

UB School of Medicine and Biomedical Sciences: Educational Objectives and Competencies

Educational Objective		Competency
<u>Knowledge</u>		
K1	Knowledge of the normal structure and function of the body as an intact organism and of each major organ system.	Medical Knowledge
K2	Knowledge of the molecular, biochemical and cellular mechanisms which are important to maintaining the body's homeostasis.	Medical Knowledge
K3	Knowledge of the causes of disease (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative and traumatic) and the ways in which they affect the body (pathogenesis).	Medical Knowledge
K4	Knowledge of altered structure and function (pathology and pathophysiology) of the body and its major organ systems in various diseases and conditions.	Medical Knowledge
K5	Knowledge of biostatistics and the epidemiology of common diseases within a defined population and the systematic approaches useful in reducing the incidence and prevalence of those diseases.	Medical Knowledge
K6	Knowledge of gender, ethnic and age-specific issues that affect disease across the lifespan with particular emphasis on pregnant, newborn, child and geriatric patients.	Systems-Based Practice
K7	Knowledge of the principles of pharmacology including understanding of drug actions and interactions, rational drug therapy, and monitoring of patient response.	Medical Knowledge
K8	Knowledge of appropriate diagnostic tests and their interpretation as related to common clinical, laboratory, radiologic and pathologic findings in common disease states.	Medical Knowledge
K9	Knowledge about relieving pain and suffering of patients including those who require palliative care at the end of life.	Medical Knowledge
K10	Knowledge of the important non-biologic determinants of health and the economic, psychological, social and cultural factors that contribute to the development and/or continuation of maladies including violence and abuse.	Medical Knowledge

K11	Awareness of state and federal regulations regarding reporting of domestic violence, child abuse, criminal activity, fraud, and the Health Insurance Portability and Accountability Act, as well as laws related to public health and health care implementation.	Systems-Based Practice
K12	Knowledge of the importance of exercise, nutrition and lifestyle in maintaining health and well-being.	Medical Knowledge
K13	Knowledge of the principles of preventive medicine.	Medical Knowledge
K14	Knowledge of the scientific method in establishing the basis of disease and of the scientific evidence supporting the efficacy and role of traditional therapies and complementary/alternative medicine.	Medical Knowledge
K15	Knowledge of the basic principles of clinical and translational research, including how such research is conducted, evaluated, explained to patients and applied to patient care.	Medical Knowledge
K16	Knowledge of the emerging fields of personalized medicine, stem cell therapies and regenerative medicine as they relate to translational research and patient treatment.	Medical Knowledge
K17	Knowledge of the theories and principles that govern ethical decision making, and of the major ethical issues in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of our knowledge of genetics.	Medical Knowledge
K18	Knowledge of the various approaches to the organization, financing and cost effective delivery of health care.	Systems-Based Practice
K19	Knowledge of the principles of patient safety, health care professional safety, and quality improvement.	Systems-Based Practice

<u>Skills</u>		
S1	The ability to obtain an accurate medical history which is thorough and includes issues related to age, gender, cultural background and socioeconomic status.	Patient Care
S2	The ability to perform both a complete and an organ-specific examination, including a mental status exam.	Patient Care
S3	The ability to perform routine technical procedures, such as venipuncture, inserting an intravenous catheter, arterial puncture, lumbar puncture, inserting a nasogastric tube, inserting a Foley catheter, and suturing lacerations.	Patient Care
S4	The ability to reason deductively using critical judgment based on evidence and experience in solving clinical problems.	Patient Care
S5	The ability to construct appropriate management strategies (both diagnostic and therapeutic) for patients with common acute and chronic conditions, including medical, psychiatric and surgical conditions, and those requiring short- and long-term rehabilitation.	Patient Care
S6	The ability to recognize and outline an initial course of management for patients with serious conditions requiring critical care.	Patient Care
S7	The ability to work and solve problems in large and small groups, interdisciplinary teams, and other collegial forums.	Interpersonal and Communication Skills
S8	The ability to communicate effectively, both orally and in writing, with patients, patients' families, colleagues and other health care professionals with whom physicians must exchange information in carrying out their responsibilities.	Interpersonal and Communication Skills
S9	The ability to identify factors that place individual at risk for disease or injury, to select appropriate tests for identifying patients with specific diseases or in the early stage of disease and to determine strategies for responding appropriately.	Patient Care
S10	The ability to review critically the medical literature based on evidence.	Practice-Based Learning and Improvement
S11	The ability to retrieve (from electronic databases and other resources), manage and utilize biomedical information for solving problems and making decisions that are relevant for the care of individuals and populations.	Practice-Based Learning and Improvement

<u>Attitudes</u>		
A1	Compassionate treatment of patients and respect for their privacy and dignity.	Professionalism
A2	Sensitive and respectful attitudes to patients from diverse gender, cultural, economic, educational, and family backgrounds.	Professionalism
A3	Honesty and integrity in interactions with patients and their families, colleagues and others with whom physicians must interact in their professional lives.	Professionalism
A4	An understanding of, and respect for, the roles of other health care professionals, and of the need to collaborate with others in caring for individual patients and in promoting the health of defined populations.	Systems-Based Practice
A5	A commitment to advocate at all times the interests of one's patients over one's own interests.	Professionalism
A6	An understanding of the threats to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine.	Professionalism
A7	A commitment to excellence and an understanding of the need to engage in lifelong learning with the goal of recognizing limitations to one's knowledge and clinical skills, and a commitment to continuously improve one's knowledge and ability.	Practice-Based Learning and Improvement
A8	A commitment to provide care to patients who are unable to pay, to be advocates for access to health care for members of traditionally underserved populations, and to provide effective care in a multi-dimensionally diverse society.	Professionalism
A9	An understanding of one's duties and responsibilities and a sense of accountability for one's actions.	Professionalism
A10	Participation in all assigned activities in a reliable and timely manner.	Professionalism
A11	An understanding of the unique ethical obligations of being a physician.	Professionalism