

# GREENVILLE MEDICINE (GMED)

---

## **GMED G601 - Integrated Practice of Medicine Ia (4 Credits)**

The first half of the M1 IPM Course (IPM-1a): The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-1a module, weekly clinical material is presented in a "Case of the Week" format, and provides an introduction to history taking, physical examination skills, clinical reasoning, and patient-centered care. The structure of this module focuses on a team-based approach to clinical problem-solving that includes the application of basic science knowledge and social science concepts to patient care. Weekly, student teams will focus on a clinical case and identify the problem, formulate hypotheses, and develop a comprehensive approach to the case. Students will examine the role of psychological, social, behavioral, economic, and environmental factors in the health of individuals and populations. Through this process, IPM-1a will promote an understanding of patients in their varying contexts: as individuals, in a societal context, within the healthcare delivery system, and as members of a larger population. The premise of the material is that an understanding of the multifactorial aspects of health and the need to understand patients as individuals is necessary for the provision of high quality, patient-centered care. Students will learn to recognize opportunities for personal growth as well as self-identify signs of stress and identify skills of managing stress. Throughout the year, students will learn effective history taking communication skills and to perform physician examinations. Students will begin to develop strategies to formulate differential diagnoses and explain the underlying basic science principles that lead to their hypotheses. Students will begin to develop the foundation for clinical research literacy and practice evidence-based strategies to support their differential diagnoses for each case.

## **GMED G602 - Integrated Practice of Medicine Ib (4 Credits)**

The second half of the M1 IPM Course (IPM-1b): The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-1b module, weekly clinical material is presented in a "Case of the Week" format, and provides an introduction to history taking, physical examination skills, clinical reasoning, and patient-centered care. The structure of this module focuses on a team-based approach to clinical problem-solving that includes the application of basic science knowledge and social science concepts to patient care. Weekly, student teams will focus on a clinical case and identify the problem, formulate hypotheses, and develop a comprehensive approach to the case. Students will examine the role of psychological, social, behavioral, economic, and environmental factors in the health of individuals and populations. Through this process, IPM-1b will promote an understanding of patients in their varying contexts: as individuals, in a societal context, within the healthcare delivery system, and as members of a larger population. The premise of the material is that an understanding of the multifactorial aspects of health and the need to understand patients as individuals is necessary for the provision of high quality, patient-centered care. Students will learn to recognize opportunities for personal growth as well as self-identify signs of stress and identify skills of managing stress. Throughout the year, students will learn effective history taking communication skills and to perform physician examinations. Students will begin to develop strategies to formulate differential diagnoses and explain the underlying basic science principles that lead to their hypotheses. Students will begin to develop the foundation for clinical research literacy and practice evidence-based strategies to support their differential diagnoses for each case.

## **GMED G605 - Emergency Medical Technician (5 Credits)**

The Emergency Medical Technician (EMT) module is a minimum state-required 200-hour program that teaches the practice of emergency healthcare delivery to patients who become unexpectedly ill or injured. The module focuses on the role and competencies of the prehospital care provider and exposes the student to the many psychological, social, behavioral, economic, environmental, and lifestyle-related factors in the health of individuals and populations. Following successful module completion, students will take a National Registry of Emergency Medical Technicians (NREMT) psychomotor skills and written examination and become certified as a South Carolina EMT.

## **GMED G606 - Foundations in Medicine I (4 Credits)**

The Foundations of Medicine I module presents initial scientific and laboratory methods to explore the biochemical, molecular, and genetic basis of health and disease. Molecular, genetic, and genomic testing modalities will be discussed, with initial application to associated disorders provided.

**GMED G607 - Foundations of Medicine II (7 Credits)**

The Foundations of Medicine II module continues to build upon Foundations of Medicine I by incorporating additional core concepts essential to understanding the development, organization, and structural elements of the human body from a clinically relevant perspective. Students will develop a clear understanding of the dynamic relationship between function and structure by examining the molecular and cellular interactions required for tissue formation and function and the differentiation of tissues into organ systems, adding additional principles integrating cell biology, immunology, histology, microbiology, lifestyle behaviors, and introductory pathophysiology and pathology material, providing the basis of disorders to be covered in the organ systems, as well as basic concepts of pharmacology to introduce students to the therapeutics of disease. Students will also acquire core knowledge in population health, biostatistics, and epidemiology to promote the application of evidence-based medicine and lifelong learning.

**GMED G610 - Integrated Practice of Medicine IIa (4 Credits)**

The first half of the M2 IPM course (IPM-2a): The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-2a module weekly clinical material is presented in a "Case of the Week" format, and provides an introduction to history taking, physical examination skills, clinical reasoning, and patient-centered care including cost effective knowledge of appropriate diagnostic studies and fundamental therapeutic procedures. The structure of this module focuses on a team-based approach to clinical problem-solving that includes the application of basic science knowledge and social science concepts to patient care. Weekly, student teams will focus on a clinical case and identify the problem, formulate hypotheses, and develop a comprehensive approach to the case. Students will examine the role of psychological, social, behavioral, economic, and environmental factors in the health of individuals and populations. Through this process, IPM-2a will promote an understanding of patients in their varying contexts: as individuals, in a societal context, within the healthcare delivery system, and as members of a larger population. The premise of the material is that an understanding of the multifactorial aspects of health and the need to understand patients as individuals is necessary for the provision of high quality, patient-centered care. Students will learn to recognize opportunities for personal growth as well as self-identify signs of stress and identify skills of managing stress. Students will learn the role other professionals play in coordinated patient care. Throughout the year, students will learn to perform physician examinations understand the role of appropriate diagnostic studies and procedures including fundamental therapeutic procedures. Students will begin to develop strategies to formulate differential diagnoses and explain the underlying basic science principles that lead to their hypotheses. Students will build on their foundation for clinical research literacy and practice evidence-based strategies to support their differential diagnoses for each case.

**GMED G611 - Integrated Practice of Medicine IIb (4 Credits)**

The second half of the M2 IPM course (IPM-2b): The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-2b module weekly clinical material is presented in a "Case of the Week" format, and provides an introduction to history taking, physical examination skills, clinical reasoning, and patient-centered care including cost effective knowledge of appropriate diagnostic studies and fundamental therapeutic procedures. The structure of this module focuses on a team-based approach to clinical problem-solving that includes the application of basic science knowledge and social science concepts to patient care. Weekly, student teams will focus on a clinical case and identify the problem, formulate hypotheses, and develop a comprehensive approach to the case. Students will examine the role of psychological, social, behavioral, economic, and environmental factors in the health of individuals and populations. Through this process, IPM-2b will promote an understanding of patients in their varying contexts: as individuals, in a societal context, within the healthcare delivery system, and as members of a larger population. The premise of the material is that an understanding of the multifactorial aspects of health and the need to understand patients as individuals is necessary for the provision of high quality, patient-centered care. Students will learn to recognize opportunities for personal growth as well as self-identify signs of stress and identify skills of managing stress. Students will learn the role other professionals play in coordinated patient care. Throughout the year, students will learn to perform physician examinations understand the role of appropriate diagnostic studies and procedures including fundamental therapeutic procedures. Students will begin to develop strategies to formulate differential diagnoses and explain the underlying basic science principles that lead to their hypotheses. Students will build on their foundation for clinical research literacy and practice evidence-based strategies to support their differential diagnoses for each case.

**GMED G616 - Hematology and Oncology (5 Credits)**

The Hematology and Oncology module provides an overview of major diseases and abnormalities of red and white blood cells, lymph nodes, spleen and thymus, bleeding and clotting disorders, and therapeutic agents for neoplastic processes. Basic principles and characteristics of neoplasia, genetic, viral, and lifestyle-related disease etiology, clinical presentation, and evidence-based clinical prevention, treatment, and management will be emphasized. Gross and microscopic images will be examined and correlated with clinical findings. Laboratory studies pertinent to diagnosis, prognosis, and therapy selection will be discussed. Imaging techniques will be applied, as applicable, and compared with respect to the information they provide in the clinical analysis and treatment of these diseases and abnormalities.

**GMED G620 - Molecular and Cellular Foundations of Medicine (3 Credits)**

This instructional module integrates the disciplines of molecular biology, genetics, cell biology, and biochemistry as the foundations of understanding the human body at the molecular and cellular level. Students will be introduced to cellular structure and its influence on cellular communication, organization and integration of cellular functions, utilization of biomolecules in metabolic pathways, and processes of cell division and transmission of genetic information. The goal of this module is to gain an understanding of the biology and biological processes of the human body from the molecular to cellular scale, processes and patterns of inheritance, and the role of the human genome and epigenome in medicine.

**GMED G621 - Musculoskeletal, Dermatology, and Rheumatology (4 Credits)**

The Musculoskeletal, Dermatology and Rheumatology module provides the students with knowledge about the structure and diseases of the musculoskeletal system, the skin, and initial discussion of rheumatologic disorders. Cadaveric dissection and correlation with radiologic findings allow for intensive study of normal anatomy and correlation with abnormal processes. Students will be presented with the effects of lifestyle on musculoskeletal health, and the major diseases and illnesses affecting these systems, including infectious, neoplastic, environmental, and immunologic; as well as their signs and symptoms, histopathologic and clinical laboratory characteristics, and rationale for current therapeutic interventions.

**GMED G626 - Cardiovascular (5 Credits)**

The Cardiovascular module provides detailed understanding of cardiovascular structure and processes, as well as major diseases of the heart and vasculature, along with the effects of lifestyle on cardiovascular health. Congenital and acquired disorders will be discussed, with examination of their risk factors and the associated structural, pathophysiological and histological processes. Disease etiology, diagnostic techniques, clinical presentation, and evidence-based clinical management will be emphasized.

**GMED G630 - Structure and Function of the Human Body I (7 Credits)**

The Structure & Function module fully integrates the basic disciplines of Biochemistry, Histology, Embryology, Gross Anatomy and Physiology of the human body. Building upon information from the Molecular and Cellular Foundations module, this unit focuses on understanding the interaction and communication of cells to form tissues, the embryological development and differentiation of tissues into organ systems, the anatomical organization and function of tissues and organ systems, and the dynamic relationship between structure and function, from the cellular level to the whole body. Imaging techniques including x-ray, ultrasound, computerized tomography and magnetic resonance will be applied and compared with respect to information they provide in the clinical analysis of structure/function relationships and the consequences of abnormalities in health and disease.

**GMED G631 - Pulmonary (4 Credits)**

The Pulmonary module provides an overview of normal lung anatomy and physiology and acute and chronic diseases associated with the respiratory system. Building upon the physiologic principles of breathing and gas exchange, the module covers the anatomical, pathophysiological, and lifestyle-related causes of disease states, diagnostic procedures, lifestyle and pharmacologic therapeutic approaches, and examples of the ways in which other systems contribute to cardiopulmonary disorders.

**GMED G635 - Structure and Function of the Human Body II (7 Credits)**

The Structure and Function II module is a continuation of the previous Structure and Function I module. The module continues to integrate gross anatomy, histology, embryology, radiology, physiology, and lifestyle medicine. The purpose of the Structure and Function II module is to provide an integrated and clinically relevant basis of knowledge for understanding the interaction and communication of molecules and cells to form tissues, the differentiation of tissues into organ systems, and the dynamic relationship between physiological functions and structures. This will be accomplished through a student-centered and technology-enhanced instructional approach to achieve the overall module objectives.

**GMED G636 - Renal (4 Credits)**

The Renal module encompasses organs and tissues of the kidney and lower urinary tract. By advancing students' detailed knowledge of the physiology and pathophysiology of renal disease, including evidence-based lifestyle-related behaviors affecting the renal system, this module will enable them to describe the major renal diseases, including their signs and symptoms, histopathologic and clinical laboratory characteristics, and rationale for prevention of chronic kidney disease as well as current therapeutic interventions.

**GMED G640 - Neuroscience (3 Credits)**

The neuroscience module integrates the development, anatomy, biochemistry and physiology of the central and peripheral nervous system with clinical correlates. The principles that underlie the anatomical structures of each system are correlated with their physiology and relevant clinical applications. Students will learn to integrate the normal molecular, cellular, physiological, and anatomical aspects of the nervous system in order to understand the basis of disorders commonly encountered in clinical practice. The Neuroscience module emphasizes integration in four different areas: • Anatomical and functional organization of the nervous system • Morphological and functional correlates of neuronal activity • Vascular supply of the nervous system and its clinical correlates • Integration of motor and sensory systems and their clinical correlates.

**GMED G641 - Endocrine (2 Credits)**

The Endocrine module focuses on the contribution of endocrine systems to hormonal regulation of growth and development, metabolism, and homeostasis. Students will develop a clear understanding of the major endocrine glands, production and synthesis of hormones, mechanisms of action and regulation of hormone secretion, as well as various aspects regarding the anatomy, biochemistry and physiology of the endocrine systems and the pathophysiology, and epidemiology. This module will also examine the characteristics of common diseases of the endocrine system, similarities and differences in etiology, diagnostic methods, lifestyle behaviors, as well as prevention and treatment.

**GMED G646 - Anatomy I (1 Credit)**

This course will help students acquire a conceptual and practical framework to recognize anatomical structures and explain the physiological functions of body systems. Students will apply knowledge of function to predict the features of anatomical structures and develop a vocabulary of appropriate terminology to effectively communicate anatomy-related information. The module will correlate with the Spring BMS modules.

**GMED G650 - Defenses and Responses (3 Credits)**

The Defenses and Responses module is focused on understanding the immune system and mechanisms by which the body defends against pathological and pathophysiological influences, including infectious organisms and malignant transformations. This module also addresses how abnormalities in the immune system contribute to disease manifestations during infection and autoimmune disorders. Integrated within this module is the basic introduction to pathology, understanding pathogenesis, and the study of the body's response to disruptions including those induced by trauma, infection, genetic mutation and drugs.

**GMED G651 - Gastrointestinal/Hepatic (5 Credits)**

The Gastrointestinal/Hepatic module provides an overview of the organs that make up the gastrointestinal tract and their innervation, vascular supply, and sequence of activation during normal digestion. Students will understand the physical and chemical events necessary for normal digestion and the physiologic regulation that coordinates these processes. This module will also examine the characteristics of common diseases of the gastrointestinal system, their clinical presentation, prevention, diagnostic methods, pathology, etiology, treatment, and the impact of diet and lifestyle behaviors on these factors. Disorders of the esophagus, stomach, small and large intestine, hepatobiliary system, and exocrine pancreas will be explored.

**GMED G656 - Reproductive (5 Credits)**

The Reproductive module provides students with a fundamental knowledge of the structure, function, and diseases of the male and female reproductive systems across the lifespan, including pregnancy and childbirth. Hormone synthesis, regulation, mechanism of action and the pathophysiology resulting from endocrine and reproductive system malfunction will be emphasized. Students will learn how lifestyle affects both male and female reproductive health, and how to evaluate clinical history, physical examination and laboratory data related to reproductive disease using an evidence-based approach.

**GMED G657 - Anatomy II (1 Credit)**

This course will help students acquire a conceptual and practical framework to recognize anatomical structures and explain the physiological functions of body systems. Students will apply knowledge of function to predict the features of anatomical structures and develop a vocabulary of appropriate terminology to effectively communicate anatomy-related information. The module will correlate with the Fall BMS modules.

**GMED G660 - Biomedical Principles of Infectious Diseases and Therapy (3 Credits)**

The Biomedical Principles of Infectious Diseases and Therapy module will present core concepts underlying causative microbial pathogens of infectious diseases, disease vectors, modes of transmission, mechanisms of pathogenesis and pharmacologic principles of treatment and prevention. This module will lay the foundation for understanding the infectious diseases of the different organ systems and provide a basic epidemiologic approach to prevention and treatment strategies. Clinical evaluation, diagnostic testing and laboratory results used for the identification and classification of microorganisms will also be examined. In addition, students will investigate the characteristics of ill patients and pathogenic organisms that influence therapeutic protocols as well as analyze strategies for the management of antimicrobial resistance and infection control.

**GMED G661 - Brain and Behavior (8 Credits)**

The Brain and Behavior module integrates the normal molecular, cellular, physiological, and anatomical aspects of the central and peripheral nervous system to understand the basis of disorders commonly encountered in clinical practice. Laboratory experience will connect structures within the brain with clinical, radiologic, and pathologic findings. An overview of major diseases of the nervous system including the visual and auditory systems, population-based diseases including Alzheimer's, Dementia, and Parkinson's disease, and relevant lifestyle and relevant behavioral science, psychiatry, and developmental topics to prevent and manage these diseases will be provided. Pharmacologic and non-pharmacologic treatment options are discussed.

**GMED G665 - Mind, Brain, and Behavior (3 Credits)**

The Mind, Brain and Behavior module is an integrated multidisciplinary overview of the major psychiatric disorders and diseases of the nervous system, including mood and psychotic disorders, visual/auditory disorders, cerebrovascular disease, brain tumors, neurodegenerative disorders, seizure disorders, and brain trauma. This module builds upon knowledge learned in the Structure/Function, Foundations and Neuroscience modules. Gross and histologic images will be reviewed and correlated with clinical findings. Disease etiology, clinical presentation, and evidence-based clinical management will be emphasized. Imaging techniques will be applied and compared with respect to the information they provide in the clinical analysis and treatment of these diseases. This module emphasizes the ongoing development of clinical reasoning skills, an understanding of the clinical-pathologic correlations of the diseases, and skills of critical judgment based on evidence.

**GMED G667 - Multiorgan Systems (8 Credits)**

The Multiorgan systems module reviews and expands upon previous preclinical modules by covering the prevention, pathophysiology, pathology, pharmacology of the nation's top lifestyle related noncommunicable chronic diseases, infectious diseases and oncology of each organ system in an integrated manner, assessing health and disease of the full patient. Multisystem disorders and patients with multiple medical problems will be discussed. The module illustrates and emphasizes basic science principles through exploration of disease processes and clinical prevention, treatment, and/or management. Thoughtful analysis and synthesis of basic science information and its clinical application will be accomplished through a variety of synchronous and asynchronous teaching formats, including self-directed learning activities, large and small group active learning sessions, discussion groups, a comprehensive basic science examination, and other learning and assessment modalities.

**GMED G671 - Cardiovascular/Pulmonary/Renal Systems (7 Credits)**

The Cardiovascular, Pulmonary and Renal module is an integrated multidisciplinary overview of major diseases of the heart, vasculature, lungs, kidney and lower urinary tract. This module builds upon knowledge learned in Year 1. Descriptions of the pathophysiological and histological processes associated with common cardiovascular, pulmonary and renal disease will be given through active lecture and case studies. Examples of other systems (e.g. endocrine) generating cardiopulmonary and renal disorders will be included. Disease etiology, clinical presentation, and evidence-based clinical management will be emphasized. Diagnostic techniques will be evaluated and compared with respect to the information they provide in the clinical analysis and treatment of these diseases.

**GMED G675 - Hematology/Oncology Systems (3 Credits)**

The Hematology/Oncology module is an integrated multidisciplinary overview of major diseases and abnormalities of red and white blood cells, lymph nodes, spleen and thymus, bleeding and clotting disorders, and therapeutic agents for neoplastic processes as a whole. This module reviews basic principles and characteristics of neoplasia and builds upon knowledge learned during Year 1. Disease etiology, clinical presentation, and evidence-based clinical management will be emphasized. Gross and microscopic images will be reviewed and correlated with clinical findings. Laboratory studies pertinent to diagnosis, prognosis, and therapy selection will be discussed. Imaging techniques will be applied, as applicable, and compared with respect to the information they provide in the clinical analysis and treatment of these diseases and abnormalities. The educational format will include active lectures, slide review sessions, case-based discussions, laboratory results review sessions, question/quiz-based sessions, and a final review session.

**GMED G680 - Musculoskeletal/Dermatology/Rheumatology Systems (2 Credits)**

Focuses on the pathology, pathophysiology, signs and symptoms, diagnostic methods, and drugs used for the treatment of disorders related to these organ systems. This module emphasizes the ongoing development of clinical reasoning skills, an understanding of the clinical-pathologic correlations of the diseases, and skills of critical judgment based on evidence. Diagnostic methods and procedures, their indications, contraindications, and complications will be discussed. An understanding of ethical, psychosocial, and cultural factors that affect patient behavior and influence treatment plans will be integrated into the topics presented in this module.

**GMED G685 - Gastrointestinal/Hepatic Systems (3 Credits)**

The GI and Hepatic Systems Module focuses on the pathology, pathophysiology, signs and symptoms, diagnostic methods, and drugs used for the treatment of disorders related to these systems. This module emphasizes the ongoing development of clinical reasoning skills, an understanding of the clinical-pathologic correlations of the diseases, and skills of critical judgment based on evidence. Diagnostic methods and procedures, their indications, contraindications, and complications will be discussed. An understanding of ethical, psychosocial, and cultural factors that affect patient behavior and influence treatment plans will be integrated into the topics presented in this module.

**GMED G692 - Medical Spanish (0 Credits)**

This course is for students who demonstrate an intermediate level of proficiency in Spanish and want to begin exploring how to use their Spanish language skills in a medical context. The goal is to learn and expand on medical Spanish terminology as well as provide avenues to practice listening, speaking, and writing on medical topics in Spanish. Each week we will focus on different terminology by organ system as well as highlight different cultural nuances in how the Latino community approaches healthcare.

**GMED G693 - LEAD (0 Credits)**

The goal of the LEAD concentration is to prepare physicians to lead our complex, ever-changing healthcare system and improve patient health outcomes. The overall objective of the LEAD curriculum is to provide basic knowledge of leadership principles and an opportunity to develop this knowledge into sustained leadership skills and behaviors.

**GMED G694 - Substance Use Disorder and Recovery (0 Credits)**

The summer experience around substance use disorder and recovery (SUDR) provides an opportunity for medical students to enhance their learning about SUD and to engage with the FAVOR Greenville Recovery community organization in both training as a Recovery Coach and as a practicing Recovery Coach for people in Greenville, South Carolina who request a coach. Completion of all components of this experience will result in a solid background on SUD and Recovery and can be a nice addition to your CV.

**GMED G695 - Endocrine/Reproductive Systems (3 Credits)**

The Endocrine and Reproductive Systems Module presents core concepts underlying the pathology, pathophysiology, signs and symptoms and pharmaceutical principles of treatment related to the endocrine and reproductive systems. This module emphasizes the ongoing development of clinical reasoning skills, an understanding of the clinical-pathologic correlations of diseases and skills of critical judgment based on scientific evidence. Diagnostic methods and procedures, their indications, contraindications, and complications are discussed. Additionally, an understanding of ethical, psychosocial, and cultural factors that impact patient behavior and influence treatment plans are integrated into the module topics.

**GMED G696 - Step 1 Preparation (0 Credits)**

A designated time of preparation for the NBME Step 1 exam, culminating in the taking of said exam. A passing Step 1 exam grade is required to pass the course.

**GMED G697 - Culinary Medicine: Disease Prevention and Treatment (0 Credits)**

The Culinary Medicine Elective prepares future physicians to become frontline advocates for healthy lifestyle behaviors in their patients and communities through the effective application of Lifestyle Medicine principles. Students will learn how to effectively use evidence-based Lifestyle Medicine to prevent and treat chronic diseases that include obesity, type 2 diabetes, hypertension, cardiovascular disease, and some forms of cancer. This will be a voluntary, not-for-credit elective which meets 1-2 times per module in M2 year.

**GMED G698 - Culinary Medicine: Foundations of Patient Care (0 Credits)**

The Culinary Medicine Elective prepares future physicians to become frontline advocates for healthy lifestyle behaviors in their patients and communities through the effective application of Lifestyle Medicine principles. Students will learn how to effectively use evidence-based Lifestyle Medicine to prevent and treat chronic diseases that include obesity, type 2 diabetes, hypertension, cardiovascular disease, and some forms of cancer.

**GMED G699 - Research Elective (0 Credits)**

The Summer Research Elective provides an opportunity for rising M2 students to engage in clinically relevant research throughout the Health Sciences Center at Prisma Health. Enrollments and subsequent completion of this zero credit course will be recorded on the Fall Semester transcript of the M2 academic year. Enrollment in the Summer Research Elective requires completion of the "Summer Research Elective Approval Form" and subsequent approval by the course director. The form will require student to have identified a research mentor within the Health Sciences Center at Prisma Health, agreed upon a research project and developed a timeline and goals for the project (\*if the research mentor is not a member of the Dept. of Biomedical Sciences, the student must identify a secondary advisor within the Dept. of Biomedical Sciences). Students will be required to write a short research proposal outlining their plan and expectations of their summer research experience at the start of the summer. The Summer Research Elective will be offered to rising M2 students between the end of their M1 year and beginning of their M2 year. The time commitment will be a minimum of 120 hours to be completed in approximately 8 weeks over the summer. These hours must be documented and can include time spent completing research efforts (i.e. lab bench, data analysis, chart review, etc.). Students will be divided into 5 groups and assigned an HSC Librarian to meet with at least once during the summer. The student will be expected to present their research findings as an oral/poster presentation at the Annual BMS Summer Research Symposium or approved venue if there is an unavoidable conflict. The student will also be required to complete a research abstract of their efforts upon completion of the elective.

**GMED G703 - Integrated Practice of Medicine III (1 Credit)**

The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-3 module, the curriculum is designed to facilitate the students' transition into the real world of health care delivery as practicing professionals. Building on clinical experiences via third-year clerkships, students discuss the importance and application of topics such as quality and risk management, partnering with other professionals for better patient care such as medical-legal partnerships, advanced diagnostics, lifestyle medicine, and medical practice in the context of societal challenges. Students will further their understanding of identifying and managing stress, work life balance between professional and personal obligations. Students will engage in discussions with patient panels representing underserved and vulnerable populations, learn how to minimize medical errors through effective communication tools and identify opportunities for health care system professional leadership. Students will participate in discussion surrounding current health care policy issues and national health crisis content such as substance use issues. Students will demonstrate proficiency in maintenance of competency in basic and advanced procedural skills and promote professional growth through refining their curriculum vitae preparation for residency applications.

**GMED G705 - Recovery Coaching for Addiction (2 Credits)**

The elective will provide an opportunity for medical students to learn more about addiction and recovery and to apply the principles of motivation interviewing to all patients who are in need of behavior change to improve health. Students will be required to 1) Complete a 40 hours training by the Jones Solution Academy in order to become a Recovery Coach. Students are STRONGLY encouraged to volunteer as a Recovery Coach for FAVOR Greenville upon completion of the elective. 2) Attend meetings at Alcoholics Anonymous, Narcotics Anonymous and Al-Anon and write a reflection on one. 3) Attend group activities at FAVOR Greenville. 4) Observe GHS acupuncturist. 5) Attend sessions at The Pavillion. 6) Take all surveys that are part of the Elective course.

**GMED G740 - Gender and Sexuality in Clinical Settings (2 Credits)**

This elective is designed to provide fourth-year students with the opportunity to develop greater breadth and depth of knowledge to allow them to better address gender and sexuality issues with their patients. Students will receive instruction on the concepts, theories, and psychosocial aspects of gender identity, sexual attraction, sexual functioning, and treatment of sexual dysfunction. Students will examine their own beliefs and assumptions that affect their reactions to gender-identity and sexuality-related issues in patients, and will be guided as to how to take a sexual history and offer psychosocial intervention for patients' sexuality-related concerns. The course has reading requirements and other assigned work, as well as mandatory class meeting times. Students are expected to be self-motivated and committed to self-examination in their approach to this course.

**GMED G755 - Leadership in Medicine (2 Credits)**

This elective is designed to provide students with the opportunity to develop greater breadth and depth of knowledge in the principles of leadership. Students will receive instruction on the concepts, theories, and applications of leadership in medicine. Students will examine their own strengths and weaknesses, personality styles, and values as each pertains to their effectiveness as leaders. The course has reading requirements and other assigned work, including a project, as well as a small set of mandatory class meeting times. Students are expected to be self-motivated and committed to self-examination in their approach to this course.

**GMED G760 - LEAD Summer Intensification (2 Credits)**

Leadership is a skill that is both essential and learnable for physicians entering an increasingly complex healthcare system. The Leadership Education and Development (LEAD) program will prepare future physicians to lead in an ever changing delivery structure for health and healthcare with a goal to ensure optimal patient outcomes. The LEAD summer intensification introduces core leadership skills during undergraduate medical education to ensure competency and to foster success in leading the future of medicine, healthcare, and patient health. LEAD 2021 will be a two-week summer intensification with daily, half day discussions and activities related to core leadership topics. Discussion of core leadership topics will be led by content experts with opportunity to use leadership skills in small group activities. The overall objective of the LEAD curriculum is to provide basic knowledge of leadership principles and an opportunity to develop this knowledge into sustained leadership skills and behaviors. Open group discussions will be held with the learners to discuss content, delivery, and overall impact of the LEAD summer intensification.

**GMED G770 - Novel Coronavirus Elective (2 Credits)**

All students will be required to complete the COVID-19 training modules developed by the American College of Physicians and the World Health Organization. Students will also have articles assigned each week as mandatory reading during the two week rotation. These articles will be discussed between faculty moderators and students in a weekly journal club discussion, conducted as a web conference or a conference call with IPM and BMS faculty.

**GMED G780 - Health Psychology (2 Credits)**

This 2-week course will focus on the psychological and physiological aspects of health, including the systems involved in chronic and acute stress responses and how they relate to chronic illness, different body systems (neurological, reproductive, cardiac, gastrointestinal, immunological), pain, memory, sleep, nutrition, and addictive behaviors, with an emphasis on prevention and methods of changing related behaviors. This course will offer opportunities for students to develop novel ways to integrate theory and research on stress and illness with advances in the science of health and wellness, with the purpose of translating current research to future applications in a clinical environment. In addition, medical student stress, including transitioning from medical school to residency, and the strategies/coping skills that can be used to ease that transition, will be discussed. Students will apply their knowledge through online synchronous and asynchronous discussions, journal article review, development of a public service announcement geared toward the community, and a final project/presentation which applies health psychology concepts to the area of their choice. Active self-assessment of health will be a learning tool for this course, and application of health psychology concepts to development of resiliency and prevention of burnout in physicians will be a focus.

**GMED G801 - Integrated Practice of Medicine IV (4 Credits)**

The Integrated Practice of Medicine modules are part of a longitudinal multi-year curriculum that prepares students for the multi-faceted aspects of clinical medicine including application of basic science knowledge, clinical proficiency in physical diagnosis, diagnostic testing and fundamental therapeutic procedures, patient interactions, population health, effective communication skills, behavioral and social considerations, team-based health care delivery, ethical issues, professionalism, life-long learning, research and evidence-based practice. In the IPM-4 module, the curriculum is designed to facilitate the students' transition into the first year of residency and the real world of health care delivery. In the second half of the fourth year, students experience a required Intensification Month split into two separate phases: 1) a two week "Core" required by all students; and 2) a two week "Specialty" specific phase which places students into tracts based on their stated clinical specialty. Within these four weeks, students receive applied information that will directly influence their residency experience, including residency specific topics, health care delivery systems and administrative topics. Students will apply skills to function as an effective patient care partner with peers and other professionals, refine clinical skills in interpreting advanced images, studies and challenging communications surrounding patient death. Students will further their foundational skills in identifying and coping with stress, behavior changes, and effectively managing personal and professional expectations.

**GMED G805 - Survey of Culinary Medicine (4 Credits)**

The M4 Culinary Medicine Elective prepares future physicians to effectively work with patients and communities through enhanced Culinary Medicine knowledge and counseling skills, along with cooking techniques, to prevent and treat chronic diseases that include obesity, type 2 diabetes, hypertension, cardiovascular disease, and some forms of cancer. This will be a 4-week, 4 credit hour elective which will meet at least twice per week in person (i.e. classroom and kitchen) and twice per week virtually.

**GMED G810 - Academic Medicine - Research (longitudinal) (4 Credits)**

A description of project, detailing your study and what you wish to accomplish during this elective must be submitted to the Course Director. This proposal should include background information, a research question, the methods that will be employed, and the expected outcomes and analytic methods that will be used. Specific details of the student role in the proposed project should be outlined. Approved projects will be assigned a faculty mentor.

**GMED G815 - Teaching, Learning, and Assessment in Medical Education (4 Credits)**

The Teaching, Learning, and Assessment in Medical Education elective is designed for 4th year medical students interested in acquiring experience in medical education. The elective aims to start building the foundation of skills required for teaching in medicine via exposure to newer principles of adult learning, current best practices, and the theoretical underpinnings of assessment. Case-based and hands-on learning are key components of this elective, with significant participant interaction and active modeling of instruction techniques. Teaching experience includes introduction to NBME-style multiple choice question writing, delivery of briefing sessions, production of multimedia presentations, interactive small group supervision during in-class sessions, and organization of informal review sessions.

**GMED G820 - Global Health (4 Credits)**

Student may select from AAMC Global Health Learning Opportunities offering or submit their own proposed experience which would need approval by the Course Director (Dr. Jeremy Byrd) and approval from the University of South Carolina Study Abroad Office.

**GMED G825 - Health Policy and Advocacy (longitudinal) (4 Credits)**

The purpose of this course is to provide learners with an exposure to the macro level health policy framework, tensions, and influences and to provide students with opportunities to work in the community and to develop and implement advocacy skills. Learners will engage in observational experiences in community health advocacy settings. Based on interests, students can be tracked into pediatric, adult, or combined focus community settings. Students are introduced to the principles of health policy and community advocacy through a series of readings, reflections, selected required conferences and web-based learning. In addition, students participate in service-based learning opportunities with community partners in the Greenville area. Each student must complete a community mapping or other approved advocacy project. Additionally, as part of the elective requirement, students will meet with individual physicians in selected GHS clinical departments to ascertain prevailing policy questions and advocacy interests. Findings from physician feedback will be incorporated into a final project and will inform relevant health policy and advocacy topics for future learners. The goal of this elective is to equip students with the skills to be effective and engaged leaders in community advocacy and influencers in health policy. The majority of the coursework should be done during the assigned block.

**GMED G830 - Medical Spanish (longitudinal) (4 Credits)**

This is a 4-week elective that can be blocked into a 4-week segment or completed longitudinally. Students will complete an online Medical Spanish proficiency course. Students will learn how to communicate in Spanish regarding a number of systems: cardiovascular, pulmonary, gastrointestinal, obstetrics and gynecology, psychiatry, musculoskeletal, neurology, prevention, immunizations, and screenings. In addition, students will learn how to take a history, perform physical examinations, ask review of systems, and inform patients of the necessary diagnostic evaluations. Students are required to complete an online medical Spanish course, attend lectures or online learning sessions, participate in formative weekly interviews, submit weekly history and physical examination write-ups, and observe interpreters in various settings. Students will work with a faculty mentor and/or interpreter to develop an OSCE station on a common diagnosis at the conclusion of their rotation. The majority of the coursework should be done during the assigned block.

**GMED G835 - Advanced Studies in Clinical Anatomy (4 Credits)**

The Advanced Studies in Clinical Anatomy elective is designed to allow 4th-year medical students the opportunity to revisit a region of anatomy that will be relevant to their future career plans while expanding their teaching knowledge and skills via participation in the module 'Structure and Function of the Human Body'. Teaching experience includes delivery of briefing sessions, production of multimedia presentations, interactive small group supervision during laboratory and in-class sessions, preparation and review of dissections, and organization of informal practical and course examination sessions.

**GMED G840 - Gender and Sexuality in Clinical Settings (2 Credits)**

This elective is designed to provide fourth-year students with the opportunity to develop greater breadth and depth of knowledge to allow them to better address gender and sexuality issues with their patients. Students will receive instruction on the concepts, theories and psychosocial aspects of gender identity, sexual attraction, sexual functioning and treatment of sexual dysfunction. Students will examine their own beliefs and assumptions that affect reactions to gender-identity and sexuality-related issues in patients, and will be guided as to how to take a sexual history and offer psychosocial intervention for patients' sexuality-related concerns. The course has reading requirements and other assigned work, as well as mandatory class meeting times. Students are expected to be self-motivated and committed to self-examination in their approach to this course.

**GMED G845 - High Value, Cost Conscious Healthcare and Quality Improvement (4 Credits)**

The elective is to provide an opportunity to 4th-year medical students to participate in high-value healthcare system improvements in order to prepare them to be an effective participant and leader in healthcare transformation as a resident and practicing physician. The elective is structured around the following experiences and activities: 1) Seminars: learning and discussion regarding high-value healthcare including healthcare waste, quality, cost, and patient experience. Faculty both within the Greenville Health System and the community will participate. 2) Observational participation in various Greenville Health System initiatives which are dedicated to quality and value improvement (these would include committee meetings). 3) Longitudinal mentorship: The course director will facilitate student discussion regarding observations of healthcare waste or value improvement that occurs during M3 and M4 rotations and during exposure to seminars and quality and value initiatives. 4) Project development: Based on these discussions, each student will identify an improvement opportunity based on their experiences during their clerkships. They will then work with their mentor to develop a novel intervention to improve care and/or reduce costs. It is anticipated that these ideas will form the foundation for QI projects.

**GMED G850 - Substance Use Disorder and Recovery (2 Credits)**

The elective will provide an opportunity for medical students to learn more about substance use disorder (SUD) and recovery and apply the principles of motivational interviewing to all patients who are in need of behavior change to improve health. Students will complete Recovery Coach Training with FAVOR Greenville. Additional educational components include educational modules delivered by national experts, a book discussion around care redesign for SUD and Recovery and selected educational modules at the course directors' discretion.

**GMED G851 - Substance Use Disorder Longitudinal Elective (4 Credits)**

The UofSC SOMG has a robust curriculum around substance use disorder and recovery. This elective will provide a deeper dive and increased experiences in the topic for any student entering any specialty. This will be a longitudinal course and includes monthly meetings to discuss readings, videos or hear guest lectures on the topic; attendance at community outreach events that include harm reduction; attendance at one of the Magdalene Clinics of Prisma Health to experience treatment of addiction in the maternity population; experience at a methadone clinic; monthly participation in the Addiction Consult service; attendance at Greenville County drug court under supervision of Judge Charles Simmons; opportunity to participate and complete a quality improvement project around substance use disorder and recovery; and shadowing of a Peer Support Specialist at FAVOR Greenville on a monthly basis.

**GMED G855 - Leadership in Medicine (2 Credits)**

This elective is designed to provide fourth-year students with the opportunity to develop greater breadth and depth of knowledge in the principles of leadership. Students will receive instruction on the concepts, theories, and applications of leadership in medicine. Students will examine their own strengths and weaknesses, personality styles, and values as each pertains to their effectiveness as leaders. The course has reading requirements and other assigned work, including a project, as well as a small set of mandatory class meeting times. Students are expected to be self-motivated and committed to self-examination in their approach to this course.

**GMED G860 - Innovation Translation (4 Credits)**

Provide students with exposure to a real world working environment within the designated "innovation engine" of a large healthcare delivery system. Student will enhance critical thinking skills by participating in the evaluation, due diligence, and vetting of new intellectual property and industry engagement opportunities. Student may be exposed to a wide spectrum of executive-level professionals directly tied to new and existing innovation opportunities from new clinical opportunities to economic development projects.

**GMED G865 - Medical Legal Partnership (2 Credits)**

This 2-week elective is designed for fourth year medical students to give an insight to the medical legal partnership associated with Prisma Health. Students will have the opportunity to be involved with both pediatric and geriatric patients that are involved with the medical legal partnership. Students will learn how legal issues impact a patient's overall health and how the MP can help patients. Students can learn how to navigate the MLP as future physicians. Student will have the opportunity to go to court and work alongside both doctors and attorneys involved with the MLP. Students will learn how community health can impact the individual patient and learn how to deliver quality care. At the end of the two weeks student will present on a topic/patient.

**GMED G870 - Novel Coronavirus Elective (2 Credits)**

All students will be required to complete the COVID-19 training modules developed by the American College of Physicians and the World Health Organization. Students will also have articles assigned each week as mandatory reading during the two week rotation. These articles will be discussed between faculty moderators and students in a weekly journal club discussion, conducted as a web conference or a conference call with IPM and BMS faculty.

**GMED G875 - Biological Rhythms (2 Credits)**

This 2-week module will explore biological rhythms and their influence on human health and disease. An overview of biological rhythms, including the cellular, molecular, and systems basis of cognitive, behavioral, psychological and physiological rhythms will be explored. Emphasis will be placed on the application of knowledge, gained through readings from current literature, journal article reviews, discussion boards, a concept integration assignment, and a final application project to apply biological rhythms research to the area of the student's choice. Human circadian systems and the influence of our brain's biological clock on health, mental health, and disease will be considered in depth, with a focus on chronotherapeutics and sleep medicine. Active self-assessment of biological rhythms will be a learning tool for this course, and application of biological rhythm concepts to future patients and the clinical environment will be explored.

**GMED G880 - Health Psychology (2 Credits)**

This 2-week course will focus on the psychological and physiological aspects of health, including the systems involved in chronic and acute stress responses and how they relate to chronic illness, different body systems (neurological, reproductive, cardiac, gastrointestinal, immunological), pain, memory, sleep, nutrition, and addictive behaviors, with an emphasis on prevention and methods of changing related behaviors. This course will offer opportunities for students to develop novel ways to integrate theory and research on stress and illness with advances in the science of health and wellness, with the purpose of translating current research to future applications in a clinical environment. In addition, medical student stress, including transitioning from medical school to residency, and the strategies/coping skills that can be used to ease that transition, will be discussed. Students will apply their knowledge through online synchronous and asynchronous discussions, journal article review, development of a public service announcement geared toward the community, and a final project/presentation which applies health psychology concepts to the area of their choice. Active self-assessment of health will be a learning tool for this course, and application of health psychology concepts to development of resiliency and prevention of burnout in physicians will be a focus.

**GMED G885 - Medical Humanities (4 Credits)**

Many medical students emerge from their undergraduate years having honed their minds with the heft of the "hard" sciences. Many of these students have had little opportunity or interest enough to fully appreciate the relevance of learning about topics in the humanities and have any beneficial effect in their educational experience. There is ample and robust evidence to support the importance of integrating a formal humanities training within the medical education curriculum. Using models from other institutions, we will focus on the development and enhancement of the student's capacity for empathy and self-reflection while translating these qualities in day-to-day interactions with patients. Students will meet with the course directors monthly in 2-hour sessions where we will discuss required reading and assignments in literature relevant to medicine including short stories, essays, articles, and poetry as well as assignments in the visual arts, film, music, and theatre.

**GMED G898 - Step 2 Preparation (0 Credits)**

A designated time of preparation for the NBME Step 2 CK exam, culminating in the taking of said exam. A passing Step 2CK exam grade is required to pass the course.

**GMED G899 - Away Rotation in Research (2-4 Credits)**

Research elective at another institution.