

# BPM 502 : Basic Principles of Medicine III (BPM3)

The Basic Principles of Medicine (BPM3) course is an 8-credit course taught over 6 weeks in Term 3 of the Doctor of Medicine (MD) program of St George's University School of Medicine, Grenada. The core aim of this course is to equip physicians with: the knowledge and skills to understand fundamental principles inherent to a future understanding and diagnosis of microbial infections; devise and utilize strategies that improve the health of entire communities and populations and help reduce health inequities among population groups; and to uphold standards of ethics and professionalism expected across North America.

The BPM3 course is sub-structured into four thematic areas:

1. **Ethics, Professionalism and Medical Jurisprudence:** A survey of bioethics introduces research ethics, public health ethics, medical and clinical ethics, professional ethics, and the professional responsibilities of today's physicians. These responsibilities derive from professional knowledge, attitudes, and practices involved in clinical medicine, medical research, and disease prevention, surveillance, and control. They stem from the medical profession itself, and from fundamental concepts of law and ethics related to the medical profession and doctor-patient relationships. Specific topics addressed include environmental health ethics, physician impairment, social and community ethics, patient autonomy and informed consent, beginning of life issues and termination of pregnancy, and end-of-life decisions. Fundamental concepts of law and ethics that relate to the medical profession are discussed, along with issues bearing on physician professionalism and boundary crossings. Societal trust and related concerns involving the regulation of medical practice are emphasized along with basic principles of patient privacy, confidentiality, medical malpractice and liability
2. **Basics of Immunology and Microbiology:** Microorganisms are the single most significant contributor to human health and disease worldwide. The Basics of Immunology and Microbiology component focuses on presenting the fundamental principles of microorganisms in the context of their interaction with humans as the core knowledge necessary for effective and efficient diagnosis and treatment of infectious diseases. The course begins with an overview of microbial groups, introduction of some common pathogens, their features, replication strategies and basic mechanisms of pathogenesis. In parallel the key immunological principles will be discussed. This will facilitate cross-linkage and a more in-depth understanding of the body's natural defense mechanisms against infectious agents. Examples of immune system failure will be presented in the context of diversity of the infectious disorders and some primary immunodeficiency syndromes. This compound knowledge will allow students to understand how microbial growth and pathogenicity could be controlled through the use of therapeutic compounds combined with physical and chemical control methods. The detail as to the specific microbial infections that result from human-microbial interactions will be covered in [MICR672](#) Introduction to Infectious Disease (Term 4).
3. **Public Health Assessment Tools:** Basic biostatistics concepts and tools are introduced, which will enable physicians to understand and critically examine the medical literature. Core concepts in clinical epidemiology, preventive medicine and evidence based medicine that are most relevant to physicians are taught. Emphasis is on recognizing patterns of disease occurrence and disease outcomes in human populations and using such information to 1) inform diagnosis and treatment strategy in patient care; and to 2) foster application of ethically and scientifically sound principles in community intervention. Quantitative topics are enhanced with clinical examples from the medical literature, providing a transition from research findings to care of individual patients. The ways in which human behavior, the environment, and politics influences health in different societies are also considered. An international comparison of health systems is provided, and factors underlying existing disparities in healthcare is explored. Current issues in healthcare financing and delivery are discussed, along with insurance systems, cost containment, different types of medical practice, and medical practice economics.
4. **Culture and Societal Issues/Physician-Patient Relationship:** The biopsychosocial approach to patient care is introduced, and the role of cultural factors within the doctor-patient encounter is discussed. Emphasis is placed on development of cultural sensitivity and competence in the

provision of care. The role of the family and the patient's social network are explored, and life-disrupting conditions such as substance abuse, domestic violence, child/elder abuse, and self-harm behavior are discussed with reference to the physician's role in detection and intervention.

**Core Course**

**Credits** 8