

STUDENT LEARNING OUTCOMES FOR SIX YEAR B.A.-M.D. PROGRAM

Years 1-2

Effective Communication

- The student demonstrates competence in written communications such as laboratory reports, term papers and other classroom writing assignments.
- The student demonstrates competence in oral communications in a one-on-one setting, such as introducing and beginning a history with an individual patient. History-taking skills at this level will be very basic and straightforward.
- The student demonstrates effective listening skills with faculty members, other students and patients.

Clinical Skills

- The student is able to perform the basic elements of a history. The student will have observed a physical examination and observed some of the routine clinical procedures.

Using Basic Science in the Practice of Medicine

- The student has an introductory and very general understanding of anatomy and microbiology.
- The student has a more advanced understanding and an ability to apply some information to a few clinical situations in biochemistry and physiology.

Diagnosis, Management and Prevention

- The student has an introductory understanding of principles of diagnosis, management and prevention.
- The student is able to identify general, rather than specific approaches to management, but is usually not expected to carry them out in real settings.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is proficient in framing a question, utilizing modern information searching modalities, organizing data, compiling and using information to answer the question in the context of a structured setting, such as an undergraduate course.
- The student has an introductory knowledge of the humanities and social science. Enough information is learned at this level to stimulate the student to desire further learning in medicine, humanities and social sciences.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student exhibits behaviors indicative of personal self-awareness through a process of self reflection. Students are able to identify potential areas of weakness and are able to conceive of potential options for addressing these areas.
- The student is able to identify areas of strength and is able to build on these strengths.
- The student is able to set goals for a self-study plan.
- The student is aware of his/her personal growth in regards to age specific developmental tasks.
- The student knows the elements of professional behavior and can explain the meaning of each element.
- The student can cite an example of how each of the elements applies in Year 1 and Year 2 coursework for the baccalaureate and M.D. degree.
- The student shows courteous regard for other students and faculty and acknowledges the views of others. The student shows courteous regard for his/her mentor on aging and for the patients they meet in their docent group experiences. The student interacts with patients they meet in their docent group experiences in an appropriately compassionate fashion. The student expresses empathy for his/her mentor on aging as appropriate.
- The student puts the legitimate needs of his/her mentor on aging, patients, docent group members and study group members first before his/her own needs.
- The student demonstrates academic honesty in all aspects of his/her coursework for the baccalaureate-M.D. degree.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings or classes; accepts personal responsibility for group projects; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn and tries to excel in their coursework.

Diversity and the Social and Community Contexts of Health Care

- The student appreciates some of the non-biological factors that influence health, disease, disability and access to care.
- The student attributes proper importance to identifying non-biological factors.
- The student is aware of different value systems and life styles.

Moral Reasoning and Ethical Judgment

- The student can identify and apply ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior.
- The student develops an introductory understanding of ethical choices related to a few controversial medical issues.

Problem-Solving Skills

- The student displays competence in basic problem-solving skills as applied to basic science courses or simple, straightforward medical problems.

Years 3-4

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
 - Medical record documentation in the continuing care clinic and on docent rotation.
 - Writing papers for courses and rotations.
 - Essay examinations in medical ethics.
- The student develops and demonstrates competency in using oral language and listening effectively by:
 - Communicating with patients and families in the continuing care clinic and on docent rotation.
 - Communicating with senior partners, peers and faculty.
 - Functioning as an effective junior partner.

Clinical Skills

- The student is able to perform a comprehensive history and physical examination of patients in the outpatient setting and the general medical wards, excluding critical care settings.
- The student is competent in performing venipuncture and basic CPR.
- The student is able to perform a gram-stain, vaginal smear wet prep, stool occult blood, urinalysis, urine pregnancy test, finger stick glucose determination and peak expiratory flow rate.
- The student has observed and is familiar with some of the more complex or specialized lab and diagnostic tests.
- The student knows the basics in the interpretation of plain x-ray studies; chest x-ray, abdominal x-ray.

Using Basic Science in the Practice of Medicine

- The student applies knowledge in the areas of behavioral science, anatomy, pathology, biochemistry, physiology, microbiology and immunology, and pharmacology to the overall care of patients.

Diagnosis, Management, Continuing Care and Prevention

- The student is able to interpret standard diagnostic studies and history and physical examination data. From these data, the student is able to state the most likely diagnosis when presented with straightforward presentations of common problems in general internal medicine. The student is expected to carry out management plans in those situations that are relatively straightforward and uncomplicated.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is able to do a computerized literature search as it applies to patient problems.
- The student is able to comprehend the medical literature and understand basic statistics and the scientific method.
- The student is continually motivated by an awareness of the limits of his/her personal knowledge and experience.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student is reflective about him or herself in a group context.
- He or she is able to confront his/her own values as they relate to the practice of medicine.
- The student is able to identify real situations of stress and his/her response to these situations.
- The student is able to practice personal techniques for relaxation and time management and can modify behavior and respond to constructive criticism.
- The student is able to identify learning needs, plan a program to meet those needs and determine how well they have met them and what further learning issues they need to address.

- The student identifies the elements of professional behavior and can explain the meaning of each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence. The student can give an example of how each of the elements of professionalism applies to Year 3 and Year 4 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior.
- The student shows courteous regard for patients, students, faculty, and members of the health care team and acknowledges their views.
- The student interacts with patients, patients' families, and members of the health care team in an appropriately empathic and compassionate fashion.
- The student contributes to the doцент team and other small groups by sharing knowledge and skills, expressing positive attitudes and accepting help from others to address his/her deficiencies.
- The student recognizes how potential conflicts between his/her own needs and the legitimate needs of patients, doцент group members, and study group members might be resolved and can discuss a rationale for alternative resolutions.
- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with supervisors.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and tries to excel in coursework and scholarship.

Diversity and the Social and Community Contexts of Health Care

- The student elicits and identifies non-biological factors as part of the routine history taking and includes those issues, as appropriate, in the problem list formulations and management plans.
- The student takes personal responsibility for discussing these issues with patients, assessing their needs and matching them to appropriate community resources.
- The student works with his/her individual patients and families to enhance their total well-being.

Moral Reasoning and Ethical Judgment

- The student is able to employ ethical concepts and reasoning when presented with typical ethical cases in medicine, and is able to recognize ethical issues in medical practice.

Problem-Solving Skills

- The student displays competence in problem-solving skills with common clinical problems utilizing a limited knowledge base.

Years 5-6

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
 - medical record documentation on clinical rotations.
 - preparing written patient education material.
 - writing clinical papers.
 - journals, short stories, papers or poetry during medical humanities and social science courses.
- The student develops and demonstrates competency in using oral language and listening effectively by:
 - communicating with patients and families in the continuing care clinic and clinical rotations.
 - presenting new patients to faculty in continuing care clinic and clinical rotations.
 - delivering lectures on clinical rotations utilizing slides and handouts.
 - communicating with student partners, peers, faculty and the health care providers.
 - oral examinations.
- The student develops and demonstrates competency in respecting patients and sharing information effectively with patients, families and health care team members by:
 - interacting with the individuals on clinical rotations and the continuing care clinic.
 - working as an integral part of the doцент team and teams on other clinical rotations.
 - functioning as an effective senior student partner.

Clinical Skills

- The student is able to perform the basic and emergency elements of a history and physical examination smoothly and efficiently in the outpatient setting, inpatient setting, critical care setting and emergency department settings.
- The student is able to perform and interpret basic clinical procedures, laboratory and diagnostic tests smoothly and efficiently as listed.
- The student is able to describe the procedural steps necessary to carry out advanced clinical procedures as listed.

- The student observes and is able to state the indications, complications, and limitations of advanced clinical procedures as listed.
- The student is aware of the indications, complications and limitations of and interpret from the written reports complex and specialized laboratory and diagnostic tests as listed.

Using Basic Science in the Practice of Medicine

- The student is able to explain a multi-system health problem in terms of pathogenesis, mechanisms of system-to-system interactions and potential complications. The student is able to present therapeutic goals and interventions aimed at the multiple pathophysiological forces in motion.
- The student is able to exhibit clinical decision analysis that weighs the pros and cons of proposed interventions, taking into consideration such factors as drug-drug interactions and the trade-off of proposed drug interventions in the context of multi-system problems.

Diagnosis, Management, and Prevention

- The student is able to state the most likely diagnosis and management plan when presented with presentations of common problems in any of the major disciplines.
- The student is able to integrate the approach of care to individuals, families and communities, taking advantage of opportunities for prevention and education in addition to the immediate physical care.
- The student through his/her experiences in the continuing care clinic is able to provide continuing care and management for both chronic and acute medical problems and provide appropriate plans for prevention.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student begins to explore new opportunities for intellectual growth and professional enlightenment in medicine, the social sciences and humanities.
- The student attends a continuing medical education course.
- The student continues to recognize his/her limits of knowledge and experience.
- The student is able to recognize the significance of valid scientific discoveries reported in medical journals and recognize unsubstantiated, inaccurate or poorly performed studies and conclusions.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student utilizes skill in coping with stress during clinical rotations.
- The student develops and demonstrates appropriate personal values and beliefs relevant to his/her practice of medicine.
- The student identifies the elements of professional behavior and can explain the meaning each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence.
- The student gives examples of how each of the elements of professionalism applies to Year 5 and Year 6 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior. He/she teaches these elements of professional behavior to junior students by explicit role modeling.
- The student shows courteous regard for patients, student, faculty and health care team members, and acknowledges their views. He/she teaches respect for other people to junior students by explicit role modeling.
- The student interacts with patients, patient families and members of the health care team in an appropriately empathic and compassionate fashion. He/she teaches compassion and empathy to junior students by explicit role modeling.
- The student contributes to the docent team and other small groups by exercising effective leadership and active teaching of teamwork.
- The student resolves potential conflicts between his/her own needs and the legitimate needs of his/her patients or health care team members appropriately and can discuss a credible rationale for the resolution.
- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with little or no supervision.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion. He/she teaches junior students about responsibility through explicit role modeling.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and endeavors to excel in coursework and scholarship. He/she teaches junior students about life learning.

Diversity and the Social and Community Contexts of Health Care

- The student is able to identify and propose solutions for non-biological factors that influence health, disease, disability and access to care.
- The student is able to utilize resources in the community that may provide assistance to his or her patients.
- The student is an advocate for better health for the patients and the community.

- The student demonstrates knowledge of practice management, utilization review, quality improvement and economic and cultural issues in health care.

Moral Reasoning and Ethical Judgment

- The student is able to identify patient care and health policy ethical issues and choices in his or her own clinical experience; to evaluate critically alternative ethical courses of action by analyzing and articulating reasons for the relative importance of the different ethical considerations bearing on each choice; to select and ethically defend a course of action.
- The student recognizes the importance of the ethical treatment of research subjects and the functions of an Institutional Review Board.

Problem Solving

- The student displays competence in more advanced clinical problem solving using a comprehensive knowledge base.
- The student can effectively utilize a team approach in solving clinical problems.