Syllabus

Scientific Principles of Medicine (SPM)

PSPM 6011 (SPM III)
PSPM 6022 (SPM IV)
Academic Year 2024-2025
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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 organized into a series of ‘clinical presentations (CP)’ (e.g., gait disturbance, movement disorders, headache, seizure, and epilepsy) that reflect the major ways a person would present to a physician. A high level of integration and clinical relevance is achieved by learning the basic and clinical sciences synchronously and within the context of clinical presentations. 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 has been shown to help mitigate the temporal loss of basic science knowledge, help students think like experts when solving clinical problems, and dramatically improve students’ diagnostic success rates.

In activities such as the Worked Case Example (WCE) 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 (formative exams), 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 III (PSPM 6011):

This first semester of SPM Year 2 consists of three integrated units: ‘Central Nervous System and Special Senses (CSS), ‘Endocrine System’ (END), and ‘Reproductive System’ (REP). The sequence of CPs 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 CP 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, neuroscience, 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 7: Central Nervous System and Special Senses (CSS)

Content of this unit is concentrated in the areas of disorders and abnormalities of the central nervous system and special senses. Each CP will include a brief definition, a statement of clinical significance, and a schematic representation of potential causes (along with “process worksheets” to be used in “worked case examples”). There will also be basic science learning objectives related to the appropriate scientific concepts of anatomy (including gross and microscopic anatomy, embryology, neuroanatomy, and radiographic anatomy), biochemistry, physiology, genetics, immunology, microbiology, pharmacology, and pathology. The following are the CPs to be covered in the CSS unit:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Gait Disturbances</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Movement Disorders</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Headache</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Seizure and Epilepsy</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Stroke and Aphasia</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>Delirium, Stupor and Coma</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Eye Redness</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>Diplopia and Strabismus</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Visual Disturbances</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>Hearing Loss and Tinnitus</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Vertigo and Dizziness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exam Week</td>
</tr>
</tbody>
</table>

Unit 8: Endocrine System (END)

This unit deals with glucose, lipids, intermediary metabolism of these entities, and the disease processes associated with their abnormalities. Other endocrine disorders and their anatomic
and pathophysiological basis will also be considered. The following CPs are covered in the END unit:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Hypothalamus / Pituitary / Adrenal Disorders</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Hypertension</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Diabetes and Obesity / Metabolic Syndrome</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Disorders of Thyroid Function</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Abnormal Serum Calcium</td>
</tr>
</tbody>
</table>

Exam Week

Unit 9: Reproductive System (REP)
This unit focuses on the male and female reproductive systems, pregnancy and infertility, sexually-transmitted diseases, and pathologies associated with the breast and genital tract. The sequence of these CPs has been structured so that the concepts developed during the study of one topic provides a foundation for subsequent topics. Students are given a brief clinical overview of each CP and its clinical significance. This serves as the foundation for the acquisition of both clinical and basic science knowledge pertinent to the CP. Gross, microscopic, and radiographic presentation of normal and abnormal anatomy are explored in laboratory and small group discussions. The following are the CPs to be covered in the REP unit:

<table>
<thead>
<tr>
<th>Week</th>
<th>CP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Men’s Health</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Infertility</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Screening and Prevention (Cervix and Breast)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Abnormal Uterine Bleeding</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>Pelvic Masses</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Pelvic Pain</td>
</tr>
</tbody>
</table>

Exam Week

Winter Break (2 weeks)

SPM IV (PSPM 6022):
This second semester of SPM Year 2 consists of one integrated unit: ‘Mind and Human Development’:

Unit 10: Mind and Human Development (MHD)
This unit transitions logically from the preceding focus on the male and female reproductive systems, and spans the arc of human development from neonatology to geriatrics. The unit concludes with CPs that explore mental health and mental illness across the lifespan. The following are the CPs to be covered in the MHD unit:
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
- Integrative team-based learning (TBL) experiences (e.g., Worked Case Example sessions)
- Small group interactive discussions (Open-Learning Forum - Tuesday Afternoon Club and Faculty Assisted Student Tutoring – FAST)
- Laboratory exercises (e.g., Anatomy)
- Exposure to interprofessional education (Worked Case Example sessions and through instructions from a wide variety of professionals)
- The Student Self-Assessment (SSA) component (e.g., session-level formative quizzes, weekly formative exams, and ‘flashback’ formative exams)

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)**
There will be a capstone event at the end of the second year of medical school called 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 their donor cadaver. In addition, this element is designed to assess students’ ability to employ self-directed learning strategies, work within a team, and communicate effectively with peers and other healthcare professionals.

Students within each anatomy team are required to both individually and collaboratively investigate their donor cadaver’s listed cause of death, known comorbidities, and/or any other pertinent findings that were discovered during the examination of their donor cadaver. Following a self-organized team meeting and discussion, each student within their team shall engage in a self-directed learning activity that follows a unified sequence:

1) Each student will identify independent learning needs related to the donor cadaver’s known clinical presentations, diagnoses, and/or cause of death. This can include but is not limited to the biological, genetic, or pathophysiological underpinnings of the patient’s disorder(s), disease epidemiology (e.g., prevalence, risk factors), clinical manifestations (e.g., signs/symptoms), differential diagnosis and diagnostic evaluations (e.g., physical exam findings, imaging/laboratory studies, and their scientific underpinnings), clinicopathological correlations, and evidence-based treatment options.

2) Based on the above independent assessment, each student will develop one or more SMART learning objectives intended to clearly frame their individual learning needs.

3) Each student will then independently identify, analyze, and synthesize relevant information from credible sources and synthesize relevant information from credible sources to address their learning needs. Credible sources should include primary literature (e.g., original peer-reviewed articles, case reports, autopsy reports) and secondary literature (e.g., peer-reviewed review articles and online peer-reviewed resources such as UpToDate).

4) Each student will develop a brief PowerPoint presentation summarizing their individual learning objective(s) related to their donor cadaver, the relevant findings they obtained from credible information sources, and appropriate references.

5) Students should meet with their team members periodically to share their learning objectives, review progress, and to develop a coherent outline for their TSGR team presentation.
Student teams will be scheduled to present their findings to an audience of peers and faculty during the spring semester of their second year. Students will be supplied with a TSGR grading rubric indicating the standards expected for the presentation, and faculty will judge the presentations using this rubric provided in the Appendix. In addition, assigned faculty will provide an assessment of individual student’s information-seeking skills, including the credibility of student-identified information sources.

If a group or individual receives a grade of ‘remediation required’ for this activity, the faculty will create a remediation plan specific to the weaknesses observed. This may include the development, implementation and presentation of a revised TSGR self-directed learning plan.
## 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><strong>PC-1.1</strong> 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; Session-level formative quizzes)</td>
</tr>
<tr>
<td><strong>PC-1.2</strong> 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; Session-level formative quizzes)</td>
</tr>
<tr>
<td><strong>PC-1.3</strong> 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; Session-level formative quizzes)</td>
</tr>
</tbody>
</table>

### Knowledge for Practice

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KP-2.1</strong> Compare and contrast normal variation and pathological states in the structure and function of the human body across the life span.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams; Session-level formative quizzes)</td>
</tr>
<tr>
<td></td>
<td>• Exam – Nationally Normed/Standardized, Subject (NBME CBSE)</td>
</tr>
<tr>
<td></td>
<td>• Narrative Assessment (Tankside Grand Rounds Rubric)</td>
</tr>
<tr>
<td><strong>KP-2.2</strong> Apply established and emerging foundational/basic science principles to health care.</td>
<td>• Exam – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams; Session-level formative quizzes)</td>
</tr>
</tbody>
</table>
| KP-2.3 | Apply evidence-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) |
| --- | --- | --- |
| KP-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 – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams; Session-level formative quizzes)  
• Exam – Nationally Normed/Standardized, Subject (NBME CBSE)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |
| KP-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 – Institutionally Developed, Written/Computer-based (Weekly SPM formative exams; End-of-unit SPM summative exams; Session-level formative quizzes)  
• Exam – Nationally Normed/Standardized, Subject (NBME CBSE)  
• Narrative Assessment (Tankside Grand Rounds Rubric) |

### Practice-Based Learning & Improvement

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBL-3.1 Identify gaps in one's knowledge, skills, and/or attitudes, and perform learning activities to address them.</td>
<td>• Narrative Assessment (Tankside Grand Rounds Rubric; Formative Assessment Engagement Rubric)</td>
</tr>
<tr>
<td>PBL-3.4 Locate, appraise and assimilate evidence from scientific studies related to patient’s health problems.</td>
<td>• Narrative Assessment (Tankside Grand Rounds Rubric)</td>
</tr>
<tr>
<td>PBL-3.6</td>
<td>Participate in the education of patients, families, students, trainees, peers, and other health professionals.</td>
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</table>

**Interpersonal and Communication Skills**

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<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICS-4.2 Communicate effectively with colleagues and other health care professionals.</td>
<td>Narrative Assessment (Tankside Grand Rounds Rubric) Peer Assessment (WCE Peer Assessment Rubric)</td>
</tr>
<tr>
<td>ICS-4.3 Communicate with sensitivity, honesty, compassion and empathy.</td>
<td>Narrative Assessment (Tankside Grand Rounds Rubric) Peer Assessment (WCE Peer Assessment Rubric)</td>
</tr>
</tbody>
</table>

**Professionalism**

<table>
<thead>
<tr>
<th>Educational Program Objectives</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO-5.1 Demonstrate sensitivity, compassion and respect for all people.</td>
<td>Peer Assessment (WCE Peer Assessment Rubric) Narrative Assessment (Professionalism Event Card) Narrative Assessment (Tankside Grand Rounds Rubric)</td>
</tr>
<tr>
<td>PRO-5.6 Demonstrate honesty and integrity in all professional and academic interactions.</td>
<td>Narrative Assessment (Professionalism Event Card) Peer Assessment (WCE Peer Assessment Rubric)</td>
</tr>
<tr>
<td>PRO-5.7 Meet professional and academic commitments and obligations.</td>
<td>Narrative Assessment (Professionalism Event Card) Narrative Assessment (Tankside Grand Rounds Rubric; Formative Assessment Engagement Rubric) Peer Assessment (WCE Peer Assessment 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 important to the educational experience. USMLE-style formative assessments will be provided each week to allow students to monitor progress and identify potential deficiencies that warrant early remediation through self-study. Grades on formative assessments are for diagnostic purposes only and do not count toward the student’s final grade. Weekly formative assessments are listed on the Elentra calendar view under ‘asynchronous learning’ and will be made available during the weekly formative testing window (12 PM Friday until 5 PM Monday). Once each formative assessment is completed, students will have the opportunity to review their scores 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 Mondays unless otherwise indicated on the Elentra 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 pre-clerkship curriculum.

“Flashback” formatives will also be given on a weekly basis to promote spaced learning by regularly revisiting previously covered material. These formative assessments are designed to prompt students to recall and apply previously learned information, reinforce knowledge retention, and deepen understanding. This approach ensures continuous engagement with the content and helps to mitigate knowledge attrition over time.

“Mid unit” narrative feedback will be provided on students' completion of their formative assessments. Regular engagement in formative assessment is a crucial pedagogical practice that fosters ongoing learning and improvement and offers specific, constructive insights into students' strengths and areas for growth. By providing timely narrative feedback to students on their overall engagement in the course’s formative assessment program, our aim is to incentivize best practices so our learners can obtain timely, actionable feedback that that can be incorporated and addressed before the summative assessments, ultimately leading to better learning outcomes and a deeper understanding of the material.
End-of-unit summative (formal) exams will be given at the end of the SPM Units. These exams will consist of 2 components: 1) an Exam comprised of questions from the NBME test bank and 2) an Institutionally developed exam composed of questions written by faculty, with up to 5% of the exam including cumulative material from previous units. Summative exams will be delivered and proctored on campus. The end-of-unit exam score is determined by calculating the 50:50 weighted average of the NBME and in-house components; to pass an end-of-unit summative exam, students must achieve a minimum average score of 65%. 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 and they will be required to remediate during scheduled remediation dates, if criteria are met. Requests for excused absences may be made through the PLFSOM pre-clerkship absence management system.

Students must follow the directions of the proctoring staff. Failure to comply with proctor instructions will result in an event card for each infraction, and if severe enough, students can face expulsion from the exam. Failure to comply with all the guidelines and instructions set forth for summative assessments may result in a failing grade for the SPM unit at the discretion of the course directors. The student can be referred to the Grading and Promotions Committee (GPC) for review of the proctoring report, course directors’ recommendation and for further action as they deem advisable.

**CBSE Exams**
The NBME Comprehensive Basic Science Exams (CBSE) are administered during the M2 year to assess student readiness to pass the USMLE Step 1 exam. While the exams are not used to calculate either semester or unit grades, they do provide valuable student feedback. A CBSE score of 63 or higher during the Spring semester is required for eligibility to take USMLE Step 1 (refer to the Grading, Promotion, and Academic Standing (GPAS) Policy). Students can test out
of the exams as early as the January test date and will not be required to take additional CBSE exams. However, students are encouraged to take additional CBSE exams that are offered in the Spring semester. Test dates are listed in the important dates section. Students who do not achieve a CBSE score of 63 or higher by the last scheduled testing date will be referred to the Grading and Promotions Committee for review of their progression plan (refer to the Grading, Promotion, and Academic Standing (GPAS) Policy).

SPM Unit and Semester Grade Determinations
The semester courses SPM III and IV must be passed in order to progress to the third 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 59.05) 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 receive a minimum score of 65%, which is determined by averaging scores on NBME exam and in-house exam components.

   One component of team-based learning in the worked-case example activities is active participation by everyone. There will be active peer review of each team member by other members of the team. Less active members will likely receive constructive feedback and be encouraged to improve their preparation for and engagement in the activity.

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

   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 will initially 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 unit is 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 will 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.

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 both components of the exam. 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.

   Students on probation and repeating a pre-clerkship year will be subject to more stringent rules that apply to both fall semester and end-of-year reviews: For details, refer to section 10 of the Grading, Promotion, and Academic Standing (GPAS)’ policy.

3) Grade Release
   Barring extenuating circumstances, SPM unit grades will be released within 14 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 receiving their summative grade.

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 Institutional Student Handbook, and could lead to academic warning, probation, or dismissal from PLFSOM.

Important Dates

1. Summative Examinations
   - CSS Summative:       27 September 2024
   - END Summative:       1 November 2024
   - REP Summative:       20 December 2024
   - MHD Summative:       21 February 2025

2. CBSE Examinations
   - Round 1:             5 August 2024
   - Round 2:             7 January 2025
   - Round 3:             26 February 2025
   - Round 4:             21 March 2025
   - Round 5:             28 March 2025
   - Round 6:             11 April 2025
   - Round 7:             25 April 2025

*Note that effective Aug 1, 2023 the NBME has implemented new policies regarding CBSE exams: (1) Students are allowed to take a maximum of 5 CBSE exams; and (2) Students must wait for at least 2 weeks between consecutive CBSE administrations. Students are advised to consider these policies when scheduling their CBSE exams between February and April.

3. Remediation Exam Dates
   Students who are deemed eligible 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 (erica.saenz@ttuhsc.edu). Eligible students may select a 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>6 January 2025 (optional Fall remediation)</td>
<td>28 December 2024, 12 PM</td>
</tr>
<tr>
<td>7 March 2025</td>
<td>1 March 2025, 12 PM</td>
</tr>
<tr>
<td>14 March 2025</td>
<td>8 March 2025, 12 PM</td>
</tr>
<tr>
<td>22 March 2025</td>
<td>15 March 2025, 12 PM</td>
</tr>
</tbody>
</table>
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; therefore, students’ absence can be detrimental to the educational experience of their 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. The referral to GPC may lead to dismissal, if determined by the GPC.

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)

Sessions with required attendance or participation will labeled on the Elentra 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 have 10 calendar days after absence is recorded to challenge its status as unexcused. If absence is not challenged, then it will remain unexcused.
• 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 10 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
Three professionalism objectives are addressed in the SPM syllabus from the institutional learning goals and objectives:

PRO-5.1  Demonstrate sensitivity, compassion, integrity, and respect for all people.
PRO-5.6  Demonstrate honesty in all professional and academic interactions.
PRO-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 worked-case example activity and therefore failed to meet their 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 will trigger the filing of an event card. Subsequent unexcused tardies or absences will be met with similar incident reporting. Students are expected to remain present and participate in the entire activity.
   • Failure to engage in active participation.

2) Summative examinations.
• Students who are tardy for a summative examination will receive a professionalism event card.

• Lack of preparation (forgetting charging cable, laptop, student ID)

• Failure to follow proctor instructions

• Disruptive behavior

• Leaving an exam without permission from the test proctors

In the case of alleged academic misconduct, a student will also be referred to the Grading and Promotions Committee and/or the Student Conduct Committee. This includes but is not limited to the following scenarios:

• Dissemination of test items in any form. This includes written and oral.

• Possession of a prohibited item such as a cell phone

• Cheating

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.

Excused absences
If a student is unable to attend or be punctual for a required session, they may be granted an excused absence in accordance with the criteria set forth in the PLFSOM ‘Pre-clerkship phase attendance policy’.

Students wishing to obtain an excused absence must submit a request to the Pre-Clerkship Absence / Leave Request (maxient.com) (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
Examples of evaluation rubrics used for Event Cards and Tankside Grand Rounds are provided in the Appendix. 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.
Students will also receive mid-unit narrative feedback on formative participation and performance. An example of an evaluation rubric used for the mid-unit narrative feedback on formative participation and performance is provided in the Appendix.

Textbooks
Required and recommended reading assignments are listed on the associated session pages in the Elentra calendar. Unless otherwise noted, textbook reading assignments will be available through the TTUHSC-EP electronic library. A curated list of relevant electronic textbooks is also available through the TTUHSC-EP Library at:

https://elpaso-ttuhsclibguides.com/PLFSOMtextbooks

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). 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 referral to Grading and Promotions Committee and possible dismissal from PLFSOM.

Office of Accessibility Services (OAS)
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 Accessibility Services (OAS), by calling 915-215-4398, 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 OAS as soon as possible. More information can be found on the OAS website:
https://elpaso.ttuhsclstudentservices/accessibility/
Appendix

SPM III and IV Course Director
Komal Marwaha, MD, PhD

SPM III and IV Course Co-Director
Jessica Chacon, PhD

Faculty Roster: SPM Unit Directors

Unit 7 – CNS and Special Senses (CSS):
Dale Quest, PhD
Salvador Cruz-Flores, MD (Neuro)

Unit 8 – Endocrine System (END):
Tanis Hogg, PhD
Dale Quest, PhD
Tamis Bright, MD (IM)
Mariela Lane, MD
Komal Marwaha, MD, PhD

Unit 9 – Reproductive System (REP):
Rebecca Campos, MD
Komal Marwaha, PhD
Harvey Greenberg, MD (OB/GYN)
Elizabeth Dimitrievich, MD (OB/GYN)

Unit 10 – Mind and Human Development (MHD):
Diana Pettit, PhD
Rebecca Campos, MD
Blanca Garcia, MD (PED)
Namrata Singh, MD
Patricia Ortiz, MD (Psychiatry)
# Event Card

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

<table>
<thead>
<tr>
<th><strong>Course (Circle One):</strong></th>
<th>SPM</th>
<th>SCI</th>
<th>Medical Skills</th>
<th>College Colloquium</th>
<th>SARP</th>
<th>Other</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Description of Event:</strong></th>
<th></th>
</tr>
</thead>
</table>

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

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

<table>
<thead>
<tr>
<th><strong>Suggestions for improvement?</strong></th>
<th></th>
</tr>
</thead>
</table>
## 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>
</tbody>
</table>
### Scheme utilization

<table>
<thead>
<tr>
<th>Scheme utilization</th>
<th>An appropriate scheme is utilized and incorporated logically into the presentation</th>
<th>An appropriate scheme is utilized and partially incorporated into the presentation</th>
<th>Scheme utilization is limited and incorporation into the presentation is minimal.</th>
<th>No evidence of utilization of a scheme and/or no incorporation into the presentation</th>
</tr>
</thead>
</table>

### Correlation of findings with cause of death

<table>
<thead>
<tr>
<th>Correlation of findings with cause of death</th>
<th>Cause of death is very well correlated with gross and microscopic findings</th>
<th>Some correlation of gross and microscopic findings with cause of death is attempted</th>
<th>Minimal correlation between cause of death and gross and microscopic findings is attempted</th>
<th>No correlation between cause of death and gross and microscopic findings is attempted</th>
</tr>
</thead>
</table>

### Information sources

<table>
<thead>
<tr>
<th>Information sources</th>
<th>Credible and up-to-date information sources are utilized, appropriately referenced, and logically incorporated into the presentation</th>
<th>Some credible and up-to-date information sources are referenced, however their incorporation into the presentation could be improved.</th>
<th>Information sources are referenced and incorporated into the presentation, however their credibility and/or currency raise uncertainty.</th>
<th>Information sources are either not credible, not current, or not evidently utilized in the creation of the presentation.</th>
</tr>
</thead>
</table>

### Slides easy to read and follow

<table>
<thead>
<tr>
<th>Slides easy to read and follow</th>
<th>Order of presentation is logical and slides are easy to read and not crowded</th>
<th>Order of presentation is logical, but slides are crowded or hard to read</th>
<th>Presentation is hard to follow and/or slides are crowded or hard to read</th>
<th>Presentation does not make sense and/or slides are crowded or hard to read</th>
</tr>
</thead>
</table>

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

Comments for the team to receive:
Example Rubric for Mid–Unit Narrative feedback based on weekly formative participation

1. Completed all formatives on time and received a score of 65% or greater:

Consistently completing all formative assessments on time and achieving scores above 65% demonstrates your professional and academic commitment and strong dedication to identifying knowledge gaps and actively working to address them. Keep up the great work!

2. Completed all formatives on time and received a score of less than 65%:

You have shown professional and academic commitment by completing all formatives on time, but there are areas for improvement, as indicated by scores below 65%. Let us work together to address these gaps and enhance your understanding. Scoring below 65% indicates a need for better strategies to enhance commitment and address knowledge gaps. Let us work together to ensure improved performance on future assessments.

3. Did not complete formatives:

Not completing formatives is concerning as it indicates a lack of academic and professional commitment and utilizing the opportunity to identify the potential gaps in your knowledge. It is crucial to actively participate in all assignments to enhance your learning experience and performance in the course. Let us discuss strategies to ensure your full participation moving forward.