

University of Hawai‘i John A. Burns School of Medicine

Objectives for Graduation

Graduates of the University of Hawai‘i John A. Burns School of Medicine are lifelong learners. They apply their knowledge of biological and clinical sciences, demonstrate a deep appreciation for their community, and communicate effectively in the care of their patients, particularly the peoples of Hawai‘i and the Pacific Basin. They practice medicine with the highest professional standards while maintaining their personal health and well-being. All medical students at JABSOM must demonstrate achievement of these objectives prior to graduation.

I. Lifelong, Self-Directed Learning Skills

Graduates will be lifelong learners.

Following PBL tutorial, patient care interactions, or in anticipation of future learning needs, students will be lifelong, self-directed learners by:

- A) Listing important learning issues in the biological, clinical, populational, and behavioral domains and meeting these learning needs through self-directed study.
- B) Searching for and retrieving (from electronic databases and other resources) biomedical information, critically appraising this information, and applying it appropriately to patients and populations.
- C) Evaluating the knowledge base supporting good patient care, recognizing gaps between prevailing and best practices, and incorporating the principles of quality improvement to enhance patient care outcomes including patient safety.
- D) Evaluating their knowledge base and responding proactively when gaps in knowledge are identified.

As measured by achieving a passing grade in all pre-clerkship PBL tutorials, clerkships, and fourth-year electives and a satisfactory performance on the Self-Directed Learning Assessment.

II. The Biological Sciences

Graduates will understand the biological sciences underlying clinical medicine.

Students will apply the biological sciences to the practice of medicine by:

- A) Discussing the scientific rationale in determining the cause of disease and the efficacy of conventional, complementary and/or alternative therapies.
- B) Explaining the molecular, cellular, and biochemical mechanisms that maintain the body's homeostasis.
- C) Describing the normal structure and function of each organ system and the human body as a whole.
- D) Explaining the various biologic causes (genetic, developmental, metabolic, toxic, infectious, immunological, neoplastic, degenerative, and traumatic) of illness and the way in which they impact the body (disease pathogenesis).
- E) Describing the altered structure and function (pathology and pathophysiology) of the body and its organ systems and tissues that are seen in various diseases and disorders.
- F) Identifying the mechanisms by which various treatment modalities impact the pathogenesis and natural history of diseases and disorders.
- G) Illustrating how new findings in research may be applicable to the clinical practice of medicine.

As measured by achieving a passing grade in all required pre-clerkship courses (this requires a passing score on all written and laboratory exams assessing knowledge of the biological sciences), clerkships, and fourth-year electives, completing the required USMLE Step 1 Practice Examination, and achieving a passing score on the USMLE Step 1 Examination and the USMLE Step 2 Clinical Knowledge Examination.

III. The Care of Patients

Graduates will be able to care for their patients with increasing responsibility under faculty supervision and respond to feedback.

When seeing a patient presenting with a concern or illness in the ambulatory or hospital setting, students will be able to care for that patient by:

- A) Approaching each patient with an awareness and sensitivity to the impact the patient's age, gender, culture, spiritual beliefs, socioeconomic background, lifestyle, social support, sexuality, and healthcare beliefs may have on the development, diagnosis, and treatment of their illness.
- B) Reflecting upon and recognizing their own personal biases in patient care.
- C) Recognizing the patient's decisional capacity as it relates to informed consent for health care decisions.
- D) Applying clinical reasoning, critical thinking, and problem-solving skills.
- E) Performing a complete or organ-specific history and physical exam following an appropriate exam sequence and utilizing correct technique in a manner that reflects a clear understanding of the manifestations of common maladies.
- F) Respecting patient preferences for interpersonal communication including issues of modesty and personal space when interviewing a patient or performing a physical exam.
- G) Ordering appropriate diagnostic tests with careful consideration of the test properties, risks and complications, discomfort to patients, cost, and patient's overall therapeutic goals.
- H) Performing routine procedural skills under appropriate supervision with special attention to:
 - Venipuncture
 - IV insertion
 - PPD placement
 - Basic CPR
 - Sterile technique
 - Bladder catheterization (male and female)
 - Bag-valve mask use
- I) Developing and implementing an appropriate therapeutic plan that takes into account efficacy, adverse effects, cost, safety, and compliance issues, in the context of the patient's overall goals, values, and cultural beliefs.
- J) Recognizing and initiating therapy for acute life-threatening conditions.
- K) Understanding comprehensive care and team-based care necessary in caring for patients with chronic conditions and disabilities.
- L) Educating patients, families, and other healthcare providers about health, illness, and the prevention of disease in a manner they can understand.
- M) Providing end-of-life care including pain management and guidance to patients and their families on end-of-life care decision-making.
- N) Incorporating principles of interprofessional patient care, especially in the areas of communication, quality, and patient safety.

As measured by achieving a passing grade in all required pre-clerkship courses, clerkships, and fourth-year electives, completion of personal bias reflections, a passing score on the “History Taking” exam, the “Observed Complete Physical Exam”, the chest compressions manikin simulation, the Comprehensive Clinical Skills Assessment, the procedural skills assessment on venipuncture, IV insertion, PPD placement, basic CPR, sterile technique, bladder catheterization (male and female), and bag-valve mask use, successful completion of all interprofessional manikin simulations and standardized patient exercises, the observed informed consent exercise, the Senior Seminars “Night on Call” medical emergencies manikin simulations, the USMLE Step 2 Clinical Knowledge Examination, and the USMLE Step 2 Clinical Skills Examination.

IV. Oral and Written Communication Skills

Graduates will be able to communicate effectively with patients, families, and other healthcare providers.

When in a classroom, clinical, or other healthcare setting, students will communicate effectively with others by:

- A) Greeting patients warmly, eliciting relevant information, understanding the patient's perspective, responding to their feelings, educating them about their condition, and explaining further management.
- B) Utilizing rapport-building techniques, including open-ended questions, empathic listening, checking for understanding, validation, and appropriate eye contact, body language, and voice quality to attend to patients.
- C) Communicating with patients and family in a manner that conveys compassion and sensitivity to their feelings and concerns.
- D) Incorporating patient-centered and shared decision-making principles into their practice.
- E) Motivating patients to adopt new or different behaviors to promote their health.
- F) Orally presenting cases clearly, concisely and in an organized manner.
- G) Utilizing transition of care for patient handovers.
- H) Writing comprehensive history and physical exams, appropriately complete yet concise and organized progress notes, and accurate prescriptions.
- I) Using the available electronic medical record to communicate in an effective manner without excessive reliance on copying prior notes, cutting and pasting, or using templates.
- J) Providing constructive, meaningful feedback to colleagues, course directors, PBL tutors, lecturers, and other members of the educational community.

As measured by achieving a passing grade in all pre-clerkship courses (including clinical skills courses), clerkships, and fourth-year electives and achieving a passing score on the Comprehensive Clinical Skills Assessment, the USMLE Step 2 Clinical Knowledge Examination, USMLE Step 2 Clinical Skills Examination, successful completion of the transition of care training in patient handovers, and completion of all required interprofessional education sessions.

V. Populational and Community Health

Graduates will appreciate the epidemiology of disease and the role of the physician in public health and global health issues, particularly those important to Hawai‘i and the Asia-Pacific region.

When in the clinical or classroom setting, students will demonstrate understanding of the epidemiology of disease and determinants of health and the role of the physician in managing the health of populations they care for and their role in public health and global health issues that are of particular importance to Hawai‘i and the Asia-Pacific Region by:

- A) Describing the epidemiology of common illnesses within diverse populations and the systematic approaches useful in reducing the incidence and prevalence of such illnesses.
- B) Explaining the important non-biological determinants of health and the economic, psychological, social, behavioral, environmental and cultural factors that contribute to the maintenance of good health or development of illness.
- C) Explaining the physician’s role in current Global Health issues that include emerging infections and pandemics, bioterrorism, and natural disasters.
- D) Explaining the important public health measures and population health management strategies (including telehealth) that support the health of communities.
- E) Stating important legal aspects of medicine.
- F) Caring for all patients, regardless of ability to pay, and advocating for access to health care for underserved populations.
- G) Applying principles of research methods, evidence-based medicine and common biostatistical tools to evaluate the validity and application of research results published in medical journals.
- H) Applying principles of quality improvement and systems-based practice in patient care and research.
- I) Participating meaningfully in community health activities.

As measured by achieving a passing grade in all required pre-clerkship courses (including Evidence-Based Medicine), clerkships, and fourth-year electives and achieving a passing score on the Comprehensive Clinical Skills Assessment, the USMLE Step 2 Clinical Knowledge Examination, and the USMLE Step 2 Clinical Skills Examination.

VI. Professionalism

Graduates will be professional and ethical and demonstrate an enthusiasm for medicine while delivering compassionate care to their patients.

When practicing medicine or representing JABSOM both inside and outside the classroom or clinical setting, students will exhibit the highest standards of professional and ethical behavior by:

- A) Stating the theories and principles that govern ethical decision-making including those related to the major dilemmas in medicine.
- B) Adhering to JABSOM policies regarding academic integrity, cheating, plagiarism, fabrication, and falsification and to JABSOM and UHM policies regarding student conduct.
- C) Showing respect, honesty, altruism, accountability, honor, excellence, integrity, and humility.
- D) Presenting a professional appearance and demeanor.
- E) Respecting patient confidentiality and preserving patient dignity.
- F) Obtaining informed consent while respecting patient autonomy.
- G) Recognizing potential conflicts of interest inherent in various financial and organizational arrangements in the practice of medicine.
- H) Dealing with professional mistakes openly and honestly in ways that promote patient and colleague trust and self-learning.
- I) Acknowledging personal limitations and the need for lifelong learning.
- J) Completing school and professional requirements in a timely manner.
- K) Willingly teaching and supporting others.
- L) Participating positively in JABSOM learning opportunities.
- M) Demonstrating respect for diversity and maintaining a safe environment for all.
- N) Incorporating principles of interdisciplinary collaboration, especially in the areas of communication and patient safety.
- O) Demonstrating the ability to reflect and self-assess.

As measured by achieving a passing grade in all pre-clerkship courses, clerkships, and fourth-year electives, completion of personal bias reflections, successfully completing the disclosing medical errors, patient confidentiality, impaired student, and informed consent simulations, completing all interdisciplinary manikin and standardized patient simulations, and achieving a passing score on the Comprehensive Clinical Skills Assessment, the USMLE Step 2 Clinical Knowledge Examination, and the USMLE Step 2 Clinical Skills Examination.

VII. Personal Health and Well-Being

Graduates will have the skills and strategies to maintain personal health and well-being.

Students will maintain their personal health and well-being by:

- A) Stating strategies to maintain personal physical and mental health.
- B) Stating healthy coping mechanisms to manage stress and exam anxiety.
- C) Stating strategies to maintain personal safety in both academic and clinical environments.
- D) Debriefing critical clinical incidents, such as poor outcomes and mistakes, with colleagues so they can better cope with emotional stresses of clinical practice.
- E) Identifying resources available for treating depression, substance abuse, and other forms of physician impairment.
- F) Stating the key elements of the student mistreatment policy, including the definition of mistreatment and how to report it.
- G) Recognizing the importance of balancing personal, family, and career goals.

As measured by their creation of a personal health and well-being plan for the pre-clerkship, clinical, and postgraduate periods of their medical education, successful completion of the student mistreatment colloquia, impaired student simulation, and the Transition to Clerkship safety and wellness sessions including the debriefing critical incidents and dangerous patient sessions.

Resources

Association of American Medical Colleges. The Medical School Objectives Project: Report I Learning Objectives for Medical Student Education Guidelines for Medical Schools 1998.

Association of American Medical Colleges. The Medical School Objectives Project: Report II Contemporary Issues in Medicine: Medical Informatics and Population Health 1998.

Association of American Medical Colleges. The Medical School Objectives Project: Report III Contemporary Issues in Medicine: Communication in Medicine 1999.

Association of American Medical Colleges. Medical School Objectives Project: Report IV Contemporary Issues in Medicine: Basic Science and Clinical Research 2001.

Association of American Medical Colleges. The Medical School Objectives Project: Report V Contemporary Issues in Medicine: Quality of Care 2001.

Association of American Medical Colleges. Medical School Objectives Project: Report VI Contemporary Issues in Medicine: Genetics Education 2004.

Association of American Medical Colleges. Medical School Objectives Project: Report VII Contemporary Issues in Medicine: Musculoskeletal Medicine Education 2005.

The Royal College of Physicians and Surgeons of Canada. CanMEDS 2005 Physician Competency Framework.

American Board of Internal Medicine. Project Professionalism 1995.

Liaison Committee on Medical Education. Function and Structure of a Medical School.

Accreditation Council on Graduate Medical Education (ACGME) Common Program Requirements: General Competencies 2007.