Syllabus

Scientific Principles of Medicine (SPM)

PSPM 5021 (SPM I)
PSPM 5012 (SPM II)

Academic Year 2019-2020
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Course Description

The SPM course is designed to foster the rapid acquisition, integration and application of scientific knowledge fundamental to the practice of medicine. By using diagnostic scheme algorithms as conceptual frameworks for both learning and application, the knowledge structure and diagnostic skills of an experienced clinician will be developed from the very outset of instruction. Students will explore human health and disease within individual organ-system based units that are each organized into a series of ‘clinical presentations’ (e.g. gait disturbance, movement disorders, headache, seizure and epilepsy) that reflect the major ways in which a person would present to a physician. By learning the basic and clinical sciences synchronously and within the context of clinical presentations, a high level of integration and clinical relevance is achieved. The use of diagnostic scheme algorithms as conceptual frameworks for structuring and applying scientific knowledge is aimed at equipping students with the skills to make highly effective evidence-based diagnoses using scheme-inductive reasoning. This pedagogical approach, as implemented in SPM, has been shown to help mitigate the temporal loss of basic science knowledge, to help students think like experts when solving clinical problems, and to dramatically improve students’ diagnostic success rates.

In activities such as the Worked Case Example and Tankside Grand Rounds sessions, students will learn to communicate effectively and function effectively in teams. SPM offers a robust learning experience by employing a variety of educational methods in addition to active learning lectures. Such experiences include team based learning and self-directed learning, which rely on students maintaining professional attitudes and behaviors.

By its nature the clinical presentation-based curriculum will make students aware of the larger context and system of healthcare as many of the case based discussions incorporate consideration of risks and cost. Also, the SPM course incorporates experiences and activities, such as the Student Self-Assessment component, that give students opportunities to assess their knowledge and identify their own strengths and deficiencies and then engage in self-directed learning to address knowledge gaps. A general overview of the organization of clinical presentation-based units in SPM is provided in the following schematic:
SPM I (PSPM 5021):
This first semester course of Year 1 consists of three integrated units: ‘Introduction to Health and Disease’ (IHD), ‘Gastrointestinal System’ (GIS), and ‘Integumentary, Musculoskeletal, and Introduction to the Nervous System’ (IMN). The sequence of clinical presentations within each unit has been structured so that the concepts developed during the study of one topic provide the foundation for subsequent topics. Basic information is provided for each clinical presentation including its clinical significance and a schematic representation of the relationships of the potential causes. These provide the basis for discussion of each of the underlying basic science principles. Each clinical presentation includes a set of basic science learning objectives related to the appropriate scientific concepts of anatomy (gross and neuroanatomy, including medical imaging), behavioral science, biochemistry, cell and molecular biology, embryology, genetics, histology, immunology, microbiology, nutrition, pathology, pharmacology and physiology. Discipline experts provide instruction using various teaching methods including lectures, laboratories, and small group discussions. Both basic science and clinical faculty participate in this component of the instructional process.

Unit 1: Introduction to Health and Disease (IHD)
This 5-week unit is comprised of the following five clinical presentations that introduce students to the basic foundations of health and disease:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>The Child with Dehydration</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>The Child with Poor Growth</td>
</tr>
</tbody>
</table>
The molecular and cellular mechanisms underlying homeostasis, cell growth and division, quiescence, senescence and apoptosis will be introduced to provide a foundation for understanding the processes of health and disease. Biochemistry, cell biology, genetics, immunology, microbiology and pathology are featured prominently in this unit. Highlights include the student’s first hands-on experiences in the anatomy and microbiology laboratories.

**Unit 2: Gastrointestinal System (GIS)**
This 5-week unit investigates the gastrointestinal system within the context of the following eight clinical presentations:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Dysphagia</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Nausea and Vomiting</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Abnormal Liver Function Tests and Jaundice</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Abdominal Distension</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Diarrhea</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Constipation</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>Abdominal Pain</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Blood from Gastrointestinal Tract</td>
</tr>
</tbody>
</table>

Exam Week

In this unit students will be introduced to the processes of motility, secretion, digestion and absorption, which form the functional basis of the gastrointestinal system. The numerous
functions of the liver will be presented including those that relate to intermediary metabolism, blood detoxification, plasma protein synthesis and bile production, forming a foundation for recognizing, understanding and treating various diseases of the liver and hepato-biliary system. Within each of the clinical presentations the pathology and etiologies of region specific diseases are explained as they relate to the underlying basic science.

There are anatomy sessions that develop the findings of each portion of the gastrointestinal tract as they relate to the patient’s clinical presentation. The last anatomy lab will be devoted to a summary of the important findings relating to the gastrointestinal tract, and for this lab students will be assigned to a cadaver in two groups of 4-6 students. Students will be expected to review gastrointestinal anatomy as it has been presented in the prosected cadavers during the unit. As part of this experience some dissection will be required in order to identify relevant anatomical structures and any associated pathologies. These cadavers will form the basis for the tankside grand rounds presentation that each student group will give at the end of the second year of medical school. During the summary anatomy presentation, student groups will biopsy significant anatomic/pathologic findings and work with anatomy staff to take needed photographs for their presentation.

Unit 3: Integumentary, Musculoskeletal and Introduction to the Nervous Systems (IMN)
This 7-week unit is an integrated presentation of the major basic science concepts related to the integumentary (skin, hair & nails), musculoskeletal, and nervous systems (with a deliberate focus on the peripheral nervous system). The course content is organized and explored in the context provided by a sequence of ten relevant, common and broadly applicable clinical presentations that include orthopedic, rheumatologic, neurologic and dermatologic issues:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Skin Lesions: Rash-Non-Blistering</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Skin lesions: Rash with Blisters, Hair, Nails, and Ichthyosis</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Skin Lesions: Tumors</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Bone Fractures</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Joint Pain</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>Musculoskeletal Lumps and Masses</td>
</tr>
</tbody>
</table>
Deformity and Limp

Thanksgiving Week

6  8  Pain
9  Numbness and Tingling

7  10  Weakness and Loss of Motion

Exam Week

Gross anatomy is featured during this unit by way of cadaver dissection, three-dimensional models, radiographs, computer assisted tomography, magnetic resonance imaging, angiograms, ultrasound images, and histological images. The neuroscience of movement and pain, the regulation of skeletal muscle contraction at the cellular and molecular levels, and the scientific principles of peripheral nervous system diseases are some of the themes explored in this unit.

SPM II (PSPM 5012):
This second semester course of Year 1 consists of three integrated units: ‘Hematologic System’ (HEM), ‘Cardiovascular and Respiratory Systems’ (CVR), and ‘Renal System’ (RNL).

Unit 4: Hematologic System (HEM)
This 4-week unit investigates the functions of the hematologic system within the context of the following four clinical presentations:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Coagulation Abnormalities</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Abnormal Hemoglobin</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Abnormal White Blood Cells</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Lymphadenopathy</td>
</tr>
</tbody>
</table>

Exam Week

Students will learn about the structure and function of the formed elements of blood as well as the components of blood plasma as they apply to health and hematologic diseases.
Unit 5: Cardiovascular and Respiratory Systems (CVR)
This 7-week unit explores the normal parameters of the cardiovascular and respiratory systems and investigates their dysfunction in the following ten clinical presentations:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Chest Discomfort</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Abnormal Heart Sounds</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Cardiac Murmurs</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Syncope</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Palpitations</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>Abnormal Blood Pressure: Hypertension and Shock</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>Dyspnea</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>Cough and Wheezing</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>Cyanosis</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Hemoptysis</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Mediastinal Mass</td>
</tr>
</tbody>
</table>

The faculty of the Department of Medical Education work together with cardiologists, pulmonologists, acute care physicians and other practicing specialists to present the topics using a variety of educational approaches. Several laboratory experiences are included to emphasize critical physiological concepts underlying the function of the cardiovascular and respiratory systems.

There will be a summary anatomy session that involves student groups examining the cardiac and respiratory systems of their assigned cadaver. The students will be expected to appreciate the in situ appearance of the heart and lungs in the thorax and they will be asked to dissect and examine the internal gross anatomy of the heart and lungs of their cadaver. If abnormalities are identified, they will be expected to ask for photographs and to biopsy significant findings for their tankside grand rounds presentations.

Unit 6: Renal System (RNL)
This 4-week unit focuses on fluids, electrolytes, homeostatic mechanisms and the structure and function of the kidney. The following are the four clinical presentations to be covered in this unit:
There will be a summary anatomy session at the end of the renal unit where students will dissect and examine the urinary system and ask for photographs as needed. They will biopsy significant anatomic/pathologic findings, as needed, for tankside grand rounds.

**Educational Methods and Learning Experiences**

SPM offers a robust learning experience by employing a variety of educational methods including:

- Lectures (e.g. clinical scheme presentations)
- Large group interactive discussions (e.g. basic science ‘clicker’ presentations)
- Small group interactive discussions (e.g. Worked Case Example sessions)
- Integrative team-based learning experiences
- Laboratory exercises (e.g. Anatomy & Microbiology)
- Exposure to interprofessional education (Worked Case Example sessions and through instructions from a wide variety of professionals)
- The Student Self-Assessment (SSA) component

Learning experiences are framed around each clinical presentation and consist of three main components: (1) Introduction & Diagnostic Scheme Overview, (2) Basic Science, (3) Synthesis, Integration and Worked Case Example sessions. The Introduction session is a clinician-guided overview of the clinical presentation and the underlying conceptual framework (diagnostic scheme) of scientific concepts utilized by expert clinicians to make effective diagnoses. The Basic Science sessions are designed to help students build an integrated foundation of clinically relevant scientific knowledge within the context of clinical presentations and their respective diagnostic schemes. The Worked Case Example segment emphasizes the deliberate practice of making evidence-based clinical diagnoses using basic science knowledge and scheme-inductive
diagnostic reasoning; here, a high level of student engagement is promoted in a clinician-tutored small group or team-based learning format.

Tankside Grand Rounds (TSGR)
TSGR is designed to have students integrate their basic science knowledge in the context of clinical presentation schemes and relevant findings from a donor cadaver. In addition, this element is designed to assess students’ ability to employ self-initiated learning strategies, work within a team, and communicate effectively with peers and other health-care professionals. TSGR is a team-based oral presentation activity in which anatomy teams will present their cadaveric findings to their student peers and faculty. Basic science and clinical faculty judge team presentations using the TSGR grading rubric provided in the Appendix. The course director will compile these to create a final judgement of pass or remediation required.

Data for TSGR comes from the cadavers in the anatomy labs and from pathology labs held three times during the M1 year. Students will be assigned to a tank team. Two teams will be assigned to each cadaver. Teams sharing a cadaver may work together to create their presentations but each team will be expected to fully present, explain, and answer questions about their cadaver.

During anatomy summary labs, students will perform faculty-guided examination and dissection of relevant anatomy and associated pathology. Students will be required to document their findings during the dissections and will be expected to ask anatomy staff to take photographs of significant pathology to be used during their TSGR presentations.

If a student has an excused absence during the TSGR presentations at the end of the second year, they will be required to individually give the entire presentation to a faculty panel. As part of the presentation, the student should be prepared to discuss his/her contributions to the presentation and answer questions on all aspects of the case.

If a group or individual receives a grade of ‘remediation required’ for the TSGR component, the faculty will create a remediation plan specific to the weaknesses observed. This may include presentation of another case or preparation of other elements for presentation.
### Competencies, Program Goals and Objectives, and Outcome Measures

The Paul L. Foster School of Medicine education program goals and objectives are outcome-based statements that guide instruction and assessment as you develop the knowledge and abilities expected of a physician. All elements of the PLFSOM curriculum are derived from and contribute to the fulfillment of one or more of the medical education program’s goals and objectives, which can be found at PLFSOM PGOs. SPM is designed to meet the following PLFSOM Medical Education Program Goals and Objectives:

#### Patient Care

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Gather essential information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging studies, and other tests.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams)</td>
</tr>
<tr>
<td>1.2 Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams)</td>
</tr>
<tr>
<td>1.3 For a given clinical presentation, use data derived from the history, physical examination, imaging and/or laboratory investigation to categorize the disease process and generate and prioritize a focused list of diagnostic considerations.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams)</td>
</tr>
<tr>
<td>1.6 Describe and propose treatments appropriate to the patient’s condition and preferences.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams)</td>
</tr>
</tbody>
</table>

#### Knowledge for Practice

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 2.1 Compare and contrast normal variation and pathological states in the structure and function of the human body across the life span. | • Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams)  
• Exam – Nationally Normed/Standardized, Subject (NBME CBSE)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| 2.2 Apply established and emerging foundational/basic science principles to health care. | • Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams) |
| 2.3 | Apply evidenced-based principles of clinical sciences to diagnostic and therapeutic decision-making and clinical problem solving. | • Exam – Nationally Normed/Standardized, Subject (NBME CBSE)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| 2.4 | Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations. | • Exam – Nationally Normed/Standardized, Subject (NBME CBSE) |
| 2.5 | Apply principles of social-behavioral sciences to patient care including assessment of the impact of psychosocial, cultural, and societal influences on health, disease, care seeking, adherence and barriers to care. | • Exam – Nationally Normed/Standardized, Subject (NBME CBSE) |

### Interpersonal and Communication Skills

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 4.2 Communicate effectively with colleagues and other health care professionals. | • Narrative Assessment (Small-group assessment rubric)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| 4.3 Communicate with sensitivity, honesty, compassion and empathy. | • Narrative Assessment (Tankside Grand Rounds Rubric) |
| 4.4 Maintain comprehensive and timely medical records. | • Narrative Assessment (Tankside Grand Rounds Rubric) |

### Professionalism

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 5.1 Demonstrate sensitivity, compassion, integrity and respect for all people. | • Narrative Assessment (Small-group assessment rubric)  
• Narrative Assessment (Professionalism Event Card)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| 5.3 | Demonstrate accountability to patients and fellow members of the health care team. | • Narrative Assessment (Small-group assessment rubric)  
• Narrative Assessment (Professionalism Event Card)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| 5.6 | Demonstrate honesty in all professional and academic interactions. | • Narrative Assessment (Small-group assessment rubric)  
• Narrative Assessment (Professionalism Event Card) |
| 5.7 | Meet professional and academic commitments and obligations. | • Narrative Assessment (Professionalism Event Card)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |

**Interprofessional Collaboration**

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
</table>
| 7.3 Function effectively both as a team leader and team member. | • Narrative Assessment (Small-group assessment rubric)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |

**Personal and Professional Development**

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5 Demonstrate the ability to employ self-initiated learning strategies (problem definition, identification of learning resources and critical appraisal of information) when approaching new challenges, problems or unfamiliar situations.</td>
<td>• Narrative Assessment (Tankside Grand Rounds Rubric)</td>
</tr>
</tbody>
</table>
Grading System

SPM is a pass/fail course. Successful passage requires that the student has not only achieved a level of competency as measured by performance on summative assessments, but has also demonstrated a commitment to professional responsibility by being an active participant in the educational experience that is defined by the curriculum.

Formative and Summative Assessments
Regular formative student assessment and feedback are an important part of the educational experience. Students will receive feedback from Worked Case Example preceptors on a weekly basis. Worked Case Example feedback includes a list of descriptive adjectives that represent the student’s attitudes, professionalism and preparation, often accompanied by a brief written narrative. USMLE-style formative assessments will be provided each week to allow students to monitor progress and to identify potential deficiencies that warrant early remediation through self-study. Grades on formative assessments are for diagnostic purposes only and do not count towards the student’s final grade. Weekly formative assessments are listed on the CHAMP calendar view under ‘asynchronous learning’ and will be made available during the weekly formative testing window. Once each formative assessment is completed, students will have the opportunity to review their score along with the answers and explanations for each question. Each student will also receive an individual e-mail listing the learning objectives that are linked to questions they missed. Note that formative assessment performance reports will be automatically generated at 12 AM on Fridays unless indicated otherwise on the CHAMP calendar. These reports will be used to calculate class statistics, to send out individualized lists of missed learning objectives, and to populate the formative score tables on each student’s e-portfolio. Consequently, students who don’t complete a formative assessment prior to the automatic reporting deadline will not receive an e-mail containing missed learning objectives and will see a score of ‘0’ on their e-portfolio entry for that formative. Each formative assessment will be subsequently available for students to re-take and review for the duration of the first year of the pre-clerkship curriculum.

USMLE-style end-of-unit summative (formal) exams will be given at the end of SPM Units 1-6. Up to 10% of the content featured on these summative exams will be cumulative; these items will be taken from formative quizzes in prior units. In accordance with institutional policy, students are required to use their own laptops for all computer based assessments including end-of-unit summative exams. For more information regarding this requirement, refer to the “Bring Your Own Device” policy in the PLFSOM Student Handbook.

Tardiness for a summative assessment is disruptive, unprofessional, discourteous, and strongly discouraged. Students who arrive up to 10 minutes late for an assessment will be permitted entry to the assessment area entirely at the discretion of the chief proctor and with regard to
the effect that such entry may have on the students already present in the assessment
environment. Students who are permitted late entry to the assessment will receive a
professionalism event card and must finish at the scheduled end time. Students who arrive
more than 10 minutes late for an assessment will be denied entry and recorded as absent. An
unexcused absence from a summative assessment will result in an initial grade of ‘Fail’ for the
unit and an associated grade of ‘DE’ (Deferred) for the SPM semester course. Excused absences
are granted through the Office of Student Affairs (see ‘Course Policies and Procedures’).

SPM Unit and Semester Grade Determinations
The semester courses SPM I and II, in addition to the CEYE, must be passed in order to progress
to the second year. The SPM grading and promotion policy is designed to provide students with
ample opportunity to demonstrate satisfactory knowledge and skills.

Detailed information regarding institutional and school-level grading procedures and transcript
notations can be found in the TTUHSC-EP ‘Grading Procedures and Academic Regulations’
(HSCEP OP 77.19) policy and PLFSOM ‘Grading, Promotion, and Academic Standing’ (GPAS)
policy. SPM assessment and grading guidelines are summarized as follows:

1. **SPM Unit Grade (within a semester course)**
   Unit and Course Directors are responsible for determining student progress. To receive a
   grade of pass (PA) for each SPM unit, a student must achieve a minimum summative exam
   score of 65%.

2. **SPM Semester Course Grade**
   Progress within the course will be determined by the Course Directors based on the
   student’s performance in the Units of the course.

   1) **Grading**
   A. **Pass (PA):** All Units must be passed.

   B. **Deferred (DE):**
      a) *If one or two SPM units are failed in the first semester,* the first semester course
         grade initially will be recorded as ‘Deferred’ (DE) and will be revised to ‘Pass’ (PA)
         or ‘Fail’ (FA) pending the outcome of unit remediation during the optional
         January remediation date and/or at the end of the academic year.
      b) *If one or two units are failed in the second semester,* the second semester course
         grade initially will be recorded as ‘DE’ and will be revised to ‘PA’ or ‘FA’ pending
         the outcome of unit remediation at the end of the academic year.
      c) In accordance with the PLFSOM ‘Grading, Promotion, and Academic Standing
         (GPAS)’ policy, a student with ‘DE’ status may be referred to the GPC if it appears
         they are at substantial risk for academic failure.
C. **Fail (FA):**

   a) *If three SPM units are failed in the first semester,* the semester course grade will be recorded as ‘FA’ and a recommendation will be made to the GPC for repeat of the year if the student is eligible.

   b) *If two SPM units are failed in the first semester,* the semester course grade be listed as ‘DE’ and the student will be given an opportunity to complete unit remediation during the optional January remediation date and/or at the end of the academic year. If an additional unit failure occurs in the second semester the student will receive a grade of ‘FA’ for both semesters and a recommendation will be made to the GPC for repeat of the year if the student is eligible. Similarly, if a student fails one unit in the first semester and goes on to fail two units in the second semester, a grade of ‘FA’ will be recorded for both semesters and a recommendation will be made to the GPC for repeat of the year if the student is eligible.

   c) *If a student fails three SPM units in the second semester* they will receive a grade of ‘FA’ for that semester and a recommendation will be made to the GPC for repeat of the year or semester if the student is eligible. The grade for the first semester will remain as ‘PA’.

   d) If a student fails two SPM units and one SCI semester, or one SPM unit and two SCI semesters, over the course of the academic year, then they will be referred to the GPC with a recommendation for repeat of the year if eligible.

2) **Remediation**

   If a grade of ‘DE’ (Deferred) is recorded because one or two SPM units are failed within a semester, students will be required to pass a remediation exam for each failed unit. As with the original SPM unit summative exams, the minimum passing score for an SPM unit remediation exam is 65%. If the remediation exam(s) for the failed unit(s) is/are passed, the semester course grade(s) will be converted from ‘DE’ to ‘PA’ (Pass). If the student fails to successfully remediate a failed unit, the corresponding semester course grade will be converted from ‘DE’ to ‘FA’ (Fail), and the student will be referred to the GPC with a recommendation for repeat of the year if eligible. See ‘Important Dates’ below for a list of remediation exam dates.

3) **Grade Release**

   Barring extenuating circumstances, SPM unit grades will be released within 7 calendar days of the summative assessment date. If a student wishes to challenge their unit
grade, they must do so by contacting the Course Director within fourteen calendar days of the summative assessment date.

4) Professionalism

Be aware that formative and summative assessment items are part of a collective pool of secured assessment items designed to ensure that student proficiency meets the minimum standards necessary for the eventual practice of medicine. As such, the integrity and security of this pool must not be compromised, and students are strictly prohibited from copying, reproducing, transmitting or distributing formative or summative assessment items. Any violation of this honor code, including failure to report a known offence, is a direct violation of the Code of Professional and Academic Conduct as described in the PLFSOM Student Handbook, and could lead to academic warning, probation, or dismissal from PLFSOM.

Important Dates

1. Summative Examinations
   - IHD Summative: 5 September 2019
   - GIS Summative: 18 October 2019
   - IMN Summative: 18 December 2019
   - HEM Summative: 6 February 2020
   - CVR Summative: 2 April 2020
   - RNL Summative: 5 May 2020
   - CEYE: 21-22 May 2020

2. CBSE Examinations
   - Baseline: 17-18 July 2019
   - End of Semester 1: 6 January 2020
   - End of Semester 2: TBD (Fall Semester 2020)

3. Remediation Exam Dates
   Students who are deemed eligible by the Associate Dean for Student Affairs will be permitted to remediate up to two SPM unit exams or two SCI semester grades, or a
combination of one SPM unit exam and one SCI semester grade, over the course of the academic year. Students are required to schedule their remediation exams via e-mail with the assessment coordinator (norma.fuentes@ttuhsc.edu). Eligible students may select an SPM/SCI/CEYE remediation schedule that best suits their individual needs. Remediation dates and signup deadlines are specified below**:

<table>
<thead>
<tr>
<th>Remediation Date</th>
<th>Signup Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 January 2020 (optional Fall remediation)</td>
<td>31 December 2019, 12 PM</td>
</tr>
<tr>
<td>4 June 2020</td>
<td>22 May 2020, 12 PM</td>
</tr>
<tr>
<td>5 June 2020</td>
<td>22 May 2020, 12 PM</td>
</tr>
<tr>
<td>11 June 2020</td>
<td>29 May 2020, 12 PM</td>
</tr>
<tr>
<td>12 June 2020</td>
<td>29 May 2020, 12 PM</td>
</tr>
<tr>
<td>18 June 2020</td>
<td>5 June 2020, 12 PM</td>
</tr>
<tr>
<td>19 June 2020</td>
<td>5 June 2020, 12 PM</td>
</tr>
</tbody>
</table>

Note that students needing to remediate the comprehensive end-of-year exam (CEYE) will also need to factor this into the above Spring remediation schedule. CEYE remediation must take place over two consecutive days.

**It is essential that students choose a schedule that allows their individual remediation requirements to be completed by the last available date. Failure to do so will lead to a grade of ‘FA’ for the associated SPM and/or SCI semesters.
Course Policies and Procedures

Attendance/Participation Policies
Students are expected to be present, to be prepared, and to be on time. Unless otherwise specified, lectures, labs and small group activities begin on the hour. The Paul L. Foster School of Medicine curriculum is modeled on the concept of ‘learning communities’ where each individual offers knowledge, skills and experiences that are unique and beneficial to the community. A number of SPM learning activities will rely on active student participation and teamwork, and therefore a student’s absence can be detrimental to the educational experience of his or her peers. As the effective practice of medicine requires physicians to demonstrate punctuality, teamwork, trustworthiness and beneficence, similar behaviors and attitudes will be expected of our students. As outlined in the PLFSOM ‘Pre-clerkship phase attendance policy’, failure to meet the school’s overall expectations for attendance and participation can lead to a number of consequences including failure of a course or referral to the GPC for professionalism concerns.

Required SPM activities
Attendance and punctuality will be monitored for a number of required SPM activities including the following:

- Worked Case Example sessions
- Specified lab-based learning sessions (e.g., Anatomy and Microbiology)
- Specified small-group interactive or team-based learning sessions

Sessions with required attendance or participation will be highlighted by a star on the CHAMP calendar view at the beginning of each unit. Accountability and responsibility are important tenets of professionalism which pertain to medical professionals at all stages of education, training and practice. In this regard, medical students are expected to demonstrate punctuality and reliability for required educational activities in the SPM course including the weekly Worked Case Example sessions.

- Students will be counted as absent from a required SPM event (such as Worked Case Example sessions) if they have not signed in by 10 minutes after the scheduled start time.
- Students who sign in within 10 minutes after the scheduled start time will be marked as tardy.
• Sessions where attendance is required will be tracked using a Swipe-Card System. A student who was recorded as tardy or absent will receive an automatically-generated notification email. The attendance record will become permanent 14 calendar days following the date of the notification email.

Consequences

Non-compliance with the SPM punctuality and attendance/participation policy will have consequences that are reflected in a student’s academic record. These consequences may include: a failing grade on the basis of attendance or punctuality; required remediation or repeating of the course; documentation in the student’s academic record and e-Portfolio; and reporting to the Associate Dean of Student Affairs and the PLFSOM Grading and Promotion Committee.

Professionalism ‘Event Card’ reporting system

Four professionalism objectives are addressed in the SPM syllabus from the institutional learning goals and objectives:

5.1 Demonstrate sensitivity, compassion, integrity and respect for all people.
5.3 Demonstrate accountability to patients and fellow members of the health care team.
5.6 Demonstrate honesty in all professional and academic interactions.
5.7 Meet professional and academic commitments and obligations.

When a student fails to meet any of the above listed learning goals and objectives within the context of the SPM curriculum, an event card (see Appendix) will be filled out by the observing faculty or staff member. This card will contain the student’s name, the date of the incident, the reporter’s name, the associated institutional learning goal(s) and objective(s) related to the incident, and a brief description of the issue (e.g. ‘Student had an unexcused absence for today’s anatomy session and therefore failed to meet his/her professional and academic commitments and obligations’).

There are a number of situations when this may occur:

1) Worked Case Example sessions.

• An unexcused absence or tardy over the course of a unit will trigger the filing of an event card. Subsequent unexcused tardies or absences over the course of the semester will be met with similar incident reporting.

• Blank event cards will be made available by the Course Coordinators to the Worked Case Example facilitators in the event of incidents warranting a professionalism report (good or bad).
2) Summative examinations.
   • Students who are tardy for a summative examination will receive a professionalism event card.

3) Unspecified SPM sessions: any faculty may submit an event card (good or bad) when a student fails to meet, or excels at, one or more professionalism institutional learning goals and objectives.

The approved process for reporting on professionalism is summarized as follows:

1) Faculty or staff submits event cards to the Course Coordinator.

2) Course Coordinator collects event cards, creates a list of students who received event cards, and sends the list to the Course Director and the Unit Associate Director.

3) Unit Associate Director enters the information contained in event cards into TTAS (Texas Tech Assessment System), an in-house database.
   • Information from the TTAS system will be recorded in each student’s e-portfolio. This will allow the generation of an electronic report at the end of the semester which will be sent to the Course Director and College Masters.

4) The following actions will be taken depending on a number of “bad” event cards filed against a student over the course of a semester:
   a) First occurrence: Course Director sends an email to the student informing that an event card has been filed.
   b) Second occurrence:
      • Course Director sends an email to the College Master requesting to meet with a student who received two or more event cards over the course of a semester.
      • College Master meets with the student to discuss early trend.
   c) Third occurrence: College Master sends student to Associate Dean for Student Affairs (ADSA) to discuss.

Documentation:

1) At the end of the semester (or earlier when warranted), the College Master will review all advisory sessions or professionalism comments and discuss negative trends with the student. This meeting will be documented.
2) At the end of year one, College Masters from the students’ college, ADSA, and Director of Academic Support will meet to discuss each student’s progress to date. This meeting will include reviewing documentation of any advisory meetings between the College Masters and the student and/or any documentation of exemplary professionalism. A summary will be generated per student and posted on the student’s e-portfolio with a plan for improvement or acknowledgement of progress, meeting expectations, etc.

3) At the end of year two, the same group will meet to review all narratives and the committee authors a paragraph for each student commenting on the student’s professionalism to date. The statement will be forwarded to the student e-portfolio and will be used in its entirety in the pre-clerkship paragraph of the Medical Student Performance Evaluation (MSPE).

The student has a right to challenge the accuracy of information as stated in the policy on challenging student grades (please see Student Affairs Handbook).

**Excused absences**

If a student is unable to attend or be punctual for a required session, he or she may be granted an excused absence through the Office of Student Affairs in accordance with the criteria set forth in the PLFSOM ‘Pre-clerkship phase attendance policy’.

Students wishing to obtain an excused absence must contact the Office of Student Affairs ([https://elpaso.ttuhs.edu/som/studentaffairs/absence.aspx](https://elpaso.ttuhs.edu/som/studentaffairs/absence.aspx)) by submitting a request to plfabsence@ttuhsc.edu (refer to the PLFSOM ‘Pre-clerkship phase attendance policy’ for more details).

No credit will be given for any graded exercise missed without a valid excuse.

**Narrative Evaluations and Feedback**

During the course, students will receive periodic written formative feedback on their cognitive and non-cognitive abilities and skills within small group settings (Worked Case Example sessions). Examples of evaluation rubrics used for Worked Case Example sessions and Tankside Grand Rounds are provided in the Appendix. Narrative evaluations will become part of the student’s e-Portfolio and may be discussed on occasion with the Course Director, College Master and/or Associate Dean for Student Affairs. In the event that the rubrics undergo modification during the academic year, copies of the revised forms will be provided to students in advance of the associated activity.
Textbooks
Required and recommended reading assignments are listed on the associated session pages in the CHAMP calendar. Unless otherwise noted, textbook reading assignments will be available through the TTUHSC-EP electronic library. A select list of relevant textbook hyperlinks is also available through the PLFSOM electronic student portal under ‘Electronic educational resources’.

Professionalism, Plagiarism and Copyright Policies
Professionalism is a core competency in Medicine. In SPM, as with all other courses in the Paul L. Foster School of Medicine, we expect students to adhere to the Standards of Professional Conduct and the Medical Student Honor Code as outlined in the PLFSOM Student Handbook and the TTUHSC-EP Institutional Handbook (available on the Office of Student Affairs website under ‘PLFSOM Student Handbooks’). In particular, students must not copy, recreate, post or share SPM exam questions (formative or summative). Students who have delayed testing or remediation must not discuss the content of SPM exams with their peers prior to testing. Students must not submit false claims of attendance for required SPM sessions or attempt to sign-in for another student. Students must not attempt to obtain an excused absence for a required activity or examination through misrepresentation. Students must adhere to published policies related to plagiarism and copyright protection. Depending on the nature of the problem and as determined by the course director, failure to act professionally may result in a grade of Fail for SPM regardless of the student’s academic performance according to the PLFSOM ‘Grading, Promotion, and Academic Standing (GPAS)’ policy. A student who witnesses academic misconduct or other unprofessional behavior is obligated to report that violation or risk facing disciplinary action. Violations of professionalism could result in dismissal from PLFSOM.

Disability Support Services
TTUHSC EP is committed to providing equal access to learning opportunities to students with documented disabilities. To ensure access to this course, and your program, please contact the Office of Academic and Disability Support Services to engage in a confidential conversation about the process for requesting accommodations in the classroom and clinical setting. Accommodations are not provided retroactively so students are encouraged to register with DSS as soon as possible.
Appendix

Faculty Roster: SPM Year 1 Unit Directors

Unit 1 – Introduction to Health and Disease (IHD):
Jorge Cervantes, MD, PhD
Martine Coue, PhD
Ellen Dudrey, MD

Unit 2 – Gastrointestinal System (GIS):
Ellen Dudrey, MD
Diego Niño, MD, PhD
Curt Pfarr, PhD
Marc Zuckerman, MD

Unit 3 – Integumentary, Musculoskeletal and Nervous Systems (IMN):
Ricardo Belmares, PhD
Ellen Dudrey, MD
Diana Pettit, PhD
Justin Wright, MD

Unit 4 – Hematologic System (HEM):
Niti Manglik, MD
Curt Pfarr, PhD
Javier Corral, MD

Unit 5 – Cardiovascular and Respiratory Systems (CVR):
Herb Janssen, PhD
Niti Manglik, MD
Cynthia Perry, PhD
Brad Fuhrman, MD
Gordon Woods, MD

Unit 6 – Renal System (RNL):
Ricardo Belmares, PhD
Herb Janssen, PhD
### Event Card

<table>
<thead>
<tr>
<th>Student Name:</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Faculty/Staff/Student Name:</th>
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</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course (Circle One):</th>
<th>SPM</th>
<th>SCI</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of Event:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did this demonstrate exceptional professionalism? (Circle One)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did this demonstrate a lapse in professionalism? (Circle One)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Suggestions for improvement?</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

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29
Small Group Narrative Assessment (Worked Case Examples)
## Tankside Grand Rounds Grading Rubric

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation skills</td>
<td>Professional level presentation</td>
<td>Satisfactory presentation</td>
<td>Adequate presentation, but lacks detail</td>
<td>Poor quality presentation which lacks detail</td>
</tr>
<tr>
<td>Picture utilization</td>
<td>Pictures labeled as to site, supportive of findings, with good understanding of their significance</td>
<td>Pictures labeled as to site, supportive of findings, and explanations show some lack of understanding</td>
<td>Pictures labeled as to site, not supportive of findings, and lack of understanding of their significance</td>
<td>Pictures not labeled as to site, not supportive of findings and no understanding of their significance</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Students are able to accurately answer almost all questions about the case</td>
<td>Students are able to accurately answer most questions about the case</td>
<td>Students are able to accurately answer a few questions about the case</td>
<td>Students are unable to accurately answer questions about the case</td>
</tr>
<tr>
<td>Preparedness</td>
<td>Students are completely prepared and have obviously rehearsed</td>
<td>Students seem pretty prepared but might have needed a couple more rehearsals</td>
<td>The students are somewhat prepared, but it is clear that rehearsal was lacking</td>
<td>Students don’t seem at all prepared to present.</td>
</tr>
<tr>
<td>Content</td>
<td>Shows a full understanding of the case</td>
<td>Shows a good understanding of the case</td>
<td>Shows a good understanding of parts of the case</td>
<td>Does not seem to understand the case very well</td>
</tr>
<tr>
<td>Basic science content</td>
<td>Able to clearly explain basic science content relevant to their case</td>
<td>Explains some of the basic science content relevant to their case</td>
<td>Not much basic science material is explained, but can answer basic science questions</td>
<td>Not much basic science in presentation and/or can’t answer basic science questions correctly</td>
</tr>
<tr>
<td>Collaboration with peers</td>
<td>Evidence that the group has worked together to complete the presentation</td>
<td>Group has worked together to prepare the presentation, but only a few can answer questions about the case</td>
<td>A few of the group worked together to prepare and present the case; others did not participate</td>
<td>Group did not work together to prepare or present the case.</td>
</tr>
<tr>
<td>Scheme utilization</td>
<td>An appropriate scheme is utilized and incorporated logically into the presentation</td>
<td>An appropriate scheme is utilized and partially incorporated into the presentation</td>
<td>Scheme utilization is limited and incorporation into the presentation is minimal.</td>
<td>No evidence of utilization of a scheme and/or no incorporation into the presentation</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Correlation of findings with cause of death</td>
<td>Cause of death is very well correlated with gross and microscopic findings</td>
<td>Some correlation of gross and microscopic findings with cause of death is attempted</td>
<td>Minimal correlation between cause of death and gross and microscopic findings is attempted</td>
<td>No correlation between cause of death and gross and microscopic findings is attempted</td>
</tr>
<tr>
<td>Recent reference materials</td>
<td>Major diagnoses are researched and the results are incorporated logically into the presentation</td>
<td>Major diagnoses are researched and somewhat logically incorporated into the presentation</td>
<td>Evidence of active use of research materials is limited and incorporation into the presentation is minimal</td>
<td>No evidence of research into the major diagnoses and/or no incorporation into the presentation</td>
</tr>
<tr>
<td>Slides easy to read and follow</td>
<td>Order of presentation is logical and slides are easy to read and not crowded</td>
<td>Order of presentation is logical, but slides are crowded or hard to read</td>
<td>Presentation is hard to follow and/or slides are crowded or hard to read</td>
<td>Presentation does not make sense and/or slides are crowded or hard to read</td>
</tr>
</tbody>
</table>

Notes for faculty (questions to ask – not to share with students)

Comments for the team to receive: