare comprises nearly one-fifth of the US economy with projections of job growth over the next 10 to 20 years. Our society has a significant demand for medical professionals in fields from medical specialists and primary care to occupational therapists, nurses and physician assistants. Basic medical sciences provide a foundation for work in a wide variety of medical professions. Students seeking a Bachelor of Science in Medicine with an emphasis in Basic Medical Sciences study the fundamental processes of the human body. This major is designed for students aspiring to pursue further professional development in the healthcare field. Students gain understanding of physiological systems, cellular biology and medical treatment while attaining the necessary course work to continue in medical school and other healthcare professions.

Course	Units
<a href="#">BSM 391 Preceptorship</a>	1-3
<a href="#">BSM 498H Honors Thesis</a>	6
<a href="#">CHEM 241B &amp; CHEM 241B O. CHEM II w/ lab</a>	4
<a href="#">CMM 401 Gross Anatomy</a>	4
<a href="#">CMM 404 Cell Biology of Disease</a>	3
<a href="#">CMM 437 Immunology Basics</a>	1
<a href="#">CMM 443 Embryology Basics</a>	1
<a href="#">CMM 444 Embryology II</a>	1
<a href="#">CMM 445 Embryology III</a>	1
<a href="#">IMB 402 Medical Microbiology Basics</a>	1
<a href="#">IMB 404 Medical Virology Basics</a>	1
<a href="#">IMB 406 Human Immunology</a>	3
<a href="#">MCB 301 Molecular Basis of Life</a>	4
<a href="#">MCB 304 Molecular Genetics</a>	4
<a href="#">MIC 420 Pathogenic Bacteriology</a>	3
<a href="#">PCOL 350 ADME: How the Body Changes Drugs</a>	3
<a href="#">PCOL 355 Drug Delivery Systems</a>	3
<a href="#">PCOL 410 Pharmacogenomics and Precision Medicine</a>	3
<a href="#">PCOL 465 Infectious Disease Pharmacology</a>	3
<a href="#">PCOL 467 Pharmacology of Anti-Cancer Drugs</a>	3
<a href="#">PHCL 430 Pain/Neuropharmacology</a>	2
<a href="#">PHCL 442 Human Performances Pharmacology</a>	3
<a href="#">PHCL 444 Human Neurobiology Basics</a>	1
<a href="#">PHCL 445 Drugs of Abuse</a>	3
<a href="#">PHCL 460 Designing Drugs - from Chemistry to Cure</a>	3
<a href="#">PSIO 427 Metabolism and Disease</a>	3
<a href="#">PSIO 450 Respiratory Physiology</a>	3
<a href="#">PSIO 452 Digestive Physiology</a>	3
<a href="#">PSIO 465 Systems Neurophysiology</a>	3

<a href="#">PSIO 467 Endocrine Physiology</a>	3
<a href="#">PSIO 469 Human Reproductive Physiology</a>	3
<a href="#">PSIO 485 Cardiovascular Physiology</a>	3
<a href="#">PSIO 487 Physiology of Aging</a>	3

# BACHELOR of SCIENCE in MEDICINE

## Medicine and Society - Course Offerings

*There are many facets of health care in our society. Professionals knowledgeable about healthcare systems are in high demand in governments, businesses, schools and community organizations. If the societal impacts of healthcare interest you, consider this degree. Students seeking a Bachelor of Science in Medicine with an emphasis in Medicine and Society consider healthcare systems from a legal, historical, demographical and global perspective. This degree provides students focused on the impacts of medicine and health in our society with a broad range of perspectives. Students gain insight on the intricacies of community health, positioning themselves for in-demand roles in administration, management, social services and public health.*

Course	Units
<a href="#"><u>BSM 318 Medicine – Past, Present and Future</u></a> <u>or</u>	3
<a href="#"><u>BSM 320 Law and Medicine: Parallel Comparisons Through Time</u></a>	3
<a href="#"><u>BSM 391 Preceptorship</u></a>	1-3
<a href="#"><u>BSM 498H Honors Thesis</u></a>	6
<a href="#"><u>CHEM 241B &amp; CHEM 243B O. CHEM II w/ lab</u></a>	4
<a href="#"><u>EHS 420 Environmentally Acquired Illnesses</u></a>	3
<a href="#"><u>EHS 425 A Public Health Lens to Climate Change</u></a>	3
<a href="#"><u>EHS 439A Outbreaks and Environmental Microbiology: Then to Now</u></a>	3
<a href="#"><u>ENTR 448 Healthcare Entrepreneurship</u></a>	3
<a href="#"><u>FCM 302 Clinical Health Disparities in Sexual and Gender Minority (SGM) Populations</u></a>	3
<a href="#"><u>FCM 304 Pain and Society: Addressing the Needs of People Living with Pain as an Approach to Pain Management</u></a>	3
<a href="#"><u>FCM 305 - Mental Health and Justice</u></a>	3
<a href="#"><u>FCM 402 Addressing Health Disparities Through Interprofessional Clinical-Community Collaborations</u></a>	3
<a href="#"><u>FCM 409 Language and Cultural Humility in the Care of the Latinx Community</u></a>	3
<a href="#"><u>FCM 496E - Disability and Society</u></a>	3
<a href="#"><u>HIST 311 History of Epidemics</u></a>	3
<a href="#"><u>HIST 373 Politics of Health and Medicine in the Americas: From Historical Roots to Contemporary Development</u></a>	3
<a href="#"><u>HNRS 305 Narrative Medicine and Healthcare</u></a>	3
<a href="#"><u>HPS 406 - Immersive Experiences in Women's Health Research: Course-Based Undergraduate Research Experience</u></a>	3
<a href="#"><u>HPS 433 Global Health</u></a>	3
<a href="#"><u>LAW 452 Health Law</u></a>	3
<a href="#"><u>LAW 478A Legal and Regulatory Aspects of Healthcare Delivery</u></a>	3
<a href="#"><u>LAW 480A Liability and Regulation of Healthcare Professionals</u></a>	3
<a href="#"><u>MGMT 438 Health Care Organization and Management</u></a>	3
<a href="#"><u>NSC 212 Intuitive Eating Approach to Health &amp; Wellbeing</u></a>	3
<a href="#"><u>NSC 312 Weight Stigma, Nutrition &amp; Health</u></a>	3

<a href="#"><u>NSC 412 The Body Positive Concept &amp; You</u></a>	3
<a href="#"><u>NSC 432 Exploring Eating Disorders &amp; Body Image</u></a>	3
<a href="#"><u>PCOL 434 Pharmacology of Sex</u></a>	3
<a href="#"><u>PCOL 445 Over-the-Counter Drug Information</u></a>	3
<a href="#"><u>PHCL 452 Substance Abuse Disorder</u></a>	3
<a href="#"><u>PHPM 310 Health Care in the U.S.</u></a>	3

## BACHELOR of SCIENCE in MEDICINE

### Integrative and Practice-Focused Medicine - Course Offerings

*Direct patient care can take many forms. Increased public interest in our lifestyle and its impact on our health has created a demand for new approaches to patient care. This degree is designed for the student interested in holistic, hands-on treatments in healthcare. Students seeking a Bachelor of Science in Medicine with an emphasis in Integrative and Practice-Focused Medicine study the internal and external sources of medical conditions and gain real-world experience with treatment. This major caters to students interested in approaching health care from a perspective of wellbeing through evidence-based, integrative methods. Students master the practice of considering the patient as an individual, gaining expertise in mental, physical and comprehensive health.*

Course	Units
<a href="#"><u>BSM 301 Healthcare Professional Well-being</u></a>	1
<a href="#"><u>BSM 303 Difficult Conversations in Patient Care: The Art of Empathy</u></a>	1
<a href="#"><u>BSM 391 Preceptorship</u></a>	1-3
<a href="#"><u>BSM 498H Honors Thesis</u></a>	6
<a href="#"><u>CHEM 241B &amp; CHEM 243B O. CHEM II w/ lab</u></a>	4
<a href="#"><u>EMD 147 Emergency Medical Technician</u></a>	4
<a href="#"><u>EMD 350 Advanced Emergency Medical Services Systems</u></a>	3
<a href="#"><u>FCM 402 Addressing Health Disparities Through Interprofessional Clinical-Community Collaborations</u></a>	3
<a href="#"><u>FCM 410 Substance Misuse in Maternal and Child Health Populations</u></a>	3
<a href="#"><u>FCM 424A Arts and Community Health Intercultural Perspectives and Applications</u></a>	1
<a href="#"><u>FCM 424B Arts and Community Health Intercultural Perspectives and Applications</u></a>	1
<a href="#"><u>FCM 424C Arts and Community Health Intercultural Perspectives and Applications</u></a>	1
<a href="#"><u>FCM 496A Advancements in Substance Misuse Research and Clinical Care Seminar</u></a>	2
<a href="#"><u>FCM 498 Field Training Experience in Community Health</u></a>	3
<a href="#"><u>NEUR 450 Regenerative Medicine</u></a>	3
<a href="#"><u>NSC 275 Fundamentals of Precision Nutrition and Wellness</u></a>	3
<a href="#"><u>NSC 310 Principles of Human Nutrition in Health and Disease</u></a>	3
<a href="#"><u>NSC 315 Sports Nutrition</u></a>	3
<a href="#"><u>NSC 320 Nutrition, Physical Activity, and Health Promotion</u></a>	3
<a href="#"><u>PHCL 430 Pain/Neuropharmacology</u></a>	2
<a href="#"><u>PHCL 442 Human Performance Pharmacology (3 units)</u></a>	3
<a href="#"><u>PHCL 452 Substance Abuse Disorder</u></a>	3
<a href="#"><u>PHP 205 Fundamentals of Telehealth</u></a>	3
<a href="#"><u>PHP 312 Health Promotion and Well-being in Later Life</u></a>	3
<a href="#"><u>PSY 381 Abnormal Psychology</u></a>	3
<a href="#"><u>PSY 383 Health Psychology</u></a>	3
<a href="#"><u>PSY 405 Developmental Cognitive Neuroscience</u></a>	3
<a href="#"><u>SPAN 125 Elementary Medical Spanish for the Health Professions</u></a>	4