

Goal #1: Mastery and Integration of Clinical, Basic and Health Systems Sciences

Objective #1: To demonstrate comprehension of core basic science knowledge

At the end of Phase 1, students should be able to:

- 1.1a) demonstrate knowledge of the basic principles of biochemistry, human genetics, human anatomy and physiology, at the organ and system level.
- 1.1b) describe the molecular, biochemical, and cellular mechanisms for homeostasis.
- 1.1c) demonstrate mastery of both basic and advanced principles of host defense mechanisms, pathology, pathophysiology, and pharmacology at the organ and system level.
- 1.1d) demonstrate an understanding of patterns of disease in populations and be able to apply these principles to disease prevention and amelioration, at both the individual and the community level.
- 1.1e) understand the current concepts and methods in clinical and public health nutrition.
- 1.1f) demonstrate knowledge of the use of quantitative data and techniques in reading and interpreting the medical literature.
- 1.1g) describe the impact of aging on normal physiology, immune function and disease processes.

At the end of Phase 2, students should also be able to:

- 1.1h) demonstrate an ability to integrate cellular and molecular events, and anatomical and physiological conditions that manifest in disease.

Objective #2: To demonstrate comprehension of core clinical knowledge

At the end of Phase 1, students should be able to:

- 1.2a) describe the normal structure and function of the body and its organ systems.
- 1.2b) demonstrate knowledge of normal and abnormal human behavior and common psychiatric diseases.
- 1.2c) list the various causes (genetic, developmental, metabolic, toxic, environmental, microbiologic, autoimmune, neoplastic, degenerative, traumatic, and functional) of diseases and the ways in which they operate on the body (pathogenesis).
- 1.2d) describe the pathology and pathophysiology of the major organ systems of the body as seen in various diseases and conditions.

At the end of Phase 2, students should also be able to:

- 1.2e) apply an understanding of the underlying pathophysiologic basis for disease to clinical medicine.
- 1.2f) describe the basis for current treatments of disease and the effects on the relevant systems in the body.

At the end of Phase 3, students should also be able to:

- 1.2g) integrate knowledge obtained in the first three years to function successfully as a competent acting intern.
- 1.2h) integrate subspecialty knowledge with knowledge obtained in the first three years.

Objective #3: To demonstrate an ability to utilize basic science knowledge to explain normal and abnormal physical findings

At the end of Phase 1, students should be able to:

- 1.3a) demonstrate an understanding of the basic science principles of the organ systems to normal physical findings.
- 1.3b) apply an understanding of the principles of host defense mechanisms, pathology, pathophysiology, and pharmacology to abnormal physical findings.

At the end of Phase 2, students should also be able to:

- 1.3c) describe the pathophysiological basis for patient specific findings.
- 1.3d) demonstrate knowledge of biochemistry, microbiology, immunology, and genetics in understanding and interpreting laboratory test results.

At the end of Phase 3, students should also be able to:

- 1.3e) apply evidence provided by clinical research to develop comprehensive treatment plans.
- 1.3f) apply evidence provided by basic science research in the diagnosis, treatment and management of disease.

Objective #4: To demonstrate an awareness of and responsiveness to the larger context and system of health care

At the end of Phase 2, students should be able to:

- 1.4 a): Demonstrate an understanding of various types of health care systems, their role and their impact on health care delivery.

1.4 b): Participate effectively as a member of the healthcare team and call on interprofessional resources (case workers, nurses, physical therapists, etc.) to provide optimal and comprehensive patient care.

1.4 c): Recognize the importance of patient safety and participate in identifying system errors and quality improvement efforts with potential systems solutions.

At the end of Phase 3, students should be able to:

1.4 d) Demonstrate an understanding of the principles of value-based care, including how health policy, quality and cost impact health care outcomes

1.4 e) Recognize the importance of Clinical Informatics, security of patient data and utilization of data to improve health.

Goal #2: Excellence in Clinical Skills

Objective #1 Perform a comprehensive history and physical including obtaining a complex biopsychosocial history

At the end of Phase 1, students should be able to perform:

- 2.1a) a comprehensive history (including psychosocial, sexual, functional, etc.) based on a single presenting symptom.
- 2.1 b) a comprehensive physical examination and be able to identify common abnormal physical findings

At the end of the Phase 2, students should also be able to perform:

- 2.1 c) a comprehensive history on a patient with multiple presenting symptoms in each of the required clinical disciplines.
- 2.1 d) a comprehensive physical examination and be able to identify discipline-specific abnormal physical findings in each of the required clinical clerkships.
- 2.1 e) demonstrate a systematic method for focusing history and physical examinations.

At the end of the Phase 3, students should also be able to perform:

- 2.1 f) a comprehensive history on undifferentiated patients with complex biopsychosocial and sexual problems.
- 2.1 g) a comprehensive physical examination on undifferentiated patients with abnormal physical findings.

Objective #2 Exhibit facility in developing differential diagnoses and therapeutic plans

At the end of Phase 1, students should be able to:

- 2.2a) identify the patient's main presenting problem.
- 2.2b) develop a problem list based on the history and physical.
- 2.2c) demonstrate a systematic approach to the differential diagnosis.
- 2.2d) describe patient, physician and system barriers to successfully negotiating treatment plans and patient adherence, including physician contribution, and what strategies may be used to overcome these barriers.
- 2.2e) develop a basic therapeutic plan for a single presenting diagnosis.

At the end of Phase 2, students should also be able to:

- 2.2f) generate and pursue multiple hypotheses in the interview and physical examination, linking the development of clinical reasoning with pathophysiology.
- 2.2g) develop a complete therapeutic plan on a patient with multiple presenting problems.

At the end of Phase 3, students should also be able to:

- 2.2h) develop a thorough but concise problem list based on history and physical.
- 2.2i) describe what is meant by an undifferentiated patient complaint.
- 2.2j) develop a complete therapeutic plan on a patient with complex biopsychosocial problems including potential therapeutic options.

Objective #3 Present a patient in a comprehensive, logical analytical fashion

At the end of Phase 1, students should be able to:

- 2.3a) present a complete history and physical based on a single presenting symptom in an organized manner using basic medical terminology.

At the end of Phase 2, students should also be able to:

- 2.3b) present a thorough history and physical based on multiple presenting problems in a concise and organized manner including pertinent positives and negatives using medical terminology.

At the end of Phase 3, students should also be able to:

- 2.3c) confidently present a thorough history and physical based on multiple presenting problems in a concise and organized manner including pertinent positives and negatives using medical terminology.

Objective #4 Demonstrate ability to counsel patients

At the end of Phase 1, students should be able to:

- 2.4a) educate patients in basic health promotion and disease prevention.
- 2.4b) describe patient non-adherence to health-care regimens in different cultural groups.
- 2.4c) educate patients about their disease management process for common illnesses, such as hypertension, asthma, and diabetes mellitus.

At the end of Phase 2, students should also be able to:

- 2.4d) explain disease processes to patients.

2.4e) convey the management plan to patients.

2.4f) educate the patient on how to adhere to recommended management plan.

At the end of Phase 3, students should be able to:

2.4g) demonstrate methods of achieving consensus for the management plan:
confirming common understanding by summarizing and checking, educating patients, tailoring regimen to meet patient's individual circumstances, cueing, patient self-monitoring, contingency contracting, patient empowerment, patient self-efficacy.

Objective #5 Demonstrate competency in basic clinical procedures

At the end of Phase 1, students should be able to perform:

2.5a) blood pressure and vital sign measurements.

At the end of Phase 2, students should also be able to perform:

2.5b) intradermal injections.

2.5c) subcutaneous injections.

2.5d) intramuscular injections.

2.5e) basic life support.

2.5f) venipuncture.

2.5g) Intravenous insertion.

At the end of Phase 3, students should also be able to perform:

2.5h) pelvic exam.

2.5i) an arterial puncture.

2.5j) suturing simple lacerations.

2.5k) Foley catheter insertion (M and/or F).

Goal #3: Excellence in Professionalism and Humanism

Objective #1: To demonstrate respect for the patient, patient's family and all members of the health care team

During Phase 1, students should be able to:

3.1a) relate respectfully with individuals of diverse backgrounds.

During Phase 2, students should also be able to:

3.1b) relate respectfully with all members of the health care team.

3.1c) demonstrate the ability to establish rapport with patients and families.

During Phase 3, students should be able to:

3.1d) advocate for the best possible care for their patients.

Objective #2: To be able to listen to the patient in a judgment and value-free manner

During Phase 1, students should be able to:

3.2a) identify personal values that may impact adversely on their ability to provide patient care.

During Phases 2 & 3, students should be able to:

3.2b) demonstrate the ability to relate with patients in a judgment-free manner.

Objective #3: To demonstrate moral and ethical behavior at all times and recognize and follow the NJMS Code of Professional Conduct

Throughout ALL Phases students should be:

3.3a) familiar with and adhere to the NJMS Code of Professional Conduct.

At the end of Phase 3, students should also be able to:

3.3b) value and maintain confidentiality in patient care peers, and staff.

3.3c) document and present information that is truthful and accurate.

3.3d) demonstrate a commitment to ethical principles with regard to provision or discontinuation of non-beneficial care, confidentiality, and informed consent.

Objective #4: To recognize and learn from mistakes

During all phases, students should be able to:

3.4a) demonstrate responsibility for errors and generate a plan with an openness to change.

3.4b) reflect critically on their own performance and develop a plan for self-improvement.

3.4c) describe methods by which medical errors can be minimized and strategies for disclosure for medical errors

Objective #5: To display a kind and caring manner with patients, colleagues and other members of the medical team

During all phases, students should be able to:

3.5a) relate respectfully with patients, faculty, and colleagues.

3.5b) demonstrate empathy with patients, faculty and colleagues.

At the end of Phase 2, students should also be able to:

3.5c) demonstrate excellent interpersonal and communication skills.

At the end of Phase 3, students should also be able to:

3.5d) demonstrate confidence and trust.

3.5e) demonstrate sensitivity to the feelings, needs and wishes of patients and their families.

3.5f) demonstrate sensitivity to needs, feelings and wishes of the health care team members.

Objective #6: To set high standards for behavior for oneself and model them for one's peers

During all phases students should be able to:

3.6a) demonstrate ability to meet commitments in a timely manner.

3.6b) model appropriate appearance and dress.

3.6c) demonstrate participation in the learning experience.

3.6d) demonstrate a commitment to collegiality, including respectful communication and for privacy with classmates.

3.6e) demonstrate a commitment to volunteerism and community service.

3.6f) accept criticism and respond in a professional and thoughtful manner.

At the end of Phase 2, students should also be able to:

- 3.6g) demonstrate ability to function well within a health care team.
- 3.6h) illustrate excellent interpersonal and communication skills.
- 3.6i) respond to the needs of patients and community in a way that supersedes self-interest.

At the end of Phase 3, students should also be able to:

- 3.6j) role-model responsible behavior.
- 3.6k) respond to the health care needs of society.
- 3.6l) demonstrate confidence and engender trust.

Goal #4: Commitment to the Health of the Community and Appreciation of Social and Cultural Diversity

Objective #1: To demonstrate the ability to obtain a history and physical that accommodates a patient's belief systems

At the end of Phase 1, students should be able to:

- 4.1a) perform a structured history that explores the patient's perspective, helps develop a diagnosis and prepares the student to explain their findings.
- 4.1b) apply knowledge of different social conditions to effectively elicit a history from patients of diverse groups (gender, race/ethnicity, sexual orientation, culture, religion, socioeconomic status, disabilities, and underserved populations).
- 4.1c) value and respect the patient's cultural background and beliefs while performing the normal physical exam.
- 4.1d) demonstrate communication skills to elicit an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments.
- 4.1e) perform a comprehensive history based on a single symptom while incorporating all the components of the ETHNIC framework (a framework applicable to all patients, to enhance culturally competent clinical practice. E-explanation, T-treatment, H-healers, N-negotiation, I-intervention, C-collaboration).

At the end of Phase 2, students should also be able to:

- 4.1f) communicate to the patient their findings, assessment and treatment plan taking into account the culture and belief systems of the patient.

Objective #2: To demonstrate the ability to develop a treatment plan that accommodates the gender, cultural, and socio-economic context of the patient

At the end of Phase 1, students should be able to:

- 4.2a) explain the impact that gender, race/ethnicity, sexual orientation, culture, religion, socioeconomic status, disabilities, literacy level, and health disparities have on creating a treatment plan.
- 4.2b) develop an assessment and early treatment plan that takes into account factors such as gender, race/ethnicity, sexual orientation, culture, religion, socioeconomic status, disabilities and literacy level.

At the end of Phase 2, students should also be able to:

- 4.2c) describe the total health needs of their patients and the effects that social and cultural circumstances have on their health and their community.

4.2d) negotiate with the patient a treatment plan that is compatible with the patient's beliefs, needs, and desires while being medically appropriate.

Objective #3: To demonstrate cultural and linguistic competency by the recognition and mitigation of bias

At the end of Phase 1, students should be able to:

- 4.3a) define the terms frequently used in cultural/linguistic competency development.
- 4.3b) recognize through development of self-awareness, how to appropriately address gender, sexual orientation, race/ethnicity, religious, socioeconomic status, disability, and cultural biases in themselves.
- 4.3c) identify their own personal biases that may impact on patient care.
- 4.3d) recognize and appropriately address gender, sexual orientation, race/ethnicity, religious, socioeconomic status, disability, and cultural biases in patients.
- 4.3e) interpret the impact of provider bias on the physician-patient relationship and on health outcomes.
- 4.3f) apply the INTERPRET framework (a framework for providers and interpreters. I-introductions, N-non-citizens, T-trust, E-effectiveness, R-roles, P-positioning, R-resources, E-ethics, T-timeframe), in order to effectively work with limited English-speaking patients.
- 4.3g) describe health care access and quality issues both at individual and community levels.

At the end of Phase 2, students should also be able to:

- 4.3h) recognize and appropriately address gender, sexual orientation, race/ethnicity, religious, socioeconomic status, disability, and cultural biases in healthcare delivery.
- 4.3i) identify ways to eliminate provider bias in the physician-patient interaction and the healthcare system.

At the end of Phase 3, students should also be able to:

- 4.3j) identify gender, sexual orientation, race/ethnicity, religious, socioeconomic status, disability, and cultural biases in another healthcare professional and respond appropriately.

Objective #4: To demonstrate the ability to perform a functional history and physical, and develop a treatment plan for individuals with disabilities and chronic diseases.

At the end of Phase 1, students should be able to

4.4a) perform a history and focused physical examination on individuals from vulnerable populations (such as disabilities, sexual and gender minorities, chronic illness, mental illness, and prisoners).

4.4b) identify health inequity in a vulnerable patient.

At the end of Phase 3, students should also be able to:

4.4c) develop sophisticated treatment plans that take into account the individualized social and cultural needs of vulnerable patients.

Objective #5: To demonstrate an understanding of social responsibility and a commitment to service

At the end of Phase 2, students should be able to:

4.5a) explain the impact of external sociocultural constructs on the health of the community.

4.5b) identify healthcare access and quality issues both at the individual and community levels.

At the end of Phase 3, students should be able to:

4.5c) formulate strategies to overcome healthcare access and quality issues at an individual and community level.

4.5d) demonstrate a commitment to service as a means to promote the health of the community.

4.5e) recognize and appropriately address health inequity.

Goal #5: Dedication to Lifelong Learning and Personal Wellness

Objective #1 Practice evidence-based medicine

At the end of Phase 1, students should be able to:

- 5.1a) demonstrate facility in using electronic databases and literature retrieval services.
- 5.1b) learn to apply knowledge of study designs and statistical methods to appraise information about diagnostic tests and therapeutic interventions.
- 5.1c) identify information pertinent to the care of patients.

At the end of Phase 2, students should also be able to:

- 5.1d) learn to locate, appraise, and assimilate evidence from clinical guidelines, systematic reviews, and articles related to patients' problems.
- 5.1e) demonstrate the use of web sites, on-line search engines, PDA-based programs, information services, and journals to locate information related to patients' health needs.
- 5.1f) demonstrate clinical problem-solving skills using information resources.
- 5.1g) demonstrate skills in hypothesis-building and deductive problem solving.
- 5.1h) demonstrate the ability to appraise suitability of the information for clinical questions.

At the end of Phase 3, students should also be able to:

- 5.1i) critically read and assess the medical literature.
- 5.1j) demonstrate the ability to assimilate the new information into care for health problems.
- 5.1k) demonstrate the ability to utilize evidence-based medicine methodology to address patient care issues.

Objective #2 Recognize when to seek consultation

At the end of Phase 1, students should be able to:

- 5.2a) identify the major disciplines in medicine.
- 5.2b) identify the major diseases in each of the disciplines of medicine.

At the end of Phase 2, students should be able to:

- 5.2c) discuss the situations in which a consultant should be called.

At the end of Phase 3, students should be able to:

5.2d) integrate the input from consultations into a coherent diagnostic and treatment plan for their patients during the acting internship.

Objective #3 Be able to learn from patients and all members of the health care team

At the end of Phase 1, students should be able to:

5.3a) function effectively in small group settings and laboratories.

5.3b) define the roles of social workers, physician assistants, nurses, physical therapists, etc. in the care of patients.

At the end of Phase 2, students should also be able to:

5.3c) describe the advantages of an inter-professional approach to patient care.

5.3d) demonstrate recognition of the patient's role as an integral member of the health care team.

At the end of Phase 3, students should also be able to:

5.3e) demonstrate an ability to work effectively with all members of the health care team during their acting internship.

Objective #4: To develop an understanding of one's own strengths, weaknesses, biases and fears

At the end of Phase 1, students should be able to:

5.4a) identify their optimal learning style.

5.4b) identify methods which enable them to learn most effectively in a variety of educational modalities-lecture, small group, laboratory.

5.4c) identify gaps in their knowledge of the basic sciences.

5.4d) identify weaknesses in their ability to perform a simple history and physical.

At the end of Phase 2, students should also be able to:

5.4e) identify areas of weakness in their ability to perform a complex history and physical.

5.4f) identify areas of weakness in their communication skills.

5.4g) identify areas of weakness in their clinical knowledge.

5.4h) acknowledge one's own errors and reflect critically on one's own performance.

Objective #5: Develop the skills to attain self-awareness and maintain personal wellness.

At the end of Phase 2, students should be able to:

5.5a) develop self-care practices to maintain personal wellness in their physical, emotional, spiritual, intellectual and social spheres.

5.5b) develop stress management and personal resilience strategies.

5.5c) identify personal maladaptive behaviors including substance abuse and psychological issues; identify appropriate resources and networks for support and seek care as needed.

5.5d) recognize the importance of advocating for themselves and others.

5.5e) identify resources to establish and maintain financial wellbeing.

At the end of Phase 3, students should also be able to:

5.5f) utilize resources to enhance personal wellness to promote and maintain a sustainable work-life balance that will allow for optimal patient care.

Goal #6: Development of Effective Skills in Education and Communication

Objective #1: Teach patients how to maximize wellness, prevent disease and manage illness

During Phase 1, students should be able to:

- 6.1a) greet the patient appropriately.
- 6.1b) maintain a respectful attitude.
- 6.1c) demonstrate caring and respectful behaviors when interacting with patients and their families.
- 6.1d) elicit the patient's view of health problem(s).
- 6.1e) respond on appropriate level to patient concerns and expectations.
- 6.1f) discuss how the health problem(s) affect the patient's life.

At the end of Phase 2, students should also be able to:

- 6.1g) communicate medical information to a patient appropriate to the patient's ability to understand.
- 6.1h) understand the importance of the patient-physician relationship as the cornerstone of medical care.
- 6.1i) elicit patient requests, concerns, and expectation from a range of patients diverse in age, gender, and socio-cultural background.
- 6.1j) demonstrate validation of the patient's feelings.

At the end of Phase 3, students should also be able to:

- 6.1k) counsel patients regarding disease processes, management plans and preventive care.
- 6.1l) reach a common understanding with the patient on an elementary description of diagnosis, prognosis, and treatment plan.
- 6.1m) support the patient's self-efficacy, such as acknowledging and reinforcing positive patient behavior.

Objective #2: Effectively teach junior students and peers

At the end of Phase 1, students should be able to:

- 6.2a) participate actively in small group discussions.
- 6.2b) discuss the principles of adult learning theory.
- 6.2c) discuss the principles of effective small group teaching.

6.2d) discuss laboratory findings in lab and small group exercises.

6.2e) prepare and deliver effective presentations.

At the end of Phase 2, students should also be able to:

6.2f) educate other members of the health care team on patient's disease processes.

At the end of Phase 3, students should also be able to:

6.2g) serve as a facilitator in case-based small group discussions.

6.2h) teach history-taking and physical examination skills to junior students.

Objective #3: Make organized and concise oral presentations

At the end of Phase 1, students should be able to:

6.3a) present clear, well-thought out answers in problem-solving recitation sessions.

6.3b) critically evaluate an article from the current literature.

6.3c) present a comprehensive history and physical exam in a clear and concise manner in both written and oral format.

At the end of Phase 2, students should be able to:

6.3d) present a patient at rounds.

At the end of Phase 3, students should also be able to:

6.3e) communicate medical information orally to other members of the health care team (e.g. nurses, social workers, case managers, home health facilitators).

6.3f) research a topic and provide the best evidence for management of a clinical problem.

Objective #4: Be an effective listener

At the end of Phase 1, students should be able to:

6.4a) elicit a structured medical history.

6.4b) elicit a comprehensive history.

6.4c) maintain eye contact at comfortable intervals throughout interview.

At the end of Phase 2, students should also be able to:

6.4d) encourage the patient to continue speaking, using appropriate facilitation skills.

At the end of Phase 3, students should also be able to:

- 6.4e) use silence and non-verbal facilitation to encourage the patient's expression of thought and feelings.

Objective #5: Communicate with others in a non-judgmental manner

At the end of Phase 1, students should be able to:

- 6.5a) participate actively in small group sessions, engaging in appropriate discourse on controversial issues with others with differing opinions.
- 6.5b) demonstrate sensitivity to gender, racial and cultural diversity.
- 6.5c) describe strategies for establishing positive patient-doctor relationships.
- 6.5d) conduct a sexual history in a non-judgmental manner, with empathy, and without shame or embarrassment.
- 6.5e) recognize physician barriers to obtaining a sexual history and the consequences that might result from such an omission.

At the end of Phase 2, students should also be able to:

- 6.5f) understand that physicians and patients bring attitudes, emotions, beliefs, and culture to encounters that may have significant impact upon patient-doctor interactions and outcomes.

At the end of Phase 3, students should also be able to:

- 6.5g) describe patient, physician, and system barriers to effective communication.

Objective #6: Write articulate, legible and interpretable histories, physicals and progress notes

At the end of Phase 1, students should be able to:

- 6.6a) accurately and legibly document information obtained from a structured medical history.
- 6.6b) accurately and legibly document information obtained from a complete medical history and physical exam.

At the end of Phase 2, students should also be able to:

6.6c) communicate medical information in written format to other members of the health care team (e.g. nurses, social workers, case managers, home health facilitators).

6.6d) document daily information accurately and concisely in the medical chart in the form of a problem-oriented progress note.

At the end of Phase 3, students should also be able to:

6.6e) demonstrate the ability to write medical orders, when permitted.

6.6f) demonstrate the ability to dictate discharge summaries and/or basic operative reports and procedures, when permitted “done in a mock format”.

6.6g) demonstrate ability to use electronic medical records and order-writing technology, when permitted.

6.6h) demonstrate ability to write prescriptions.