Syllabus
Medical Skills Courses I and II

PMSK 5301
PMSK 5302

Academic Year 2012-2013

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In the end we retain from our studies only that which we practically apply.

Johann Wolfgang von Goethe
1. TTUHSC School of Medicine Institutional Educational Vision, Goals, and Objectives

Vision:
Graduates of the TTUHSC-SOM will be knowledgeable, competent, and compassionate clinicians who communicate and collaborate with patients and colleagues in a caring and professional fashion.

The curriculum that prepares these graduates will emphasize acquisition and application of medical knowledge, clinical skills, and professional behaviors. Multiple modalities of instruction which promote integration of basic and clinical science information, development of problem solving and clinical reasoning abilities, and development of life-long learning habits will be utilized.

The educators involved in the instruction of these graduates will be role models who reflect and emphasize professionalism in their teaching, science, clinical care of patients, and modes of communication with patients and colleagues.

Goals:
The goal of medical education at the Texas Tech University Health Sciences Center School of Medicine is to promote excellence in the clinical, scientific, and humanistic skills of our graduates and to instill the competence and compassion that distinguishes outstanding physicians. Our program is designed to graduate physicians who:

I. Provide competent and humane medical care to individuals, families and the larger society based on the scientific and clinical principles of health and its promotion; of disease and its prevention and management; and of psychosocial factors influencing patients well being.

II. Demonstrate competence in life-long learning including self-directed study of basic and clinical science, critical assessment of medical literature, and use of evidence-based medicine.

III. Demonstrate proficiency in clinical assessment, namely the ability to obtain a patient’s history, to perform a comprehensive physical examination, and to assess and treat patients’ medical and emotional needs.

IV. Demonstrate proficiency in clinical reasoning, including identification of clinical problems using scientific methods, data collection, hypothesis formulation, and the retrieval, management, and appropriate use of biomedical information for decision-making.

V. Demonstrate sensitivity to the diverse psychosocial and spiritual needs of their patients and communicate clearly, respectfully, and compassionately with their patients, their families and other health care professionals.
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VI. Display the highest standards of professional integrity and exemplary behavior, including compassion, truthfulness, and ethical reasoning.

Objectives:
The Texas Tech University Health Sciences Center School of Medicine has identified key objectives for our educational program relating to the knowledge, skills, behaviors, and attitudes for students acquiring the degree of Doctor of Medicine. Further, the TTUHSC SOM endorses the competencies in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice recognized by the Accreditation Council for Graduate Medical Education. Each course and clerkship sets forth specific learning objectives and their outcome measurements based on these key educational objectives. The School of Medicine will continue to review these objectives to ensure that the vision and goals are met.

A. Knowledge: The student will demonstrate an exemplary and contemporary fund of knowledge in basic and clinical sciences essential to the practice of medicine, to also include:

1. Scientific method and its application to problem solving in the basic and clinical sciences.

2. Analytical tools for data collection, quantitative analysis, critical reading and investigation, and evidence-based medicine, and their application to the clinical care of patients.

3. Definition of clinical problems and formulation of differential diagnosis, diagnostic investigation, clinical treatment and management by application of data from the clinical interview and clinical examination.

4. Organization of the health care delivery system and the professional, legal, and ethical expectations of physicians.

5. Principles of behavioral and social sciences as applied to family systems and their effect on patient health.

B. Skills: The student will demonstrate excellence in patient care, including the ability to:

1. Communicate effectively, both orally and in writing, with patients and their families, colleagues, and other health care professionals about clinical assessments and findings, diagnostic testing, and therapeutic interventions.

2. Conduct comprehensive and problem-specific physical examinations appropriate to the patients’ concerns, symptoms, and history.
3. Integrate the patient interview and physical examination findings with medical knowledge to identify the clinical problems of patients, formulate differential diagnoses, and develop plans for treatment, diagnostic investigation, and management.

4. Utilize varied methods of self-directed learning and information technology to acquire information in the basic and clinical sciences needed for patient care.

5. Interpret laboratory results and diagnostic procedures.

6. Select and perform basic diagnostic and therapeutic procedures.

C. **Behaviors:** The student will model the professional behaviors of a skilled and competent physician, including:

1. Patient care based on evidence, skilled clinical reasoning, and the current state of medical art and science.

2. Patient care that is compassionate and empathic, particularly in settings involving pain management, substance abuse, mental health disorders, or terminal illness.

3. Sensitivity to the diverse factors affecting patients and their health care beliefs and needs, including age, gender, sexual orientation, religion, culture, income, and ethnicity.

4. Demeanor, speech, and appearance consistent with professional and community standards.

5. Dedication to the highest ethical standards governing physician-patient relationships, including privacy, confidentiality, and the fiduciary role of the physician and health care systems.

D. **Attitudes:** The student’s attitude will exemplify the highest ethical standards, including:

1. Respect for each patient’s unique needs and background and how they affect the patient’s concerns, values, and health care decisions.

2. Recognition of the social nature of health care and respect for patients, other health care professionals, and administrative members of the health care systems.

3. Commitment to life-long learning as a hallmark of professional excellence throughout a physician’s career.
2. General Course Description

The Medical Skills Courses I and II are the first two semesters of a two-year series of courses that are designed to teach each medical student the basic clinical skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentation.

The Medical Skills Courses are closely coordinated with Scientific Principles of Medicine so that each Medical Skills session applies instruction provided during the prior week in SPM. Through this integration, the two courses reinforce each other and deepen the learning of the students.

Learning is accomplished through pre-session review of preparatory Student Guides (with audio-visual walk-through of each preparatory guide), readiness assurance quizzes, scheme-based standardized patient interactions, demonstration and guided practice with feedback of simulated clinical procedures, team-based problem solving exercises, small group training using partial task simulators, field trips to outlying facilities, and other modalities. Formative feedback on each student's performance is provided through faculty guided review of performance in the standardized patient encounters, medical student peers using predetermined assessment criteria, and periodic review with a faculty member of videotaped SP encounters.

Students are assessed through their performance in simulated settings with standardized patients (OSCE examinations), through their answers on multiple choice items, and through demonstration of their proficiency with selected procedural tasks. These assessments are administered at the end of each academic unit. At the end of the second year of medical school, a comprehensive OSCE examination is performed testing students over the content covered during the first two years.

3. Overall Course Goal

The goal of the Medical Skills Course is for each medical student to achieve proficiency and competence in the fundamental skills of doctoring.
4. **Learning objectives**

As a result of participation in the MSC course, student will be able to:

<table>
<thead>
<tr>
<th>MSC Learning Objectives</th>
<th>PLFSOM Institutional Learning Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients, family members, faculty, staff, and peers in a respectful and diplomatic manner.</td>
<td>P1. Demonstrate professional integrity and exemplary behavior, including compassion, truthfulness, ethical reasoning, and altruism.</td>
</tr>
<tr>
<td>Communicate using language that is clear, understandable, and appropriate to each patient.</td>
<td>I1. Communicate effectively, both verbally and non-verbally, with patients and their families, colleagues, and other health care professionals about clinical assessments and findings, diagnostic testing, therapeutic interventions, prognosis, and disease processes.</td>
</tr>
<tr>
<td>Maintain each patient's dignity and modesty during clinical encounters.</td>
<td>P2. Demonstrate sensitivity to the diverse biopsychosocial, cultural, and spiritual needs of patients and communicate clearly, respectfully, and compassionately with patients, their families and other health care professionals.</td>
</tr>
<tr>
<td>Identify the chief reason for the clinical encounter and use questions effectively to find the most pertinent history needed for decision-making.</td>
<td>P4. Demonstrate dedication to the highest ethical standards governing physician-patient relationships, including privacy, confidentiality, and the fiduciary role of the physician and health care systems.</td>
</tr>
<tr>
<td>Select and perform the most pertinent physical examination maneuvers to search for findings that support or refute likely diagnoses under consideration.</td>
<td>C2. Assess the clinical status of patients to include obtaining a patient’s history, performing a comprehensive physical examination, and assessing and describing treatment plans to address the medical and emotional needs of the patient.</td>
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**MSC Learning Objectives**

Concisely, accurately, and legibly record the patient’s history in the medical record.

Use the patient’s history, physical examination, and diagnostic studies to generate a list of active medical problems.

Orally present a patient’s history and physical examination in an organized and concise manner.

List the appropriate indications, potential risks and intended benefits of common procedures such as venipuncture, placement an intravenous catheter, and lumbar puncture.

Proficiently perform several common clinical procedures such as venipuncture, placement of an intravenous catheter, and lumbar puncture.

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**PLFSOM Institutional Learning Objectives**

C2. Assess the clinical status of patients to include obtaining a patient’s history, performing a comprehensive physical examination, and assessing and describing treatment plans to address the medical and emotional needs of the patient.

C3. Evaluate the clinical status of patients through proficiency in clinical reasoning, including identification of clinical problems using scientific methods, data collection, hypothesis formulation, and the retrieval, management, and appropriate use of biomedical information for decision-making.

I1. Communicate effectively, both verbally and non-verbally, with patients and their families, colleagues, and other health care professionals about clinical assessments and findings, diagnostic testing, therapeutic interventions, prognosis, and disease processes.

I1. Communicate effectively, both verbally and non-verbally, with patients and their families, colleagues, and other health care professionals about clinical assessments and findings, diagnostic testing, therapeutic interventions, prognosis, and disease processes.

K6. Participate in the selection and performance of basic diagnostic and therapeutic procedures.

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**Integration with the Medical School Curriculum**

The Presentation-based Curriculum creates an unprecedented opportunity for integration and application of topics in Medical Skills with content covered in Scientific Principles of Medicine. Matching the standardized patient cases and skill building activities with the content of the basic sciences curriculum creates reinforcement between these two courses that deepens and strengthens the learning in both. In addition, the skills developed in the Medical Skills Course are also practiced during clinical experiences in the Society, Community and the Individual. Eventually, the clinical schemes covered during the first two years of medical school will be carried on into the clinical clerkships in the third year of medical school.
5. Instructional Methods

Medical Skills Courses I and II will be presented as a series of weekly sessions throughout the first year of medical school. Students from each college will meet together for each two-hour session. The students will be divided into learning groups, and each group will rotate through the learning activities being presented that day.

- **Preparatory reading assignments:** Prior to each session, students will study the Student Guide that has been prepared for the clinical scheme, and will review the Camtasia recording that reviews the Student Guide. They will also have a reading assignment from the Evidence-based Physical Diagnosis, 2nd ed. by Steven McGee.

- **Objective Structured Clinical Encounter (OSCE):** Both a learning and an assessment tool, the OSCE is a structured exercise in which the student interacts with a standardized patient who has memorized a clinical scenario. Students will be required to demonstrate specific skills in communication, history taking, physical examination, and recording of clinical information. Students receive specific feedback on their performance.

- **Small-group activities:** demonstrations, facilitated performance, and practice with interview skills, physical examination techniques, and clinical procedures will be principally carried out in small groups supervised by clinical faculty.

- **Clinical simulations:** The ATACS Center is capable of simulating numerous clinical procedures on mannequins or in computer-generated virtual reality. Students will use the Center to develop and refine their skills before performing procedures on actual patients.

- **Patient encounter log:** During medical school, each medical student maintains a log of their patient encounters, including standardized patient encounters. The Online Patient Log (OP Log) can be found on the WebCT page for the Medical Skills Course.

6. Policies and Procedures

The Medical Skills Course follows all applicable policies and procedures of the Office of Student Affairs of the Texas Tech University HSC, Paul L. Foster School of Medicine.

In addition, the Medical Skills Course has established additional course-specific policies that are created to maintain an optimal learning environment, promote professional conduct with standardized patients, faculty, and staff, and protect the valuable resources of the Center for Advanced Teaching and Assessment in Clinical Simulation (ATACS).
6.1. Attendance

- **Attendance**: Attendance at Medical Skills Course activities is expected. Students are expected to arrive on time and participate in course activities until excused by the supervising faculty member. Students arriving late may receive an unexcused absence for the session from the Course Director.

- **Absences**: Students must notify the Course Coordinator in advance by email or phone of an anticipated absence, preferentially at least two working days prior to the MSC session (so that adjustments can be made in the number of standardized patients). In addition, students should also notify the Office of Student Affairs through the plfabsence@ttuhsc.edu email address. In the event of an emergency that results in an absence from an MSC session, the student must notify the course director and coordinator within three working days or the session will be counted as an unexcused absence.

- **Make up sessions**: On a case-by-case basis the MSC Course Director in coordination with the ATACS Center staff may schedule make up sessions for students with absences from MSC sessions.

- **Prior commitments**: For conflicts due to religious holidays, weddings that were planned prior to the start of the semester, or other special events, student must contact the Course Coordinator and Course Director by the first week of the semester. Events planned after the start of the semester or not discussed at the start of the semester may not be granted as excused absences.

6.2. Conduct

- **Deportment**: Students are expected to be attentive to the activities and instruction in each session, and conduct themselves in a professional manner with peers, staff, faculty, and standardized patients.

- **Personal belongings**: Students will be provided with dry erase boards during the MSC sessions. Students should bring only required equipment to each MSC session. Do not bring backs, purses, computers, or notebooks into the ATACS Center. These should be stored in your locker. The ATACS Center is not responsible for lost or stolen items.

- **Internet**: In sessions where computers are used, students may use the internet only for purposes related to the MSC session.

- **Cell phones**: Students are asked to switch their cell phones off during MSC sessions. Use of cell phones during Unit OSCE examinations will be considered a breach of the student honor code and grounds for disciplinary action.
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- **Guests and Children**: Students may not bring friends or children to the ATACS Center during learning sessions.
- **Consumables**: Students may not bring food or drink into the ATACS Center.
- **Security**: The ATACS Center is a secure area. Unauthorized entry is not permitted.
- **Property**: Removing equipment from the ATACS Center is not permitted under any circumstances.
- Otherwise, the policies and procedures of the ATACS Center will apply to all students, faculty, and staff who are on the premises of the ATACS Center.

### 6.3. Professional Attire

- Policies regarding appropriate attire are covered in the policies and procedures of the Office of Student Affairs of the Texas Tech University HSC, Paul L. Foster School of Medicine.
- The Medical Skills Center is considered to be a clinical area, and standardized patients are to be treated as actual patients. Because of the requirement that medical students perform physical examinations on standardized patients who are to various degrees disrobed, it is required that students dress in a modest and professional manner, commensurate with proper decorum for such work.

  - Men are required to wear business casual attire. This includes slacks, a collared shirt, dress shoes, and a necktie. Inappropriate attire includes running shoes, blue jeans, cargo pants, shorts, T-shirts, or polo shirts.
  - Women are required to wear business casual attire. This includes slacks, dresses, or a skirt with blouse and dress shoes. Inappropriate attire includes low cut necklines, see-through blouses, bare midriffs, and short skirts or dresses that reveal the thigh above the knee.
  - Closed-toe shoes are required in all clinical settings. Heels should be 3” or less. Sandals and shoes with open toes are prohibited in clinical areas by OSHA regulations because of the hazards posed by spills, needles, and sharp instruments.
  - Grooming should be hygienic. Students must shower, use deodorant, and use daily oral hygiene. Long hair must be secured so that it does not contact the standardized patient or interfere with the physical examination. Facial hair such as beards and sideburns must be neat, clean, and well-trimmed. Fingernails should be clean and length of...
nails should not be so long as to interfere with the proper performance of the physical examination.

- Students will wear white coats during Medical Skills Course sessions including review sessions and OSCE examinations.

- The Course Directors reserve the right to decline to permit a student to participate in a session if attire, grooming, or hygiene is deemed inappropriate.

### 6.4 Immunization Policy

- In accordance to TTUHSC Operating Policy, students must be current on all immunizations prior to entering a patient clinic or hospital unit. To review the TTUHSC Health Surveillance Program, go to [http://www.ttuhsc.edu/fostersom/studentaffairs/](http://www.ttuhsc.edu/fostersom/studentaffairs/)

### 6.5 Occupational Exposure Management

- All students are expected to follow the policy regarding exposures to blood-borne pathogens and body fluids established by the TTUHSC Occupational Exposure Management Program. Information regarding this policy can be found at: [http://www.ttuhsc.edu/HSC/OP/OP75/op7511c.pdf](http://www.ttuhsc.edu/HSC/OP/OP75/op7511c.pdf)

### 7. Student Assessment and Grading

On the basis of a composite assessment, each student in the Medical Skills Course will receive a grade of either Pass or Fail. The components of the composite assessment are:

- **Attendance:** Attendance will be recorded weekly. Cumulatively, session attendance will constitute 30% of each student’s grade for each Unit.

- **Performance on weekly quizzes:** A readiness assurance quiz is regularly included at the beginning of each Medical Skills session. Students achieving a cumulative performance 75% on these quizzes will gain one bonus point added to their cumulative grade for the Unit.

- **Completion of the OP Log:** Students are expected to record each standardized patient encounter in their Online Patient Log (OP Log). Students completing their OP Log with all of their standardized patient encounters by the end of the Unit will receive one bonus point added to their cumulative grade for the Unit.
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- **Performance on OSCE examinations:** Each End-of-Unit OSCE will have between 3-5 stations. Two or three of these stations will be standardized patient encounters. One or two will be clinical skill demonstration stations. Assessment at each station will be based on demonstration of proficiency as assessed using predetermined criteria that assess history taking skills, physical examination technique, communication skills, and professional demeanor. Any TBL sessions held during the Unit will also be included in the OSCE exam score. Performance on the OSCE examinations will constitute 70% of the grade for each Unit.

- **Team-based Learning:** TBL sessions are included to teach selected diagnostic and test interpretation skills. TBL sessions consist of an individual readiness assurance test, a group readiness assurance test, and an application exercise. All of these activities are graded, and scores from these TBL activities will be included as part of the final Unit grade for each student. It is noted that a small contribution of this grade comes from group activities. Therefore each student’s individual Unit grade will, to a small extent, reflect the performance of their peers.

- **Passing score:** Students must demonstrate a cumulative score of at least 75% in order to receive a grade of Pass for an academic Unit. Students must receive a grade of Pass in all constituent Units in order to receive a grade of Pass for a semester of the Medical Skills Course. Students demonstrating a pattern of unprofessional behavior may receive a grade of Fail for a Unit regardless of their cumulative score.

- **Make up examinations:** For those students who demonstrate a cumulative score of less than 75% for an academic Unit, a makeup examination will be offered. Those students who demonstrate a cumulative score of less than 75% on the makeup examination will receive a grade of Fail for the Unit. and will be offered an opportunity to repeat the Unit examination at the end of the academic year. If they successfully remediate the failed Unit at the end of the academic year, the grade of Fail will be changed to a grade of “Successfully Remediated”.

- **Posting of grades:** Each student’s Unit OSCE grade will be released upon receipt of a completed course and faculty evaluation.
8. Professionalism

Students are expected to adhere to the Standards of Professional Conduct that are delineated in the medical student handbook of the Paul L. Foster School of Medicine. Failure to do so may result in a Unit grade of Fail regardless of examination scores or attendance.

9. Textbooks

The required textbook for the course is:

Optional textbooks for the course include:
- Dan Longo, et al., Harrison’s Principles of Internal Medicine; 18th edition (2011), which is available online through the TTUHSC Library website. Click on eBooks > STAT!Ref > Harrison’s Principles of Medicine.

10. Required Equipment

1. A stethoscope
2. A 128 Hz tuning fork
3. A reflex hammer
4. A penlight
5. A tape ruler
6. A Snellen eye card (near vision testing)
7. A white coat
8. A wrist watch with a second hand

Note: Each exam room in the ATACS Center is equipped with an otoscope, an ophthalmoscope, and a blood pressure cuff. Therefore, for the purposes of the MSC Course, students do not need to purchase these items of equipment.
11. Staff and Faculty Roster and Scheduled Office Hours

**Dr. Woods**  
Tuesday and Wednesday, 1:00 – 3:00  
MEB 2240-C  
Dr. Woods has an open door policy and students are welcome to visit any time if the office door is open.

**Dr. Francis**  
Tuesday and Friday, 1:00 – 3:00  
MEB 2220-C  
Dr. Francis has an open door policy. Students are welcome to visit any time if the office door is open.

**Ms. Ayers**  
Availability varies  
ATACS Simulation Center  
Ms. Ayers is available by email, by appointment, and also for walk in visits when not busy with the activities of the Center.

Updated: August 2, 2012 - GW