REQUIRED COURSES AND CLERKSHIPS

A. SUMMARY DATA

PART A. SUMMARY DATA ON COURSES AND CLERKSHIPS

A. METHODS OF INSTRUCTION

YEAR ONE/ACADEMIC PERIOD ONE

	Formal instructional hours					
Course	Lecture	Lab	Small groups*	Patient contact	Other†	Total
Master's Colloquium I					28.00	28.00
Master's Colloquium II					20.00	20.00
Medical Skills I				9.75	25.00	34.75
Medical Skills II	3.00				22.00	25.00
Society, Community & the Individual I	21.50		72.00	12.00	23.50	129.00
Society, Community & the Individual II	2.00		16.00	12.00	12.00	42.00
Scientific Principles of Medicine I	127.00	36.00	35.00		96.75	294.75
Scientific Principles of Medicine II	138.00	15.00	24.00	0.00	71.00	248.00
TOTAL	**291.50**	**51.00**	**147.00**	**33.75**	**298.25**	**821.50**

***** Includes case-based or problem-solving sessions

† **Other by Course:**

Master's colloquium consists of a large group discussion format. For some sessions, students break into small discussion groups and then come back to the large group to discuss.

Medical Skills other categories include large/small group sessions, 1 review session and 1 self-taught session. The large/small group discussions consist of a short readiness/orientation (5 minutes) after which the group is split into teams which complete the skills sessions for the day. Examples of the type of activities include exercises on communications, standardized patient cases, practice skills, simulation exercises, etc. Team size varies from 2 to half the group. Self-taught sessions are materials with learning objectives provided to the student; students are expected to learn the material outside of classroom time.

Society, Community & the Individual: Other categories include self-taught, large group discussion, large/small group, and student presentation sessions. Self-taught sessions are materials with learning objectives provided to the student; students are expected to learn the material outside of classroom time. Large group discussion sessions are interactive class sessions. Large/small group sessions for this course consist primarily of a lecture followed by practice sessions where students apply the lecture material. During student presentation sessions, a small groups of students present community assessment project results to their fellow students and faculty.

Scientific Principles of Medicine: the other category consists of self-taught sessions, interactive large group sessions, formative exams with feedback, and large/small group sessions. Self-taught sessions are materials with learning objectives provided to the student; students are expected to learn the material outside of classroom time. Large group discussion sessions are interactive class sessions, including tank side grand rounds where small groups of students present to the class. Large/small group sessions for this course consist interactive sessions where students break into small group then return to the whole group to discuss with instructor. Sessions do not have a universal format but are characterized by the mix of small and large group work.

YEAR TWO/ACADEMIC PERIOD TWO

Formal instructional hours

Course	Lecture	Lab	Small groups*	Patient contact	Other†	Total
Master's Colloquium III					20.00	**20.00**
Master's Colloquium IV					22.00	**22.00**
Medical Skills III			10.00	6.00	10.50	**26.50**
Medical Skills IV				6.00	12.00	**18.00**
Society, Community & the Individual III	9.00		11.50	12.00	4.50	**37.00**
Society, Community & the Individual IV			10.00	12.00	5.00	**27.00**
Scientific Principles of Medicine III	104.00	9.00	32.00		51.00	**196.00**
Scientific Principles of Medicine IV	96.00	3.00	28.00		59.50	**186.50**
TOTAL	**209.00**	**12.00**	**91.50**	**36.00**	**184.50**	**533.00**

***** Includes case-based or problem-solving sessions

† Other by Course:

Master's colloquium consists of a large group discussion format. For some sessions, students break into small discussion groups and then come back to the large group to discuss.

Medical Skills other categories include large/small group sessions and community placement. The large/small group discussions consist of a short readiness/orientation (5 minutes) after which the group is split into teams which complete the skills sessions for the day. Examples of the type of activities include exercises on communications, standardized patient cases, practice skills, simulation exercises, etc. Team size varies from 2 to half the group. Community placement consists of a tour of UMC Nursery. The nursery activities involve patient contact but of limited scope.

Society, Community & the Individual: Other categories include self-taught, large group discussion, large/small group, and student presentation sessions. Self-taught sessions are materials with learning objectives provided to the student; students are expected to learn the material outside of classroom time. Large group discussion sessions are interactive class sessions. Large/small group sessions for this course consist primarily of a lecture followed by practice sessions where students apply the lecture material. During student presentation sessions, a small groups of students present community assessment project results to their fellow students and faculty.

Scientific Principles of Medicine: the Other category consists of self-taught sessions, interactive large group sessions, formative exams with feedback, and large/small group sessions. Self-taught sessions are materials with learning objectives provided to the student; students are expected to learn the material outside of classroom time. Large group discussion sessions are interactive class sessions. Large/small group sessions for this course consist interactive sessions where students break into small group then return to the whole group. Sessions do not have a universal format but are characterized by the mix of small and large group work.

YEAR THREE/ACADEMIC PERIOD THREE

Clerkship	Total wks	% Amb.	# Sites used*	Typical hrs/wk formal instruct**	Clinical encounter criteria (Y/N)	Patient log (Y/N)
Internal Medicine	10	35.4%	2/2	8.3	Y	Y
Psychiatry	6	52.6%	2/3		Y	Y
Family Medicine†	6	98.5%	2/13	3.9	Y	Y
Surgery	10	23.5%	1/1		Y	Y
Pediatrics	8	64.2%	1/1	7.9	Y	Y
Obstetrics/Gynecology	8	56.6%	1/1		Y	Y

* Both psychiatry and family medicine send their students to community clinics as part of their outpatient clinical experiences. Not all students will go to all sites.

**Reported by block. Because our clerkships are semi-integrated, students in a block attend formal instruction by both clerkships. Results are reported by the 15 week average for students in the block. Students within the block attend didactic sessions in common.

† FM includes 4 hrs /week designated as self-directed learning time not reported as formal instruction.

YEAR FOUR/ACADEMIC PERIOD FOUR

Clerkship	Total wks	% Amb.	# Sites used*	Typical hrs/wk formal instruct**	Clinical encounter criteria† (Y/N)	Patient log (Y/N)
Clinical Neuroscience	4	40%	1	5	Y	Y
Emergency Medicine	4	100%	1	4	Y	Y
Critical Care#(see below)	4	0%	2	5-8	Y	Y
Sub-Internship##(see below)	4	0-30%	1	4	Y	Y

*Include the number of sites used for inpatient teaching and the number of sites used for outpatient teaching in the clerkship in the following format: # inpatient/ # outpatient
**Sum of lectures, conferences, and teaching rounds; show the range of hours if there is significant variation across sites
† Have criteria for the kinds of patients, clinical conditions, or procedural skills been defined?
# Please note: Students must complete a critical care selective in one of the following—MICU, CVICU, NICU, PICU, or SICU. Hours of formal instruction varies depending upon the specific selective.
Please note: Students are required to complete a sub-internship experience in Internal Medicine, Family Medicine, Pediatrics, or Obstetrics-Gynecology. The amount of ambulatory time varies by sub-I.

Course	Lecture	Lab	Small groups *	Patient contact	Other†	Total
Capstone	12	10	12	0	2	36

* Includes case-based or problem solving sessions
† Final “Progress Test”

B. METHODS OF EVALUATION

YEAR ONE/ACADEMIC PERIOD ONE

		Contribute to Grade (Check all that apply)						
Course	# of exams	Internal exams	Lab or practical exams	NBME subject exams	Faculty/ resident rating*	OSCE/SP exam	Paper or oral pres.	Other†
Medical Skills I/II	6					✓		✓
Master's Colloquium I/II	0						✓	✓
Society, Community & the Individual I/II	4	✓	✓		✓			✓
Scientific Principles of Medicine I/II	6	✓			✓		✓	✓

* Include evaluations by faculty members or residents in clinical experiences and also in small group sessions (for example, a facilitator evaluation in small group or case-based teaching)
† Describe the specifics in the report narrative

Med skills I/II - The components of the composite assessment are:

- Attendance: Attendance will be recorded weekly. Cumulatively, session attendance will constitute 30% of each student's grade for the course.
- Performance on weekly quizzes: A readiness assurance quiz is regularly included at the beginning of each Medical Skills session. Students achieving high cumulative performance on these quizzes will gain one bonus point added to their cumulative grade for the Unit.
- Completion of the OP Log: Students are expected to record each standardized patient encounter in their Online Patient Log (OP Log). Students completing their OP Log with all of their standardized patient encounters will receive one bonus point added to their cumulative grade for the Unit.
- Performance on OSCE examinations. Each end-of-Unit OSCE will have between 3-5 stations. Two or three of these stations will be standardized patient encounters. Assessment at each station will be based on demonstration of proficiency as assessed using predetermined criteria that assess history taking skills, physical examination technique, communication skills, and professional demeanor. Performance on the OSCE examinations will constitute 70% of the grade for the course.

Master's Colloquium I/II - The grading for the Masters' Colloquium has two components:

- Essays: 2 per semester.
- The Professionalism in Colloquium statement at the end of the semester.

Society, Community, & Individual I-IV - There are three components of SCI that are graded;

- Classroom learning experiences (attendance at required) and 2 exams 50 points possible
- Community clinic experience 50 points possible - the preceptor feedback form and the student checklist
- Spanish Grade determined by participation and performance on evaluations
    - In-class Participation - Through active speaking, listening, and writing in a professional manner
    - Assignments – Periodic assignments will be made to assist students in learning material
    - Listening Evaluations – Mid-term and final listening evaluations
    - Oral Evaluations – Mid-term and final oral evaluations

Scientific Principles of Medicine I/II

- Units 1-5 Unit Grade = 95%(Summative Assessment Grade) + 5%(WCE Attendance)
- Unit 6 - The overall grade for this unit is comprised of the following weighted components:
    - 60% - Summative assessment grade
    - 10% - Donor Electronic Medical Record (DEMR) grade*
    - 10% - 'Student teaching students' (STS) anatomy assignment**
    - 10% - Performance on the 'Coding of the Rich & Famous' simulation exercise
    - 5% - Tankside Grand Rounds performance grade
    - 5% - Attendance at Tankside Grand Rounds and the simulation exercise

YEAR TWO/ACADEMIC PERIOD TWO

		Contribute to Grade (Check all that apply)						
Course	# of exams	Internal exams	Lab or practical exams	NBME subject exams	Faculty/ resident rating*	OSCE/SP exam	Paper or oral pres.	Other†
Medical Skills III/IV	5	✓				✓		✓
Master's Colloquium I/II	0						✓	✓
Society, Community & the Individual I/II	2	✓	✓		✓			✓
Scientific Principles of Medicine III/IV	5	✓			✓			✓

* Include evaluations by faculty members or residents in clinical experiences and also in small group sessions (for example, a facilitator evaluation in small group or case-based teaching)
† Describe the specifics in the report narrative

Medical Skills III/IV The components of the composite assessment are:

- Attendance: Attendance will be recorded weekly. Cumulatively, session attendance will constitute 30% of each student's grade for the course.
- Performance on weekly quizzes: A readiness assurance quiz is regularly included at the beginning of each Medical Skills session. Students achieving high cumulative performance on these quizzes will gain one bonus point added to their cumulative grade for the Unit.
- Completion of the OP Log: Students are expected to record each standardized patient encounter in their Online Patient Log (OP Log). Students completing their OP Log with all of their standardized patient encounters will receive one bonus point added to their cumulative grade for the Unit.
- Performance on OSCE examinations: Each end-of-Unit OSCE will have between 3-5 stations. Two or three of these stations will be standardized patient encounters. Assessment at each station will be based on demonstration of proficiency as assessed using predetermined criteria that assess history taking skills, physical examination technique, communication skills, and professional demeanor. Any TBL sessions held during the Unit will also be included in the OSCE exam score. Performance on the OSCE examinations will constitute 70% of the grade for the course.
- Team-based Learning: TBL sessions are included to teach selected diagnostic and test interpretation skills. TBL sessions consist of an individual readiness assurance test, a group readiness assurance test, and an application exercise. All of these activities are graded, and scores from these TBL activities will be included as part of the final Unit grade for each student. It is noted that a small contribution of this grade comes from group activities. Therefore each student's individual Unit grade will, to a small extent, reflect the performance of their peers.

Master's Colloquium III/IV - The grading for the Masters' Colloquium has two components:

- Essays: 2 per semester.
- The Professionalism in Colloquium statement at the end of the semester.

Society, Community, & Individual I-IV - There are three components of SCI that are graded;

- Classroom learning experiences (attendance at required) and 2 exams 50 points possible
- Community clinic experience 50 points possible - the preceptor feedback form and the student checklist
- Spanish Grade determined by participation and performance on evaluations
    - In-class Participation - Through active speaking, listening, and writing in a professional manner
    - Assignments – Periodic assignments will be made to assist students in learning material
    - Listening Evaluations – Mid-term and final listening evaluations

- Oral Evaluations – Mid-term and final oral evaluations

SPM III/IV - Other consists of attendance points (5% of grade) for selected sessions. These are small group sessions where we have determined that the quality of the learning experience is dependent on participation.

YEARS/ACADEMIC PERIODS THREE AND FOUR

	Contribute to Grade (Check all that apply)							
Course or Clerkship	NBME subject exams	Internal written exams	Oral exam or pres.	Faculty/ resident rating	OSCE/SP exams	Other*	Clinical skills observed (Y/N)†	Mid-course feedback (Y/N)
Family Medicine Clerkship	✓			✓	✓	✓	Y	Y
Surgery Clerkship	✓			✓	✓	✓	Y	Y
Internal Medicine Clerkship	✓			✓	✓	✓	Y	Y
Psychiatry Clerkship	✓		✓	✓	✓	✓	Y	Y
Obstetrics/Gynecology Clerkship	✓			✓	✓	✓	Y	Y
Pediatrics Clerkship	✓		✓	✓	✓	✓	Y	Y
Clinical Neuroscience	✓			✓			Y	Y
Emergency Medicine			✓	✓		✓	Y	Y
Critical Care				✓			Y	Y
Sub-Internship				✓			Y	Y

† Are all students observed performing core clinical skills? (Yes or No)

* Other Contribution to Grades:

For all clerkships, student grades also depend on Op-log and Professionalism

For clerkships there may also be items required to satisfactorily before the student has "completed" the clerkship requirements:

- Family Med – Web case completion is required
- Surgery – reflective writing worksheet
- Psychiatry – weekly reading test reflects in "the clerkship director's final grade report to the Dean of Student Affairs. This will then be reflected in the Dean's letter when the student is applying for residency positions."
- National EM Exam

PART B. REQUIRED COURSE FORM

Course title:	Masters' Colloquium (I, II, II, IV)
Sponsoring department or unit:	Medical Education
Name of course director:	Stephan Sandroni, MD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	**Number of Teaching Staff Involved**
Department of Medical Education	5

COURSE OBJECTIVES

Are there written objectives for the course?

Yes	X	**No**	

Briefly summarize the objectives/content areas covered in the course.

This is a required course for first and second year students that meet weekly in two hour sessions. Students are divided into 4 equal-sized learning communities, "Colleges," and instruction takes place within each college under the direction of a College Master. The topics addressed in this course relate to the following broad themes: the role of the physician, student acculturation into this role, professionalism, ethics, humanities, history of medicine, critical thinking, problem solving, judgment, communication skills, life-long learning, health care system issues, and controversies in medicine.

Most of the time the topics for the Masters Colloquium are coordinated with the content covered in Scientific Principles of Medicine. The principle instructional method is facilitated group discussion although a variety of instructional modalities are also used including presentation of artistic compositions, review of film and video, reflective writing, critical analysis of readings, and workshop style break-out activities. A list of the topics addressed in the Masters Colloquium in 2011-12 is included in the appendix at the end of this course description.

Course learning objectives, and how they relate to the PLFSOM Institutional Learning Objectives described in Section II (Educational Program) ED-1, 1-A (by alpha-numeric code) are listed below:

KNOWLEDGE

- Describe fundamental ethical principles and human values, and how these apply in patient care and medical practice (Prof-1)
- Describe the components of the national health system and its funding and how this system affects individual and community health (SPB-2)

- Discuss financial, political and cultural situations that may present conflicts of interest in the practice of medicine (Prof-2)

BEHAVIORS

- Display compassion in interactions with all patients regardless of race, gender, ethnicity, sexual orientation, socioeconomic status and disability (Prof-3)
- Communicate clearly and in a civil manner with colleagues and instructors in the medical learning environment (ICS-1)
- Employ the highest ethical principles in interpersonal relationships, patient care, and research (Prof-4)
- Identify the need to employ self-initiated learning strategies (problem definition, resource identification, critical appraisal) when approaching new challenges, problems, or unfamiliar situations (PBL-7)

ATTITUDES

- Demonstrate respect for the beliefs, opinions and privacy of peers, colleagues, and instructors in the medical learning environment (Prof-5)
- Hold respect for the values of open-mindedness, awareness of the values of others, and mindfulness of once upon values.
- Provide compassionate and culturally appropriate care in all stages of the life cycle (ICS-1, Prof-3)
- Recognize when to take responsibility and when to seek assistance based on one's position, training and experience (PBL-4)
- Preserve patient's dignity in all interactions (Prof-8)
- Advocate for the interests and needs of the patient over one's own immediate needs (Prof-9)

SKILLS

- Identify and critically appraise electronic resources (appropriate to problem under study) for one's own education, patient education, and direct patient care (PBL-5)
- Given an ethics case, be able to identify the key ethical dilemma, identify the ethical principles that are in conflict, formulate arguments both for and against each option, weigh these arguments, and select the best course of action.
- Communicate knowledge, interpretation and recommendations orally and/or in writing to a wide range of professional or lay audience in culturally appropriate ways (ICS-3)
- Use a variety of educational modalities in pursuit of life-long learning (PBL-3, 7)

Preparation for Teaching

All teaching is done by the college Masters who meet weekly to plan their sessions, to identify topics and resources, and to make decisions about approach. The college Masters are committed to ensuring that students address comparable issues and employ equivalent methods for assessing student performance (e.g., use of common rubrics for the evaluation of written assignments).

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	No

Residents		X
Graduate Students		X
Postdoctoral Fellows		X

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

Not applicable.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

This course is taught on the campus of the Paul L. Foster School of Medicine in two sections each corresponding to the learning communities (Colleges) that have been established in the school. As described above, the Masters Colloquium is delivered by the college Masters for their respective Colleges. The Colloquium has a single syllabus and the Masters meet weekly to coordinate their teaching. The learning goals and topics addressed are the same for each College, but flexibility is permitted in the manner in which specific objectives are achieved.

Course title:	Masters' Colloquium I, II, III, IV

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not applicable

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
✓	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination		Other (describe)

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

College Masters meet individually with students in their respective colleges about their performance in the Masters' Colloquium and they also address issues related to student performance in other components of the curriculum. During the first two years of medical school, the college Masters serve as the primary advisors and mentors to students at the PLFSOM.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Narrative feedback is provided on required written reflective exercises and analytic papers. The college Masters also collaborate with the associate dean for student affairs and the senior associate dean for medical education in the drafting of summary narratives based on small group facilitator feedback forms. These summaries are uploaded in the student portfolio.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

With the expansion in class size from 40 students in our charter class (Class of 2013) to the current 80 students, we are increasing the number of colleges—from two-to-four, and increasing the number of Masters from 4-to-8. Three new Masters were selected in the 2011-12 academic year and we are actively recruiting for the final Master as of this writing [May 12, 2012]. This number is adequate to meet the teaching needs of the Colloquium and the mentoring needs of the college. Each college has its own

"commons space" adjacent to the Masters' offices. The Colloquium takes place in two "case study" rooms designed on the Harvard Business School model or in one of two flexible use large seminar rooms. Each setting is appropriate for this discussion-intensive course. IT and audiovisual resources are readily available. The Colloquium has a course coordinator who is assigned to this course full time.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students complete on-line anonymous course evaluations at the end of each semester for this course. A five point scale in employed with 1 indicating the respondent "strongly disagrees" and 5 indicating the respondent "strongly agrees" with the item in question. The results of these evaluations for the past two academic years are listed below:

MC I	Class of 2014	Class of 2015
Masters Colloquium was well organized.	3.5	4.0
The learning objectives were clearly identified.	3.2	3.4
The course met the identified learning objectives.	3.3	3.7
The amount of material presented was reasonable.	3.8	4.2
I knew what I was supposed to be learning and why.	3.3	3.7
The methods used to evaluate my performance were fair	3.5	3.6
I understand how the Masters' Colloquium content is applicable to the practice of medicine.	4.0	3.9
The course format is appropriate.	3.7	3.8
Master's Colloquium broadens my perspectives	3.8	3.8
Master's Colloquium challenges my assumptions.	3.3	3.7
Master's Colloquium helps me understand what is expected of me as a doctor.	3.9	3.8
Overall, I learned useful knowledge and/or skills during Masters' Colloquium.	3.6	3.8
I feel the Masters Colloquium has been valuable to me	3.4	3.7
Number of Responses	52	78
Class Size	57	83
Response Rate	91%	94%

MC II	Class of 2014	Class of 2015
Masters Colloquium was well organized.	3.9	3.9
The learning objectives were clearly identified.	4.0	3.8
The course met the identified learning objectives.	3.9	3.8
The amount of material presented was reasonable.	4.3	4.1
I knew what I was supposed to be learning and why.	4.0	3.8
The methods used to evaluate my performance were fair	4.0	3.9
I understand how the Masters' Colloquium content is applicable to the practice of medicine.	4.3	4.0
The course format is appropriate.	3.9	3.9

Master's Colloquium broadens my perspectives	4.1	4.0
Master's Colloquium challenges my assumptions.	3.7	3.9
Master's Colloquium helps me understand what is expected of me as a doctor.	4.0	3.9
Overall, I learned useful knowledge and/or skills during Masters' Colloquium.	4.0	4.0
I feel the Masters Colloquium has been valuable to me	3.9	3.9
Number of Responses	42	70
Class Size	57	83
Response Rate	74%	84%

MC III	Class of 2014	Class of 2015
Masters Colloquium was well organized.	3.9	4.0
The learning objectives were clearly identified.	3.8	4.0
The course met the identified learning objectives.	3.7	3.9
The amount of material presented was reasonable.	4.1	3.9
I knew what I was supposed to be learning and why.	3.7	3.9
The methods used to evaluate my performance were fair	3.7	3.9
I understand how the Masters' Colloquium content is applicable to the practice of medicine.	4.1	3.9
The course format is appropriate.	3.9	3.9
Master's Colloquium broadens my perspectives	3.9	3.9
Master's Colloquium challenges my assumptions.	3.8	3.9
Master's Colloquium helps me understand what is expected of me as a doctor.	3.7	3.9
Overall, I learned useful knowledge and/or skills during Masters' Colloquium.	3.7	3.8
I feel the Masters Colloquium has been valuable to me	3.7	3.8
Number of Responses	27	56
Class Size	37	57
Response Rate	73%	98%

MC IV	Class of 2013	Class of 2014
Masters Colloquium was well organized.	4.1	4.1
The learning objectives were clearly identified.	3.9	4.1
The course met the identified learning objectives.	3.9	4.1
The amount of material presented was reasonable.	4.4	4.1
I knew what I was supposed to be learning and why.	3.9	4.0
The methods used to evaluate my performance were fair	4.1	4.0
I understand how the Masters' Colloquium content is applicable to the practice of medicine.	3.8	4.1
The course format is appropriate.	4.1	4.1
Master's Colloquium broadens my perspectives	4.1	4.1
Master's Colloquium challenges my assumptions.	4.2	4.0
Master's Colloquium helps me understand what is expected of me as a doctor.	3.9	4.1

Overall, I learned useful knowledge and/or skills during Masters' Colloquium.	4.1	4.1
I feel the Masters Colloquium has been valuable to me	4.1	4.0
Number of Responses	18	55
Class Size	37	57
Response Rate	49%	96%

Identify major successes in the course and problems to be overcome.

Successes:

Engagement: In Spite of the fact that the topics are broad, discussions focus on controversy and ambiguity, and the instructional method relies heavily on student participation, the Masters Colloquium is well attended and the sessions are eagerly engaged by the students.

Bioethics: by the end of the second year, the majority of students are able to take an ethics case, identify the key issue, articulate the ethical principles at work in the case, formulate arguments, and weigh the arguments against each other.

Civil discourse: an additional success is the respect for open discussion held by all the students. The Colloquium is a forum for open discussion of difficult issues. Some of the topics touch on polarizing issues. Students are encouraged to state their positions while treating others who hold different positions with respect.

Reflection: An additional success of the Colloquium is the openness that students demonstrate in their affective writings. The assignments ask the students to self-disclose their past decisions, feelings, and shortcomings. The students have written these essays with remarkable honesty, but many have described a sense of personal growth from these exercises.

Challenges:

Curriculum: Large group discussion is an inherently unwieldy instructional method, and the Masters Colloquium sessions have been somewhat uneven in quality. Some sessions has stimulated energetic participation by the students, while others fell flat. The College Masters continue to learn how to craft discussion cases and questions that contain the optimal level of ambiguity, challenge, relevance, novelty, and urgency. The weekly session planning meetings of the College Masters has become an important forum for development of these skills.

Professionalism: The assessment of professionalism has long been a challenge for medical educators. The current climate in medical education, driven principally by the ACGME, is strongly focused on developing new measures of professional behavior, and using these to assess trainees. The College Masters are responding to this challenge by initiating a collaborative effort to define the domains of professional behavior relevant to pre-clerkship trainees (and subsequently students in the clerkships), and subsequently write developmental descriptors of professional behavior. Once a derivation set of descriptors has been written, the College Masters hoped to prospectively validate these descriptors.

Students in the clinical years: Students in the pre-clerkship years have a strong sense of affiliation with their college and College Masters. However, once they leave the medical school and begin working in the

medical center, this affiliation is quickly lost. However, students in their clerkships are experiencing challenges in many domains, including difficult patient decisions, complex family dynamics, working with fatigued residents and attending physicians, ethical dilemmas, socioeconomic constraints, ethnic disparities, unfamiliar cultural norms, and other tough issues. These students would clearly benefit from a discussion forum such as the Masters Colloquium, but there simply is no place in the clerkships scheduled to situate such a forum. In addition, intersessions are not held between the clerkships, so there is no opportunity to bring all of the third-year students together from their various clerkship posts. Extending the work of the colleges into the clerkship year is a particularly important and difficult problem.

Appendix: Masters Colloquium Topics

Year 1 (MC I, II)

1. Creative composition: the anatomic donor
2. The antibiotic problem: Introduction to ethics
3. Learning principles
4. Narrative in medicine: Common text exercise
5. Economics of health care: Introduction to Medicare, Medicaid
6. The patient's experience of chronic disease
7. Decision-making heuristics
8. Ethics of pain management
9. Honesty and confidentiality
10. Doctors facing their fears
11. Empathy (parts 1,2, 3)
12. Diagnostic imaging: Two edged sword
13. The big picture: Ethical issues in genetic screening of populations
14. The risk-benefit ration of cancer therapy
15. Empathy and ethics
16. The ethics of life sustaining interventions
17. Imelda (film)
18. Reflections on a picture
19. Research Ethics (parts 1 and 2)
20. Ethics of genetic screening of individuals

Year 2 (MC III, IV)

1. Review of summer/SARP projects
2. Health care costs and sustainability
3. Awareness of disability: blindness and deafness
4. How doctor's face their fears
5. Professionalism
6. Drug companies and health care
7. Dialysis and transplantation: Access to care
8. Global health issues
9. Systemic barriers to effective therapy
10. Cultural interaction
11. Professionalism: Getting along in the sand box
12. Implications of assisted reproduction
13. Gender issues in medicine
14. Physician errors
15. Patient autonomy and decision-making
16. Career-life balance
17. Pediatric ethical decision-making
18. The chronically ill child: Doctor's sway and optimism
19. Real-time literature searching
20. Orientation to third year: Panel discussion

Academic Year 2011-12

Please note: Medical Skills (I, II, II and IV); Society, Community and the Individual (I, II, II, IV), and the Masters Colloquium (I, II, II, and IV) are courses that span the entire first two years of the curriculum. They are organized as continua as illustrated in Section II ED-5 and as described in the "overview" to the curriculum introducing the Educational Program component of the database. To reduce redundancy, we prepared a single description for these three years 1 and 2 courses. These descriptions are contained in the folder labeled "M1 and 2 Continua Courses."

Academic Year: 2011-12

PART B. REQUIRED COURSE FORM

Course title:	Medical Skills I, II, III, and IV
Sponsoring department or unit:	Department of Medical Education
Name of course director:	Gordon L. Woods, MD, MHPE Maureen Francis, MD, FACP

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Emergency Medicine	4
Family Medicine	9
Internal Medicine	17
Medical Education	8
Neurology	2
Obstetrics/Gynecology	6
Orthopedics	2
Pathology	2
Pediatrics	5
Psychiatry	4
Radiology	2
Surgery (Ophthalmology)	2

COURSE OBJECTIVES

Please note: This course is a required two year course and operates purposefully as a continuum over the first two years of the curriculum.

Are there written objectives for the course?

Yes	√	**No**	

Briefly summarize the objectives/content areas covered in the course.

Upon completion of the course, students will be able to:	Content area
Communicate with patients, family members, staff, and peers in a respectful and diplomatic manner. (ICS-1, 3, Prof-2)*	Communication skills
Communicate using language that is clear, understandable, and appropriate to each patient. (ICS-1,3, Prof-5,7)	Communication skills
Maintain each patient's dignity and modesty during clinical encounters.	Professionalism

(Prof-8)	
Identify the chief reason for the clinical encounter and use questions effectively to find the most pertinent history needed for decision-making.	Clinical skills
(PC-6)	
Select and perform the most pertinent physical examination maneuvers to search for findings that support or refute likely diagnoses under consideration.	Clinical skills
(PC-4,6)	
Concisely, accurately, and legibly record the patient's history in the medical record. (ICS-2, PC-3)	Documentation skills
Use the patient's history, physical examination, and diagnostic studies to generate a list of active medical problems. (PC-6)	Patient care
Orally present a patient's history and physical examination in an organized and concise manner. (ICS-1)	Communication skills
List the appropriate indications, potential risks and intended benefits of common procedures such as venipuncture, placement an intravenous catheter, and lumbar puncture.(MK-3)	Clinical decision-making
Proficiently perform several common clinical procedures such as venipuncture, placement of an intravenous catheter, and lumbar puncture. (PC-4)	Procedural skills

*Note: Alpha-numeric codes correspond with institutional learning objectives documented in database section II, ED-1A.

The Medical Skills course is tightly integrated with the organ system units and clinical presentations in the course Scientific Principles of Medicine (SPM). During each Medical Skills session, students interview and examine a standardized patient presenting with a problem from the clinical presentation being covered that week in SPM. Students use focused histories and physical examinations modeled after the practices of expert clinicians to identify the underlying pathologic process and reason their way to the most likely diagnosis. During this process, students apply concepts learned in SPM to relevant clinical cases, and extend their knowledge of basic science by applying what they have learned to clinical decision-making.

Preparation for Teaching

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents	√	
Graduate Students		√

Postdoctoral Fellows		√

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

The Medical Skills Course enlists clinicians from twelve clinical departments including clinician educators from the Department of Medical Education and chief residents from the residency training programs. These individuals are prepared for their teaching sessions through the following process:

- Instructional plans and course materials are prepared prior to each session. These are sent to participating clinician instructors in advance of their session. These instructional materials include learning objectives for the session.
- In preparation for their teaching, participating clinician instructors are invited to observe medical skills sessions and discuss the instructional plan with the course directors.
- Prior to their sessions, the course directors meet with participating clinician instructors for an optional instructors briefing on the teaching plan and review of the course materials. These briefings typically include a verbal "walk-through" of the session, during which comments, improvements, and suggestions are provided.
- Periodically, course directors will personally observe the instruction of clinician educators during the session. During breaks between sessions, the course directors will offer observations, suggestions, and feedback on the clinician educators' instruction.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

The Medical Skills course is taught on campus at the Paul L. Foster School of Medicine in the Western Refining Company Advanced Teaching and Assessment in Clinical Skills center.

REQUIRED COURSE FORM (Continued)

Course title:	Medical Skills I and II

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not Applicable.

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

√	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
√	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
√	OSCE or standardized patient examination	√	Other (describe) Standardized patient assessments

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Introduction: At the beginning of each Medical Skills session, a short introductory briefing is held. During this briefing, students take a readiness-assurance quiz using the audience response system (ARS). This quiz is designed to assess each student's readiness to engage in the learning activity. Multiple-choice questions taken from the preparatory materials for the session are presented, and the responses to these questions are used to fill in critical knowledge caps prior to starting the learning activities.

Standardized Patient Encounters: Students regularly participate in Standardized Patient (SP) encounters throughout the course. The problems scripted into these SP exercises are aligned with the course content of the SPM course. Each student is rated by their SP using a checklist of performance criteria. After each SP encounter, students personally meet with the SP for one-on-one feedback on their verbal communication, demeanor, and nonverbal communication.

After the SP encounter, each medical student writes a progress note in the SOAP format. These progress notes are immediately printed and given back to the medical student as a hard copy. Students then meet as a group with a faculty member to write a group SOAP note. With one student typing on a computer that is displayed on a projection screen, the students craft a consensus SOAP note. The faculty member facilitates the students as they select the elements they would include in the Subjective and Objective sections. Then, the faculty member guides the students as they come to their Assessment and craft a Plan. During this process, each student compares their own progress note to the consensus note written by their classmates. The reason for including each element of history and physical exam is reviewed, and the steps in arriving at the correct diagnosis are discussed. As a student driven activity, this exercise has proven to be a powerful learning and motivating experience for the students. Most notably, students early in their education can participate in discussions at a fairly high-level of diagnostic sophistication.

Clinical skill development sessions: in addition to a standardized patient encounter, each week medical students also participate in a skill development activity. These activities might include performance of a procedure (such as phlebotomy, lumbar puncture, arthrocentesis), physical examination skills (the fine points of the abdominal exam, cardiac auscultation, examination of the cranial nerves) or basic study interpretation (chest x-ray, electrocardiogram, laboratory test results). Skill development sessions are typically taught in small groups (4-5 students) and are interactive. After an initial demonstration of the skill, students perform the procedure while the faculty member provides coaching, suggestions, and feedback on performance.

Hospital patient visits and written H&P (second year only): On two occasions, students accompany one of the course directors to University Medical Center for a Hospital patient interview. With consent, students interview and examine a hospitalized patient, using a data gathering form to guide their questioning and physical exam. Students write up the information gathered in the standard admission history and physical format and submit these to a course director. They subsequently receive back their history and physical with handwritten comments, suggestions, and feedback.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade?

Yes	√	**No**	

In addition to check sheet ratings, standardized patients provide written narrative comments on each student's performance during each learning sessions, and also for after each OSCE testing station.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

The Medical Skills Course is presented in the Clinical Simulation Center, a state-of-the-art instructional facility located within the Paul L. Foster School of Medicine. Resources available within the Clinical Simulation Center include:

- a teaching classroom with multimedia, smart board, and audience response system
- small conference / discussion rooms
- 10 fully furnished and equipped examination rooms with videotaping and audio taping
- a real-time video processing system for recording multiple SP encounters
- a web-based SP encounter database system for student evaluation
- a simulation laboratory with six Human Patient Simulators that can simulate a wide range of medical, emergency medicine, surgical, pediatric, and obstetric clinical scenarios
- two practice rooms equipped with a wide variety of partial task simulators
- A computerized haptic simulator using force feedback simulation for computerized procedural practice
- A flexible case discussion room equipped with exam table, smart board, flat screen video, multimedia computer, and movable seating for up to 20 students.

The two course directors, who are the principal course instructors, have together over 35 years of experience as full-time medical educators, including experience in the development of educational instructional materials, development of standardized patient scenarios, bedside clinical teaching, performance assessment, and course evaluation.

The members of the Simulation Center support staff have extensive experience in organizing and presenting a wide variety of instructional sessions and student examinations. They support curriculum administration, training and maintaining a panel of standardized patients, and website management.

The Medical Skills Course is perhaps the most teacher-intensive course in the entire curriculum. The course frequently utilizes clinician-educators from the Department of Medical Education; a small group of well experienced clinical instructors. In addition, physicians from University Medical Center who have clinical appointments to Texas Tech University regularly participate in teaching in the course. Physicians are selected for each session based on their clinical experience and credentials as well as their demonstrated skill in providing small group instruction.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students complete an on-line anonymous evaluation of this course at the end of each semester. The survey employs a 5 point scale with 1 indicating a low level of satisfaction and 5 corresponding with a high level of satisfaction. Course evaluations are conducted by the Office of Curriculum, Evaluation and Accreditation.

MEDICAL SKILLS Semester I	Class of 2014	Class of 2015
This unit was well organized.	4.3	4.3
The learning objectives were clearly identified.	4.3	4.2
The course met the identified learning objectives.	4.4	4.3
I knew what I was supposed to be learning and why.	4.3	4.0
The amount of material presented was reasonable.	4.5	4.4
The materials posted on WebCT adequately prepared me for the learning sessions.	4.4	4.1
The methods used to evaluate my performance during this unit provided fair measures of my effort and learning.	4. 2	4.1
The material covered is relevant to the practice of medicine.	4.6	4.6
The preparation materials helped me learn the material.	4.4	4.3
The Standardized Patient Encounters helped me learn the material.	4.6	4.4
The group skill building activities helped me learn the material.	4.0	4.1
The feedback I received helped me learn the material.	3.7	4.1
This course encourages me.	4.2	4.3
Overall, I learned useful knowledge and/or skills during this unit of Medical Skills.	4.6	4.6
N completing Survey	56	80
Class size	62	85
Response rate	90.3%	94.1%

MEDICAL SKILLS Semester II	Class of 2014	Class of 2015
This unit was well organized.	4.5	4.3
The learning objectives were clearly identified	4.5	4.3
The course met the identified learning objectives.	4.5	4.3
I knew what I was supposed to be learning and why.	4.4	4.3
The amount of material presented was reasonable.	4.5	4.3
The materials posted on WebCT adequately prepared me.	4.5	4.2
The methods used to evaluate my performance were fair.	4.2	4.1
The material covered is relevant to the practice of medicine.	4.6	4.6
The preparation materials helped me learn the material.	4.5	4.3
The Standardized Patient Encounters helped me learn the material.	4.5	4.3
The group skill building activities helped me learn the material.	4.3	4.3
The feedback I received helped me learn the material.	3.9	4.0
This course encourages me.	4.3	4.3
Overall, I learned useful knowledge and/or skills	4.6	4.5
N completing Survey	41	83
Class size	57	83
*Response rate	72%	100%

*Please note: response rate low due to technical problems with on-line student evaluation application. This problem has been corrected.

Medical Skills Semester III	Class of 2013	Class of 2014
This unit was well organized.	4.2	4.1
The learning objectives were clearly identified	4.2	4.0
The course met the identified learning objectives.	4.3	4.0
I knew what I was supposed to be learning and why.	4.2	3.9
The amount of material presented was reasonable.	4.2	4.2
The materials posted on WebCT adequately prepared me.	4.3	3.4
The methods used to evaluate my performance were fair.	4.3	3.8
The material covered is relevant to the practice of medicine.	4.5	4.5
The preparation materials helped me learn the material.	4.2	3.7
The Standardized Patient Encounters helped me learn the material.	4.5	3.9
The group skill building activities helped me learn the material.	4.2	4.1
The feedback I received helped me learn the material.	4.3	3.9
This course encourages me.	4.4	3.9
Overall, I learned useful knowledge and/or skills	4.5	4.3
N completing Survey	25	57
Class size	37	62
Response rate	67.6%	91.9%

Medical Skills IV	Class of 2013	Class of 2014
This unit was well organized.	3.6	4.2
The learning objectives were clearly identified	3.6	4.3
The course met the identified learning objectives.	3.6	4.2
I knew what I was supposed to be learning and why.	3.5	4.3
The amount of material presented was reasonable.	3.8	4.3
The materials posted on WebCT adequately prepared me.	3.6	3.9
The methods used to evaluate my performance were fair.	3.8	4.2
The material covered is relevant to the practice of medicine.	4.2	4.4
The preparation materials helped me learn the material.	3.8	4.0
The Standardized Patient Encounters helped me learn the material.	4.0	4.2
The group skill building activities helped me learn the material.	3.7	4.3
The feedback I received helped me learn the material.	3.8	4.1
This course encourages me.	3.7	4.3
Overall, I learned useful knowledge and/or skills	3.9	4.4
N completing Survey	14	55
Class size	37	57
Response rate	37.8%	96.5%

Identify major successes in the course and problems to be overcome.

As can be seen from the evaluation results reported above, students are highly satisfied with the Medical Skills Course. Data provided by the Office of Curriculum, Evaluation, and Accreditation reveals that Medical Skills is the highest rated course in the pre-clerkship curriculum. The consistency of these high ratings over semesters and years is also noteworthy.

Students in the charter class were dissatisfied with the level and quality of feedback they received in the Medical Skills course. This issue was reviewed in a meeting of the Curriculum and Educational Policy Committee and the recommendation was made to the course director to revise the procedures for providing feedback. Responding to this recommendation, the following changes have been implemented.

1. As students see standardized patients in pairs, the second student now functions as a peer evaluator. The peer observers are provided with a list of performance criteria that are customized to each individual clinical presentation. Immediately after the encounter, the student observer provides feedback to their peer on their performance relative to these criteria.
2. Immediately after each test can counter, the standardized patients continue to give their impressions about the students verbal and nonverbal communication skills directly to the student.
3. Students receive a copy of their individual ratings from their standardized patient immediately following each SP encounter.
4. The facilitating faculty member receives aggregate data regarding the SP checklist ratings. During the small group debriefing following the SP encounter, the group receives general feedback on their performance.

5. During the SP encounter debriefing session, students write a consensus group SOAP note (see above). During this exercise, each student has a hard copy of their own individual SOAP note for comparison with the note being written by the group. In this way, students can compare their own performance with that of the best performing students in the group.

These changes have resulted in a considerable improvement in student satisfaction with this component of the course.

Successes:

Integration: A particular success of the Medical Skills Course has been the close integration of the course curriculum with topics covered in Scientific Principles of Medicine. This integration allows each medical skills session to build on basic sciences learning presented during the previous days. Through the application of basic sciences learning to clinical problems, the Medical Skills Course has enhanced the students understanding of principles learned in SPM. In this way, the two courses as have developed synergism, with each course supporting the learning goals of the other.

Communication skills and professional deportment: During the preclinical years, each medical student participates in 32 standardized patient encounters, and is the leading interviewer in at least half of these encounters. As a result, students have multiple observations of their bedside demeanor and communication skills, and receive feedback on their communication and professionalism after each of these encounters. As a result, by the end of the second year students have improved their bedside communication skills and professionalism. We have observed that virtually all of the students conduct themselves with patients in a considerate, articulate, and diplomatic manner.

Clinical decision-making: Each Medical Skills session is situated within a week of focused curriculum on a clinical topic. This has allowed the course directors have to present fairly complex clinical problems to the pre-clerkship students in the course. The course directors have seen that the students are consistently able to engage in medical decision-making at a sometimes surprisingly high level of sophistication. As a result, the Medical Skills Course has been particularly effective in preparing students for the third year clerkships.

Challenges:

Feedback: Changes in the processes for providing feedback to students have improved each students understanding of their individual performance. However, a missed opportunity persists. Each student is videotaped doing their SPM counters, and one-on-one review of these videotaped encounters is a powerful means of improving performance in a number of learning domains. Unfortunately, limited faculty availability has been a barrier to developing regular, one-on-one review of these videos with students. A potential solution is developing with recruitment of an additional clinical College Master. This faculty member would serve as a third co-director of the Medical Skills Course. With this additional faculty member, course administrative work can be distributed, opening time for clinical faculty members to begin regular reviews of video tapes with students.

Assessment of professionalism: Long an elusive goal of medical education, individual medical students have occasionally deported themselves unprofessionally. Some of these incidents have been dealt with and in an ineffective manner because of the lack of a clear description of appropriate professional behavior. The College Masters have begun the process of developing descriptors of professional behavior, with the intention of using these in the assessment of professional behavior. These descriptors will be applicable to student conduct in the Medical Skills Course sessions and will enhance the faculties ability to identify unprofessional behavior and deal with it effectively.

Academic Year _____

PART B. REQUIRED COURSE FORM

Course title:	Society, Community, and the Individual I, II, III, IV
Sponsoring department or unit:	Department of Medical Education
Name of course director:	Theresa Byrd, Dr. PH/Tania Arana, PhD

Society, Community, and the Individual (SCI) is a two-year long course spanning the first four semesters of medical school.

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Medical Education	3
Department of Biomedical Science	1
Department of Family Medicine	43*
Department of Internal Medicine	11*
Department of Pediatrics	9*
Department of Obstetrics and Gynecology	2*
Department of Psychiatry	3*

*Please note: These numbers include volunteer community faculty members serving as preceptors in the community-clinic experience component of SCI.

COURSE OBJECTIVES

Are there written objectives for the course? (check)

Yes	✓	**No**	

Briefly summarize the objectives/content areas covered in the course.

Society, Community, and the Individual (SCI) is a required course spanning the MS1 and MS 2 years. The overall goal of this course is to provide students with a population perspective on health, illness, and care. This perspective is conveyed by weaving the following threads throughout the course: epidemiology, biostatistics, culture, community, family, environmental and occupational health, and medical Spanish. As part of this course, students participate in community assessment projects and they are assigned to community clinics where they spend approximately one-half day per month during the school year. During their clinic placements they are given opportunities to interact with patients under the supervision of physicians who have clinical appointments in the School of Medicine and they also complete a series of exercises designed to help them understand the organization of the practice, and the roles and relationships among the various members of the health care team (e.g., nurses, medical assistance, pharmacy, social work, community outreach workers).

The overall course goals include the following (alpha-numeric code refers to Institutional Learning Objectives described in Section II, ED-1, 1-A):

1. Students will understand the ecological model of health and how political/social, community, organizational, and family systems influence individual health (PBL-2, SBP-1, SBP-2, Prof-9);
2. Students will acquire an understanding of biostatistical concepts required to critically evaluate the medical literature and practice evidence-based medicine (MK-3, MK-4);
3. Students will understand modern epidemiological principles for assessing disease processes within populations and know how to apply this knowledge in practice (MK-3, MK-4);
4. Students will appreciate the role of culturally based beliefs, attitudes, and values in affecting the health and illness behaviors of individuals, groups, and communities (ICS-1, ICS-2, ICS-3, Prof-5,Prof-7);
5. Students will understand the concept of community and of systems within communities that impact health seeking behaviors and responses to treatment interventions (SPB-1, SPB-2);
6. Students will recognize variations in family structures, organization, values, and expectations as these influence health and illness-related behaviors (ICS-1, ICS-2, ICS-3, Prof-5,Prof-7);
7. Students will recognize the impact of environmental and occupation factors on the health of individuals and populations within communities and they will be able to identify and apply effective strategies for promoting health and reducing illness at the level of the individual and the community (ICS-3, SBP-1, SPB-2).
8. Students will acquire (or expand upon existing) skills in conversational and medical Spanish (ICS-1, ICS-3).

Specific learning objectives and expectations are made available prior to, or at the time of, each individual learning activity.

Preparation for Teaching

A majority of the lecture sessions in this course have been developed and delivered by faculty members who participated in the initial planning and design of the course. Consequently they are well aware of course goals and objectives and have developed their teaching materials to meet these goals and objectives. For small group sessions, facilitators are provided with detailed small group facilitator guides, lesson plans, and all needed materials. Further, faculty members facilitating small group sessions meet in "faculty huddles" prior to the scheduled session to review the goals, objectives, and methods of the session and to ask and answer questions. Community-based preceptors are provided opportunities for in-person orientation and faculty development. All are provided with detailed session guides and outlines.

Academic Year _____

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	No
Residents		X
Graduate Students		X
Postdoctoral Fellows		X

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

Residents, Fellows, and Graduate Students do not teach in this course.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

Didactic/classroom components of this course are taught at a single location on the campus of the school of medicine. Students are, however, assigned to one of several community clinic sites for early clinical experiences located throughout the area. A variety of methods are employed to orient staff and clinical faculty to the goals and learning objectives of the course and the evaluation of the student. These include the following:

1. The creation of a community clinic advisory group with a representative from each major community-based site. This group meets two-three times a year, and as needed, to discuss the program goals and objectives, logistics, and to solve problems. These dinner meetings are well attended.
2. The course directors and coordinators hold orientation meetings with the clinical faculty and staff at each of the community clinic sites at the beginning of each academic year.
3. Each participating community clinic faculty member is provided a copy of the course syllabus and with a set of written materials outlining course objectives and learning activities.
4. Community clinic faculty do not grade the student per se, but complete a behavioral feedback form, including narrative comments, that is used by the course director to determine whether there are problems with student attitudes or conduct that need to be addressed.

Academic Year _____

REQUIRED COURSE FORM (Continued)

Course title:	Society, Community, and the Individual

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not applicable.

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

✓	Multiple-choice, true/false, matching questions		Laboratory practical items
✓	Fill-in, short answer questions	✓	Problem-solving written exercises
✓	Essay questions or papers	✓	Presentations
	Oral exams	✓	Preceptor ratings
	OSCE or standardized patient examination	✓	Other (describe) Small group facilitator evaluations

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Practice exam questions are provided for biostatistics.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Small group tutors complete a brief evaluation of student performance in SCI small group sessions and they are encouraged to provide brief narrative comments. Similarly, community preceptors complete an assessment on each student at the time of each encounter. They too are encouraged to provide narrative comments. These narrative comments are reviewed by the senior associate dean for medical education, the associate dean for student affairs and the college masters at the end of the year and a summary narrative is constructed and provided to the student in their e-portfolios. The summary narratives are intended to provide formative feedback. However, problems with professionalism (e.g., disruptive or disrespectful behavior) that persist, despite feedback, would be referred to the associate dean for student affairs and if necessary to the Grading and Promotion committee for action.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

The SCI course has excellent space, excellent IT/Educational technology support, and a full time course coordinator to assist the course director. We also have more than adequate faculty resources to meet the didactic course goals and learning objectives. Our challenge for the future will be in recruiting sufficient numbers of community clinic physicians for the experiential components of this course. We have adequate numbers now to meet our needs for the next 2 years, but as our class size grows, we'll need to expand capacity. Steps are being taken to identify additional clinical faculty in the community and additional sites to meet future needs.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students are asked to complete anonymous on-line evaluations of this course at the end of the three-week, "mini-immersion" experience on language, culture, and community on the border, which serves as the PLFSOM introduction to the education program for first year students, and then again at the end of each semester. Students are asked to respond to evaluation items using a 5-point scale with 1 indicating "strong disagreement" with the item and 5 indicating "strong agreement." Results for the last two years are presented below.

SCI Immersion Block	Class of 2014	Class of 2015
The SCI Immersion was well organized	4.0	3.4
The learning objectives were clearly identified	4.0	3.5
The SCI Immersion met the identified learning objectives	4.0	3.6
The community assessment gave me a good feel for the El Paso community.	4.4	4.1
The amount of material presented was reasonable.	4.2	3.6
I improved my Spanish speaking skills	4.2	4.0
The lectures helped me learn the material.	3.8	3.5
The small group learning activities helped me learn the material.	4.1	3.7
The community assessment helped me learn the material	4.0	3.7
The interactive sessions helped me learn the material	4.2	3.7
I understand how the SCI Immersion is applicable to the practice of medicine.	4.1	4.0
Overall, I learned useful knowledge and/or skills	4.0	3.7
N completing Survey	60	82
Class size	62	84
Response rate	97%	98%

Academic Year _____

SCI I (Semester)	2014	2015
SCI was well organized.	3.7	3.0
The learning objectives were clearly identified.	3.8	3.5
The course met the identified learning objectives.	3.9	3.5
The amount of material presented was reasonable.	3.9	3.8
I knew what I was supposed to be learning and why.	3.9	3.0
The methods used to evaluate my performance were fair	3.9	3.2
SCI broadens my perspectives.	3.5	3.0
The material covered by SCI is relevant to the practice of medicine.	4.0	3.3
The lectures helped me learn the material.	3.2	2.8
The community clinic experience is a worthwhile component of the curriculum.	4.2	3.9
Spanish is a worthwhile component of the curriculum.	3.7	3.3
Overall, I learned useful knowledge and/or skills during SCI.	3.7	3.2
Number of Responses	51	79
Class Size	60	83
Response Rate	85%	95%

SCI II	2014	2015
SCI was well organized.	3.5	3.0
The learning objectives were clearly identified.	3.5	3.2
The course met the identified learning objectives.	3.7	3.1
The amount of material presented was reasonable.	3.9	3.4
I knew what I was supposed to be learning and why.	3.6	3.1
The methods used to evaluate my performance were fair	3.7	3.0
SCI broadens my perspectives.	3.6	3.0
The material covered by SCI is relevant to the practice of medicine.	3.7	3.3
The lectures helped me learn the material.	3.3	3.1
The community clinic experience is a worthwhile component of the curriculum.	3.9	3.6
Spanish is a worthwhile component of the curriculum.	3.6	3.4
My community preceptor understood the learning objectives.	--	3.5
My community preceptor ensured that the learning objectives were met.	--	3.5
Overall, I learned useful knowledge and/or skills during SCI.	3.7	3.2
Number of Responses	43	79
Class Size	57	83
Response Rate	75%	95%

Academic Year _____

SCI III	2013	2014
SCI was well organized.	2.5	2.9
The learning objectives were clearly identified.	2.9	2.9
The course met the identified learning objectives.	2.7	2.9
The amount of material presented was reasonable.	2.5	3.3
I knew what I was supposed to be learning and why.	2.6	2.9
The methods used to evaluate my performance were fair.	2.4	2.9
SCI broadens my perspectives.	2.8	3.1
The material covered by SCI is relevant to the practice of medicine.	3.3	3.1
The lectures helped me learn the material.	2.2	2.6
The community clinic experience is a worthwhile component of the curriculum.	4.2	3.5
Spanish is a worthwhile component of the curriculum.	3.4	3.5
Overall, I learned useful knowledge and/or skills during SCI.	3.3	3.0
Number of Responses	27	57
Class Size	37	57
Response Rate	73%	100%

SCI IV	2013	2014
SCI was well organized.	2.4	2.4
The learning objectives were clearly identified.	2.4	2.5
The course met the identified learning objectives.	2.2	2.6
The amount of material presented was reasonable.	2.3	3.2
I knew what I was supposed to be learning and why.	1.8	2.2
The methods used to evaluate my performance were fair	1.8	2.4
SCI broadens my perspectives.	2.7	3.0
The material covered by SCI is relevant to the practice of medicine.	2.8	3.2
The lectures helped me learn the material.	1.6	2.2
The community clinic experience is a worthwhile component of the curriculum.	4.1	3.5
Spanish is a worthwhile component of the curriculum.	3.7	3.5
Overall, I learned useful knowledge and/or skills during SCI.	3.2	3.0
Number of Responses	19	55
Class Size	37	58
Response Rate	51%	95%

Academic Year _____

Identify major successes in the course and problems to be overcome.

Successes:

The SCI course has provided students with the opportunity to learn more about the ecological model of health and to connect the social, cultural, community and family determinants to individual health. Anecdotally, several third year students have commented that the content they learned in SCI has been helpful in the clinical setting. They especially feel they are skilled at patient-centered interviewing, and that they can better communicate with Spanish Speaking patients. We have also had some success in integrating more with the clinical and basic sciences content, by scheduling SCI content to coincide with other courses such as Scientific Principles of Medicine, Medical Skills and Master's colloquium topics as much as possible. In the Spanish course, students study the vocabulary associated with the SPM unit they are working in. Students have been very happy with the community clinic experience in general.

Challenges:

There have been several challenges that we have been working to overcome. The course has received low evaluations, in part because the content has been provided in a sporadic manner, and because students have not always seen the connection of SCI to medical practice. Generally, students tell us that they think the content is important for future interactions with patients, but they sense that it is not content that is covered on the USMLE Step 1 exam, so they feel uncomfortable about having to learn it in the first 2 years of medical school. In order to better understand the issues, and to get input from students and faculty from the other courses, we held an SCI planning summit in January 2012. We received good feedback on how to improve the course. In response to the feedback, we have changed the course for Fall of 2012 so that Spanish meets weekly for one hour (instead of once every 2 weeks) and SCI class meets weekly for one hour. We are changing our Spanish faculty from a health science based faculty to a language and arts based faculty to improve language instruction. Spanish will be assessing students OSCEs with Spanish Speaking standardized patients. We have tried to make clearer links between SCI content and SPM, Medical Skills and Masters Colloquium through scheduling sessions so that they integrate better with the other courses. We have removed most of the epidemiology content from year one, and moved it into a more integrated course with biostatistics in year 2. The second half of the second year will be focused on how to read and critique the medical literature, applying epidemiology and biostatistics knowledge they have learned in the previous semester. This will enhance the applicability of biostatistics and epidemiology to medicine. We are adding online content so that students can prepare for class ahead of time, and do mostly hands-on practical and application exercises during class time.

PART B. REQUIRED COURSE FORM

Course title:	Scientific Principles of Medicine Unit 10: Reproduction
Sponsoring department or unit:	Department of Obstetrics and Gynecology Department of Medical Education
Name of course director:	Sanja Kupesic, MD/ Dale Quest, PhD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Medical Education	15
Department of Obstetrics and Gynecology	6
Department of Family and Community Medicine	1
Department of Pathology	1

COURSE OBJECTIVES

Are there written objectives for the course?

Yes	✓	No	

Briefly summarize the objectives/content areas covered in the course.

This unit of Scientific Principles of Medicine addresses human reproduction, pregnancy, and illnesses associated with the reproductive system and process. This course of instruction is organized around the following clinical presentations:

1. Infertility
2. Male reproductive system
3. Abnormal menstrual cycle
4. Contraception
5. Menopause
6. Pelvic floor relaxation
7. Screening and prevention
8. Sexually transmitted diseases
9. Abnormal genital track bleeding
10. Pelvic mass
11. Pelvic pain
12. Normal pregnancy
13. Pregnancy complications
14. Pregnancy loss

The sequence of these clinical presentations has been structured so that the concepts developed during the study of one topic lay down a foundation for subsequent topics. Students are provided with a brief

definition and a statement of clinical significance for each clinical presentation. This serves as the foundation for presentations of both clinical and basic science information. Gross, microscopic, and radiographic normal and abnormal anatomy are presented in laboratory and small group discussions (with "process worksheets" and "worked examples" as previously described).

Physical signs and symptoms associated with particular disease processes are provided along with a schematic representation of the relationships of causal entities. This list of causes and the associated schematic representation provide the basis for discussion of basic science principles including underlying anatomic, biochemical, and pathophysiological concepts. Basic science learning objectives are covered for each clinical presentation. Examples of the basic science content of this unit of SPM are listed in the topic appendix at the end of this course description.

Preparation for Teaching

A majority of the instruction in this unit is delivered by faculty members in the department of medical education who participated in the development and planning of the unit. Consequently, they are well aware of the goals and objectives of the unit and how their individual material relates to that presented by other faculty members. Faculty members from the clinical departments who participate in the unit as clinical presentation "scheme presenters" and as facilitators in "Worked Case Example" (WCE) small group sessions are briefed by the unit director(s) regarding the goals and objectives of the session(s) in which they will participate. The unit directors review and give scheme presenters feedback on their particular presentations. WCE facilitators are provided with session materials (power points case material, "process work sheets") and are briefed on the goals and objectives of the given session. Whenever possible, new small group facilitators observe more experienced facilitators to learn about the WCE process.

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents		✓
Graduate Students		✓
Postdoctoral Fellows		✓

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

This course is taught at only a single site, the campus of the PLFSOM.

Course title:	Scientific Principles of Medicine Unit 10: Reproduction

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Not applicable.

Year:			
Score:			

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

✓	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination	✓	Other (describe) Small group assessment

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Students participate in a 25-30 item formative assessment each week of this unit covering material presented in the preceding week. Typically these items are multiple choice questions written in the USMLE vignette format and they are drawn from the item pool that is being developed for each of the Scientific Principles of Medicine units. The formative assessment is delivered electronically in a secure environment and students receive immediate feedback on the number of items they answered correctly. They also are able to review each of the items with annotations prepared by the item author explaining the correct (keyed) response. Scores are loaded into the students' e-portfolios for information purposes only. Scores on the formative quizzes are not used for final unit grading purposes. The goal of the formative assessment is to give students a sense of how they are performing and to identify early areas in which they may need to devote additional time or seek additional help from faculty.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Small group facilitators complete assessments on student performance in WCE sessions. These include space for narrative comments. Rating forms are uploaded into the student e-portfolio and are reviewed by the associate dean for student affairs, senior associate dean for medical education, and college masters who collaborate in formulating a summary narrative at the end of the year.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

This course, like all of the others in the SPM curriculum is delivered by an interdisciplinary cadre of basic science and clinical faculty. While most of these faculty members are affiliated with the department of medical education, several members of the clinical faculty play an active role as CP lecture presenters and small group tutors or facilitators. The PLFSOM enjoys excellent educational facilities including state-of-the art lecture halls, laboratories, flexible-use teaching space (e.g., for interactive and Team-Based Learning activities), small group rooms, etc. All units within SPM are supported by full time course coordinators and an assessment coordinator for formative and summative assessment. Centralized IT and Audiovisual support is also made available to all courses and units of instruction within SPM.

In general we have sufficient faculty for this unit. There is a high level of support in the Department of Obstetrics and Gynecology for this unit and many participated in WCE small group sessions.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students complete anonymous on-line evaluations at the end of each unit. Results below are based on a 5-point scale with 1 representing "Strongly disagree" and 5 indicating "Strongly Agree."

Reproduction Unit Evaluation Results	2010-2011	2011-2012
This unit was well organized.	3.8	4.3
The learning objectives were clearly identified.	4.1	4.3
The unit met the identified learning objectives.	4.0	4.4
The order of clinical presentations made sense to me.	4.1	4.1
The Basic Science material was well integrated.	2.9	4.2
The amount of material presented was reasonable.	4.2	4.0
I knew what I was supposed to be learning and why.	3.8	4.1
The methods used to evaluate my performance were fair.	4.1	4.0
The Clinical presentation "schemes" contributed to my learning.	4.3	4.3
The process work sheets contributed to my learning.	4.3	4.1
The lectures helped me learn the material.	3.8	4.2
The Work Case Examples helped me learn the material.	4.1	4.4
The self-taught sessions helped me learn the material	NA	3.7
Anatomy Labs helped me learn the material.	2.8	3.5
Female Infertility Integrative Lab helped me learn the material.	3.5	NA
Overall, I learned useful knowledge and/or skills during this unit.	4.4	4.5
N	32	55
Class size at date	37	57
Response Rate	86%	96%

Identify major successes in the course and problems to be overcome.

Successes:

- Students have highly valued the organization of the Unit and integration of basic and clinical science content.
- In 2011/12 male reproductive system was successfully incorporated in Reproduction Unit.
- Students' evaluations indicate that integration of scheme presentations with worked case examples and Medical Skills has facilitated mastering Reproduction Unit learning objectives.

Challenges:

- Improvements are to be made to self-taught sessions and Anatomy Lab activities to better fit the clinical science learning objectives.
- Improve the consistency of small group sessions. The clinician unit director will meet with the other small group facilitators to review goals, objectives and approach and give them an opportunity to ask questions and seek clarification.

Topic Appendix: Reproduction Unit

1. ANATOMY / HISTOLOGY / EMBRYOLOGY

Gross Anatomy

- Structure of the pelvis, bones and joints
- The inguinal region: structure, nerve supply
- Blood supply of the spermatic cord, and scrotum
- Nerve supply and blood supply of the male internal genitalia
- Urogenital region
  - Urogenital triangle
  - Urogenital diaphragm
  - Superior and inferior fasciae
  - Superficial and deep perineal pouches
  - Pudendal nerve and internal pudendal artery, pudendal canal
  - Superior pubic ligament and the arcuate pubic ligament
  - Lymphatic drainage and the structures of the male pelvis
- Visual learning objectives for gross anatomy
- Ovary and the female reproductive system
- Pelvis, bones and joints of the pelvis, the walls and floor of the pelvis
- Pelvic diaphragm and the levator ani
- Nerves of the pelvis including the pudendal nerve the pudendal canal
- Arteries of the pelvis, vaginal arteries
- Pelvic autonomic nerves
- Urogenital region
  - Urogenital triangle
  - Urogenital diaphragm
  - Associated musculature
  - Superior and inferior fasciae of diaphragm
  - Superficial and deep perineal spaces
  - Female internal genital organs
- Structure, blood supply, and nerve supply of the vagina, uterus, uterine tubes, and ovaries
- Vaginal anatomy
  - Relationship of the vagina to the perineal body
  - Sphincters of the vagina

        - Vaginal artery
    - Uterus and ovaries
        - Uterine artery and internal pudendal artery
        - Anastomosis between ovarian branch of uterine artery and the ovarian artery
        - Broad ligaments, round ligaments
        - Suspensory ligament of the ovary, and the uterosacral ligament
        - Pelvic fascia, peritoneum, bladder, uterus, and rectum
    - Retropubic space and female perineum
    - External genitalia
        - Blood supply and nerve supply of the mons pubis
        - Labia majora and minora
        - Vestibule of the vagina
        - External urethral orifice and Bartholin's gland
        - Lesser vestibular glands
        - Clitoris and the bulbs of the vestibule
    - Lymphatic drainage of the structures of the female pelvis
    - Anatomy and lymphatic drainage of the breast
    - Visual learning objectives for gross anatomy

Histology

- Ovary and female reproductive system
    - Histogenesis and histological organization of the ovary
    - Oogenesis and comparisons with spermato/spermiogenesis
    - Organization, function and development of the ovarian follicle
    - Histophysiology of the ovarian follicle
    - Cells producing steroid hormones and sources of steroid precursors
- Target cells of pituitary gonadotropins
    - Trophic action of gonadotropins
    - Apoptosis upon diminished gonadotropin secretion
- Generic structure of visceral canals, layers of the oviduct and vagina
- Histological organization of the uterus
- Implantation, formation, development and structure of the human placenta
- Mammary gland during and after lactation
- Hormones and the gonadostatic function of the pineal gland.

Embryology

- Ovary and female reproductive system
  - Development of the gonads
  - Absence of the Y-chromosome gene on female reproductive system
  - Derivation of the primordial follicles
  - Müllerian ducts
    - Development of the female reproductive system
    - Uterovaginal primordium
  - Uterine and associated tissue
    - Fallopian tubes
    - Uterus
    - Superior portion of the vagina
  - Formation of the broad ligaments, rectouterine pouch, and vesicouterine pouch
  - Inferior two-thirds portion of the vagina
  - Development of the auxiliary genital glands and external genitalia
- Female reproductive cycle with emphasis on the ovarian cycle
  - Gametogenesis and oogenesis
  - Origin of the corpus luteum from the remaining granulosa and thecal cells
  - Origin of the placenta, beginning at implantation, developing through parturition
  - Parturition, stages of labor, and hormonal control

2. BIOCHEMISTRY

- Estrogens, progesterone and the female reproductive system
  - Synthesis and secretion pathways for the synthesis of estradiol and progesterone and their tissue location
  - Transport and metabolism of the steroid hormone carrier proteins and their sites of synthesis
  - Signal transduction, mechanism by which estrogens and progesterone exert their effects on tissues
  - Menstrual cycle and pregnancy hormonal changes that take place during pregnancy and the function of the various hormones
  - Parturition and lactation, hormonal changes that occur during and after parturition, and the function of the individual hormones, hormones that participate in lactation, and their individual roles

3. GENETICS

- Genetics of gender

- Genetic disorders of endocrine function

4. NUTRITION

- Special nutritional needs during pregnancy, parturition, and lactation
  - Potentially deleterious nutritional deficiencies
    - Methods of and rationale for the nutritional assessment of the pregnant woman
    - Recommended dietary allowances for pregnancy and lactation
    - Vitamins and minerals important prevention of anemia during pregnancy and their functional biochemistry
    - Nutritionals important for prevention of birth defects
  - Potentially deleterious nutritionals, teratogens and toxicants
    - Nutritional supplements, caffeine, alcohol, drugs and exercise in pregnancy
    - Risk factors for abnormal fetal birth weight
    - Fetal alcohol syndrome and other developmental abnormalities

5. PATHOLOGY

- Female genital system and breast
  - Female genital tract
    - Clinical, gross and microscopic features of the neoplasms
    - Relationship of in utero exposure to diethylstilbestrol in vaginal adenosis and adenocarcinoma
    - Role of human papillomavirus (HPV) in carcinoma of the cervix
    - Cervix and cervical dysplasia, squamous carcinoma - in-situ, invasive squamous carcinoma and adenocarcinoma
    - Histologic appearance of the endometrium
      - Anovulatory cycles
      - Prolonged oral contraceptive use
      - Ingestion of progestational agents
      - Endometrial hyperplasia
      - Endometrial adenocarcinoma
    - Gross and microscopic features
      - Leiomyoma
      - Leiomyosarcoma
      - Adenomyosis
      - Endometriosis

- Endometrial hyperplasia
- Etiologies and potential complications of pelvic inflammatory disease
- Ectopic pregnancy
- Major features of polycystic ovary syndrome
- Chronic endometriosis
- Ovarian neoplasms
- Placenta and pathology of placentation
- Gestational trophoblastic disease

- The breast
  - Clinical findings and dominant histological features of acute mastitis and breast abscess, plasma cell mastitis (duct ectasia), fat necrosis of the breast
  - Fibrocystic disease of the breast
  - Breast neoplasms: patterns of presentation, gross and microscopic features, patterns of metastasis (if any), and prognosis
  - Staging and prognostic factors (molecular, microscopic, clinical) that influence the clinical outcome of breast cancer
  - Significant abnormalities of the male breast, gynecomastia and carcinoma

6. PHARMACOLOGY

- Ovary and female reproductive system
  - Natural and synthetic estrogens
    - Selective estrogen receptor modifiers
    - Antiestrogens
    - Estrogen synthesis inhibitors
  - Natural and synthetic progestins
    - Anti-progestins
    - Combination oral contraceptives
  - Therapeutic uses of estrogens and progestins
    - Hypogonadism
    - Postmenopause
    - Contraception
    - Osteoporosis
    - Cancer
  - Ovulation induction
    - GnRH agonists and antagonists

- Gonadotropins
- Osteoporosis: prevention and treatment
- Agents that cause contraction and relaxation of the uterus
- Prostaglandins in obstetrics

7. PHYSIOLOGY

- Ovary and female reproductive system
  - Secretion and chemical nature of female sex steroid hormones
  - Function of the hypothalamic-pituitary-gonadal axis and “feedback” in males
  - Regulation of synthesis and secretion
    - LH, FSH, prolactin
    - Female sex steroid hormones
    - Gonadotropin releasing hormone
- Endocrine influences on the function of the female reproductive system
  - Uterine endometrium and the menstrual cycle
    - Changes in the ovaries
    - FSH and LH
    - Estrogens and progesterone
    - Normal ovulatory menstrual cycles
    - Anovulatory menstrual cycle
    - Consequence of androgen production in the female
  - Pregnancy
    - Estrogen and progesterone
    - Human chorionic gonadotropin
    - Human placental lactogen
  - Endocrine functions of the placenta
  - Factors responsible for initiation and control of parturition
  - Hormones in breast development, milk synthesis, and milk release
  - Functions of the primary and accessory reproductive structures in the female
  - Physiological changes which occur during pregnancy for both the mother and the fetus

Academic Year _____

PART B. REQUIRED COURSE FORM

Course title:	Scientific Principles of Medicine Unit 11:The Mind and Human Development
Sponsoring department or unit:	Departments of Medical Education, Pediatrics and Psychiatry
Name of course director:	Tania Arana, PhD, Richard Brower, MD, Blanca Garcia, MD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Medical Education	15
Department of Pediatrics	12
Department of Psychiatry	7
Department of Family and Community Medicine	2
Department of Internal Medicine	1
Department of Biomedical Science	1

COURSE OBJECTIVES

Are there written objectives for the course? (check)

Yes	✓	No	

Briefly summarize the objectives/content areas covered in the course.

The Mind and Human development unit of SPM addresses normal and abnormal bio-behavioral developmental process across the life span beginning at birth through old age and senescence. This unit builds on the foundation laid by the unit on human reproduction which precedes it. The following clinical presentations have been assigned to Unit 11:

1. Developmental Health and Disease: Infant –Toddler (ages 0-2)
2. Sudden Infant Death Syndrome and Acute Life Threatening Events (Self-Taught Module)
3. Development Health and Disease in Early Childhood (ages 2-8)
4. Developmental Health and Disease in the Pre-Teen Years (ages 8-12)
5. Developmental Health and Disease in Adolescent Patients (ages 13+)
6. Oral Health (Self-Taught module)
7. Mood Disorders
8. Anxiety and Panic Disorders
9. Psychosis-Disordered Thought
10. Falls in the Elderly (Self-Taught Module)
11. Substance Abuse, Dependence, and Withdrawal
12. Dementia
13. Sleep and Circadian Rhythm Disorders

As with all of the units that fall under the Scientific Principles of Medicine (SPM) course umbrella, the sequence of clinical presentations have been structured so that concepts developed during the study of one topic provides a foundation for subsequent topics. The basic science content and concepts addressed in this unit are those that the faculty deems are essential for understanding a given presentation. Example basic science topics addressed in this unit of SPM are included in the appendix at the end of this course description. This content is provided to students through lecture, laboratory sessions, problem solving small group interactions, and self-study modules.

Preparation for Teaching

A majority of the instruction in this unit is delivered by faculty members in the department of medical education who participated in the development and planning of the unit. Consequently, they are well aware of the goals and objectives of the unit and how their individual material relates to that presented by other faculty members. Faculty members from the clinical departments who participate in the unit as clinical presentation "scheme presenters" and as facilitators in "Worked Case Example" (WCE) small group sessions are briefed by the unit director(s) regarding the goals and objectives of the session(s) in which they will participate. The unit directors review and give scheme presenters feedback on their particular presentations. WCE facilitators are provided with session materials (power points case material, "process work sheets) and are briefed on the goals and objectives of the given session. Whenever possible, new small group facilitators observe more experienced facilitators to learn about the WCE process.

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents		✓
Graduate Students		✓
Postdoctoral Fellows		✓

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

Not applicable

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

This course is taught at only one site—the campus of the PLFSOM.

Academic Year _____

REQUIRED COURSE FORM (Continued)

Course title:	Mind and Human Development

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not applicable

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

✓	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination	✓	Other (describe) Small group assessment

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Students participate in a 20-30 item formative assessment each week of this unit covering material presented in the preceding week. Typically these items are multiple choice questions written in the USMLE vignette format and they are drawn from the item pool that is being developed for each of the Scientific Principles of Medicine units. The formative assessment is delivered electronically in a secure environment and students receive immediate feedback on how many items they answered correctly. They also are able to review each of the items with annotations prepared by the item author explaining the correct (keyed) response. Scores are loaded into the students' e-portfolios for information purposes only. Scores on the formative quizzes are not used for final unit grading purposes. The goal of the formative assessment is to give students a sense of how they are performing and to identify early areas in which they may need to devote additional time or seek additional help from faculty.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Small group tutors complete a brief evaluation of student performance and participation in the Worked Case Examples sessions. Faculty tutors are encouraged to provide brief narrative comments. These narrative comments are reviewed by the senior associate dean for medical education, the associate dean for student affairs and the college masters at the end of the year and a summary narrative is constructed and provided to the student in their e-portfolios. The summary narratives are intended to provide

formative feedback. However, problems with professionalism (e.g., disruptive or disrespectful behavior) that persisted, despite feedback, could be referred to the Grading and Promotion committee for action.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

This course, like all of the others in the SPM curriculum is delivered by an interdisciplinary cadre of basic science and clinical faculty. While most of these faculty members are affiliated with the department of medical education, several members of the clinical faculty play an active role as CP lecture presenters and small group tutors or facilitators. Faculty resources are more than adequate to meet the needs of this course. The PLFSOM enjoys excellent educational facilities including state-of-the art lecture halls, laboratories, flexible-use teaching space (e.g., for interactive and Team-Based Learning activities), small group rooms, etc. All units within SPM are supported by full time course coordinators and an assessment coordinator for formative and summative assessment.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

At the end of the unit students complete anonymous on-line course evaluations employing a 5 point scale with a 1 representing dissatisfaction/disagreement with an item and a 5 representing a high level of satisfaction/agreement.

Mind & Human Development Evaluation Results	2010-2011	2011-2012
This unit was well organized.	3.2	2.9
The learning objectives were clearly identified.	3.2	3.3
The unit met the identified learning objectives.	3.4	3.2
The order of clinical presentations made sense to me.	3.6	3.3
The Basic Science material was well integrated.	3.4	3.3
The amount of material presented was reasonable.	3.1	3.7
I knew what I was supposed to be learning and why.	3.4	2.9
The methods used to evaluate my performance were fair.	3.0	3.2
The Clinical presentation "schemes" contributed to my learning.	3.6	3.3
The process work sheets contributed to my learning.	3.4	3.2
The lectures helped me learn the material.	3.5	3.0
The Work Case Examples helped me learn the material.	3.5	3.9
The self-taught modules helped me learn the material	NA	3.1
Anatomy Labs helped me learn the material.	3.0	NA
Overall, I've learned useful knowledge and/or skills during this unit.	3.7	3.5
N	12	55
Class size at date	37	57
Response Rate	32%	96%

Academic Year _____

Identify major successes in the course and problems to be overcome.

Successes:

- This unit of SPM was modified following the AY 2010-11 to place more emphasis on developmental themes. This enabled us to reduce redundancy that students did not find particularly helpful despite the intended goal of review in a pediatric context.

Challenges:

- Students perceived this unit as being somewhat disorganized. We agree. Some of this disorganization can be attributed to the substantial changes required to highlight development as the organizing theme of the unit.
- The self-taught modules on Sudden Infant Death and Acute Life Threatening Evens, Oral Health, and Falls in the Elderly were not particularly well received by students and may have contributed to the perception that they were not well integrated with other components of the unit.
- The Psychosis-Disordered Thought and Substance-Abuse clinical presentations need improvement.

Improvement Plan:

- To improve how the organization and flow of the unit are perceived the Unit co-directors plan to unify the efforts of the clinical medical educators/scheme presenters. They will be asked to coordinate their efforts to create threads that stream through the human development presentations such that each presenter identifies the unique features of the physical , sexual , emotional and cognitive development for each stage.

- Unit directors have identified the need to improve exam items. In particular each item must be unique and not identifiable from available learning resources. All items will be reviewed by the authors and vetting teams for uniqueness as the unit progresses this year.

- Certain psychiatry topics had not received the appropriate attention and will emphasis will be increased. In particular, efforts will be made to include the topics of Personality Disorders and Defense Mechanisms.

- The Department of Medical Education will be adding an experienced clinician medical educator in July 2012. He will play a major role in the planning and implementation of this unit in the future.

Appendix: Topic List for Mind and Human Development

1. BEHAVIORAL SCIENCE

- Characterization and assessment of human behavior
  - Development
  - Psychological assessment
  - Personality
  - Learning and memory
  - Psychosocial determinants of behavioral and cognitive health
- Established disorders of human behavior
  - Structure and use of the DSM-IV-TR
  - Autism spectrum disorders
  - Stress and coping mechanisms
  - Personality disorders
  - Anxiety disorders
  - Mood (affective) disorders
  - Attention disorders and disruptive behavior in children
  - Disorders of thought and psychotic disorders, including schizophrenia
  - Dementia and delirium
  - Circadian rhythms and sleep, normal and abnormal states/conditions
- Relationship of organic illness or physiologic changes on human behavior
  - Pregnancy
  - Cardiovascular risk
  - Pain and coping mechanisms
  - HIV and the individual
- Interpersonal relationships and human behavior
  - Families, relationships, and health
  - Violence and suicide
  - Sexuality & sexual dysfunction
- Human behavior and pharmacologically active agents
  - Adherence to medical regimens
  - Substance abuse, addiction and withdrawal
  - Consequences of maternal/prenatal substance abuse

2. BIOCHEMISTRY

- Metabolism of the brain and central nervous system in health and disease
  - Glucose and carbohydrates
  - Nitrogen, ammonia and the urea cycle
  - Amino acid categorization, metabolism and metabolic disorders
  - Fatty acid metabolism
  - Lipolysis, beta-oxidation, gluconeogenesis and ketogenesis
  - The TCA cycle and the respiratory/electon-transport chain
  - Organic acids and organic acidurias
  - Lipids and myelin
  - Serotonin and neuroactive transmitters
  - Thiamine and thiamine deficiency
- Biochemical mechanisms in degenerative diseases
  - Alzheimer disease
  - Amyloidosis
  - Prion diseases

3. GENETICS

- Genetic aspects of newborn screening
- Genetic aspects of behavioral and cognitive disorders

4. NUTRITION

- Nutrition, malnutrition and development
- Psychosocial and behavioral aspects of nutrition
- Eating disorders
- Nutritional rehabilitation

5. PHARMACOLOGY (uses, mechanisms of action, pharmacokinetics, and adverse effects)

- Pharmacology and human development
  - Developmental aspects of pharmacokinetics
  - Steroids and sexual development
- Pharmacology and behavior, mental health and cognition
  - Stimulant drugs
  - Cholinergic drugs
  - Anticholinergic drugs
  - Indirect-acting sympathomimetic agents
  - Indirect-acting sympatholytic agents
  - Serotonergic drugs
  - Dopamine antagonists
  - Antipsychotic agents
  - Sedatives, hypnotics and anxiolytics
  - Drugs used to treat ADHD
  - Drugs used to treat affective disorders
  - Drugs of abuse
  - Pharmacology of tobacco dependence
  - Drugs used in dementias
  - Antiepileptic drugs as mood stabilizers
  - Prescribing CNS drugs for the elderly

6. PHYSIOLOGY

- Physiology of human development
  - Lung maturation and surfactant
  - Circulatory system maturation
  - Maturation of liver function
  - Control of sexual development
  - Control of linear growth and body mass
- Physiology and neuroscience of behavior, mental health and cognition
  - Physiology of circadian rhythms and sleep
  - Physiology of stress
  - Physiology of substance abuse\
  - The limbic system
  - Neuroscience of mood disorders
  - Neuroscience of psychosis and schizophrenia
  - Neuroscience of dementia

7. ANATOMY/NEUROANATOMY

- Development of the nervous system (review and elaboration)
- Anatomy of the limbic system and Papez circuit

8. MICROBIOLOGY

- Developmental aspects of infectious disease
- Infectious diseases of the premature and newborn infant
- TORCH infections

9. IMMUNOLOGY

- Prematurity and the immune system
- Development of the immune system
- Primary and secondary immune deficiencies
- Childhood allergies
- Aging and the immune system

PART B. REQUIRED COURSE FORM

Course title:	Scientific Principles of Medicine Unit 7: Central Nervous System/ Special Senses
Sponsoring department or unit:	Department of Medical Education
Name of course director:	Richard Brower, MD/Dale Quest, PhD/Debra Bramblett, PhD/Asa Black, PhD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Medical Education	13
Department of Surgery	7
Department of Emergency Medicine	3
Department of Internal Medicine	1
Department of Family Medicine	1
Department of Neurology	2
Department of Radiology	1

COURSE OBJECTIVES

Are there written objectives for the course? (check)

Yes	✓	No	

Briefly summarize the objectives/content areas covered in the course.

This unit is organized into three major components: neurological, with an emphasis on the central nervous system (the peripheral nervous system is integrated into the musculoskeletal/integumentary system unit in year 1), ophthalmology, and otolaryngology. This unit of SPM, the first unit of year 2, includes the following clinical presentations:

1. Gait disturbance
2. Movement disorders
3. Headache
4. Seizures
5. Stroke and Aphasia
6. Delirium, Stupor, and Coma
7. Red Eye
8. Diplopia/Strabismus
9. Smell/Taste
10. Hearing loss
11. Dizziness/Vertigo

This unit presents an integrated approach to the structure, function, and organization of the central nervous system in the context of major neurological abnormalities affecting vision, hearing, smell and

taste. As previously described for the other units in the Scientific Principles of Medicine course, each clinical presentation includes a schematic representation illustrating a clinical approach to the presentation as a device for organizing thinking about the problem and for organizing foundational science content and concepts necessary for understanding underlying pathophysiological processes. The clinical reasoning processes are incorporated into a process work sheet based on the scheme that can be used as a resource for analyzing cases presented in small group "worked case example" sessions. Each of the basic science disciplines provides 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 related to the organ systems and clinical problems addressed in the unit. Example basic science topics included in this unit can be found in the appendix at the end of this course description.

Preparation for Teaching

A majority of the instruction in this unit is delivered by faculty members in the department of medical education who participated in the development and planning of the unit. Consequently, they are well aware of the goals and objectives of the unit and how their individual material relates to that presented by other faculty members. Faculty members from the clinical departments who participate in the unit as clinical presentation "scheme presenters" and as facilitators in "Worked Case Example" (WCE) small group sessions are briefed by the unit director(s) regarding the goals and objectives of the session(s) in which they will participate. The unit directors review and give scheme presenters feedback on their particular presentations. WCE facilitators are provided with session materials (power points case material, "process work sheets) and are briefed on the goals and objectives of the given session. Whenever possible, new small group facilitators observe more experienced facilitators to learn about the WCE process.

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents		X
Graduate Students		X
Postdoctoral Fellows		X

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

Not applicable.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

The course is taught at only one site, the campus of the Paul L. Foster School of Medicine.

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not Applicable.

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

✓	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination	✓	Other (describe) Small group facilitator assessment

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Students participate in a 25-30 item formative assessment each week of this unit covering material presented in the preceding week. Typically these items are multiple choice questions written in the USMLE vignette format and drawn from the item pool that is being developed for each of the Scientific Principles of Medicine units. The formative assessment is delivered electronically in a secure environment and students receive immediate feedback on how many items they answered correctly. They also are able to review each of the items with annotations prepared by the item author explaining the correct response. Scores are loaded into the students' e-portfolios for information purposes only. Scores on the formative quizzes are not used for final unit grading purposes. The goal of the formative assessment is to give students a sense of how they are performing and to identify early areas in which they may need to devote additional time or seek additional help from faculty. To facilitate this review, students are also provided copies of the learning objectives associated with items they missed on the formative exam.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Small group "worked case example" facilitators complete a brief assessment of student performance in the small group session and they are encouraged to provide written comments on each student in their groups. These assessments and comments are uploaded to the student's e-portfolio. In addition, on an

annual basis, the college masters, associate dean for student affairs, and the senior associate dean for medical education, review all small group evaluation forms and comments and based on this information they draft a summary narrative noting student strengths and areas for further growth and development.

This is provided primarily as formative feedback. However, if serious problems are detected that persist despite feedback and advisement, the student may be referred to the Student Grading and Promotion Committee for discussion with the student and the determination of appropriate remedial action.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

This interdisciplinary unit is taught by faculty drawn from a number of clinical departments as well as the basic science and clinical faculty members in the department of medical education. We have sufficient faculty to implement this unit in the SPM course. As class size expands over the next few years to an eventual class of 100 students, we will need to enlarge our pool of potential small group facilitators.

There is ample teaching space available for the course, including a small classrooms, lecture space, laboratories, clinical simulation laboratories, and gross anatomy dissection laboratories. Computers, computer software, library resources, and the personnel needed to support computer-based and library-based instruction are adequate to meet the teaching needs.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students complete anonymous on-line evaluations at the end of each unit. Results below are based on a 5-point scale with 1 representing "Strongly disagree" and 5 indicating "Strongly Agree."

Special Senses Evaluation Results	2010-2011	2011-2012
This unit was well organized.	3.3	3.6
The learning objectives were clearly identified.	3.2	3.8
The unit met the identified learning objectives.	3.2	3.9
The order of clinical presentations made sense to me.	3.5	3.8
The Basic Science material was well integrated.	3.2	3.8
The amount of material presented was reasonable.	3.4	4.0
I knew what I was supposed to be learning and why.	3.2	4.0
The evaluation methods were fair	3.6	3.8
The Clinical presentation "schemes" contributed to my learning	3.1	3.3
The process work sheets contributed to my	2.6	3.0
The lectures helped me learn the material.	3.6	3.9
The Work Case Examples helped me learn the material.	3.6	3.8
Anatomy Labs helped me learn the material.	2.8	3.6
Overall, I learned useful knowledge and/or skills	3.7	4.1
N	18	62
Class size at date	37	62
Response Rate	49%	100%

***Identify major successes in the course and problems to be overcome*.**

Successes:

- This Unit fulfills its essential educational objectives. In addition to our typical combination of full-time MS1-2 Medical Educators and faculty recruited from the clinical departments, this success has been achieved through creative utilization of community-based faculty resources in the clinical specialties of ophthalmology and otolaryngology. Given their high value, this approach will remain essential even as the school develops and recruits full-time faculty in these disciplines.

Challenges:

- Maintaining the commitment and enthusiasm of our non-salaried community-based faculty in the relatively high value specialties of ophthalmology and otolaryngology will require substantial effort, as will development and integration of full-time faculty in these disciplines.
- This Unit currently received substantial faculty support from the Department of Neurology and that Department is undergoing re-development due to natural/expected levels of attrition. Although this creates some minor challenges, there remains adequate support for the neurological components of the MS1-2 curriculum and substantial growth of the Department of Neurology is anticipated. Despite these challenges, we will be able to deliver this unit in the future.
- Compared to other Units, the clinical schemes and process worksheets for this Unit received less favorable student evaluations. The Unit Co-Directors and faculty presenting the Clinical Schemes have reviewed these materials and consider them adequate. As our faculty resources expand and new contributors with relevant expertise are identified, these materials will undergo review and revision. If deemed necessary through the centralized/CEPC-led course review process, external consultants may be engaged to review and suggest improvements for these materials

Topic Appendix: CNS and Special Senses Unit

1. ANATOMY / HISTOLOGY / EMBRYOLOGY

Gross Anatomy

- Spinal Cord
- Brainstem and Cerebellum
- Brain
- Orbit and oculus
- Tongue and papillae
- Vestibular and auditory anatomy
- Larynx
- Radiographic (visual) anatomy (X-rays, CTs, MRIs, etc.)

Microscopic anatomy/histology

- Nervous tissues
- Eye
- Tongue and papillae

Embryology

- Development of the nervous system and special senses
- Nervous system teratology

Neuroanatomy

- Spinal cord
- Brainstem and cranial nerves
- Cerebellum
- Basal ganglia
- Retina
- Optic chiasm
- Optic tract
- Visual cortex
- Lateral geniculate nucleus
- Taste and Olfaction
- Cochlea
- Vestibular apparatus
- Vestibulocochlear nerve, medial geniculate nucleus, auditory pathway
- Blood supply/vasculature of the central nervous system

2. MICROBIOLOGY/IMMUNOLOGY

- Infectious etiologies of myelitis, meningitis and encephalitis (bacteria, viruses and fungi)
- Infectious etiologies of eye disease (bacteria, viruses and fungi)
- Infectious etiologies of ear disease (bacteria, viruses and fungi)

3. NUTRITION

- Sensory disorders associated with vitamin deficiency
- Sensory disorders associated with vitamin excess
- Role of nutrition in selected sensory disorders

4. PATHOLOGY

- Central nervous system pathology
- Cerebrospinal fluid analysis
- Eye and visual system pathologies
- Ear, auditory and vestibular system pathologies
- Gustatory and Olfactory disorders

5. PHARMACOLOGY

- Drugs for ophthalmic indications
    - mydriatics and miotics
    - reduce intraocular pressure
    - treat infections
    - treat retinal degenerative disorders
- Pharmacology of movement disorders
- Drugs for ear, nose and throat infections
- Drugs for epilepsy

6. PHYSIOLOGY

- Regulation of intracranial pressure
- Cerebrospinal fluid production, circulation and elimination
- Neuroscience
    - Receptor functions of the retina and photo-transduction
    - Central visual pathways
    - Visual neurophysiology
    - Pupillary reflexes and control of eye movements
    - Auditory and vestibular neurophysiology
    - Gustatory neurophysiology
    - Function of the cerebellum and its pathways

- Neuroscience of movement disorders
- Physiological basis of electroencephalography
- Neuroplasticity

7. GENETICS

- Mitochondrial diseases
- Trinucleotide repeat diseases

8. MOLECULAR AND CELLULAR BIOLOGY

- Amyloid diseases
- Inborn errors of metabolism
- Toxic and metabolic mechanisms of delirium, stupor and coma

9. BEHAVIOR AND PSYCHOLOGY

- Delirium
- Somatoform disorders
- Neuropsychology of learning and memory
- Neuropsychology of language

PART B. REQUIRED COURSE FORM

Course title:	Scientific Principles of Medicine Unit 8: Renal System
Sponsoring department or unit:	Medical Education
Name of course director:	Stephen Sandroni, MD/Amy Trott, PhD/Herb Janssen, PhD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	Number of Teaching Staff Involved
Department of Medical Education	13
Department of Internal Medicine	5
Department of Emergency Medicine	1

COURSE OBJECTIVES

Are there written objectives for the course? (check)

Yes	✓	No	

Briefly summarize the objectives/content areas covered in the course.

In prior years the renal and endocrine systems were joined in a single unit of the Scientific Principles of Medicine course. However, as described elsewhere in this database, a general review of the timing, sequence, and organization of the organ system units resulted in the decision to "uncouple" the renal and endocrine systems and make these systems independent units within the overall course. However, the content and the clinical presentations that had previously been included in the joined unit remain largely unchanged.

The 6-week renal unit focuses on fluids, electrolytes, homeostatic mechanisms, and the role of the kidney in the process of regulation. The clinical presentations associated with this unit include the following:

1. Abnormalities of renal function
2. Disorders of serum sodium
3. Intrinsic renal disease
4. Abnormalities of hydrogen ion concentration
5. Renal failure: acute injury
6. Renal failure: chronic renal disease

This unit and the endocrine unit which follows are presented as model homeostatic systems with an emphasis of content related to biochemistry and physiology. Gross and microscopic anatomy is integrated with gross and microscopic anatomic pathology and is also correlated with radiographic anatomy. Microbiological, immunological and pharmacological content are also addressed. The sequence of clinical presentations has been structured so that the concepts developed during the study of

one topic provide a foundation for the subsequent topic. As with the other courses in the SPM sequence, basic information is provided for each clinical presentation including a brief definition, a statement of its clinical significance, and a list of the potential causes for the presentation. “Process worksheets” and “worked case examples” are employed by the small groups as in previous SPM units. The major clinical emphasis is on adult conditions, but pediatric renal conditions are also presented.

A list of basic science topics that are covered in this unit can be found in the attached Topic Appendix at the end of this course description.

Preparation for Teaching

A majority of the instruction in this unit is delivered by faculty members in the department of medical education who participated in the development and planning of the unit. Consequently, they are well aware of the goals and objectives of the unit and how their individual material relates to that presented by other faculty members. Faculty members from the clinical departments who participate in the unit as clinical presentation “scheme presenters” and as facilitators in “Worked Case Example” (WCE) small group sessions are briefed by the unit director(s) regarding the goals and objectives of the session(s) in which they will participate. The unit directors review and give scheme presenters feedback on their particular presentations. WCE facilitators are provided with session materials (power points case material, “process work sheets) and are briefed on the goals and objectives of the given session. Whenever possible, new small group facilitators observe more experienced facilitators to learn about the WCE process.

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents		X
Graduate Students		X
Postdoctoral Fellows		X

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

Not applicable.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

This unit of instruction is offered at a single site on the campus of the Paul L. Foster School of Medicine.

Course title:	Scientific Principles of Medicine: Unit 8 Renal

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Year:			
Score:			

Not applicable.

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

X	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination	X	Other (describe) Small group facilitator assessment

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Students participate in a 25-30 item formative assessment each week of this unit covering material presented in the preceding week. Typically these items are multiple choice questions written in the USMLE vignette format and they are drawn from the item pool that is being developed for each of the Scientific Principles of Medicine units. The formative assessment is delivered electronically in a secure environment and students receive immediate feedback on how many items they answered correctly. They also are able to review each of the items with annotations prepared by the item author explaining the correct (keyed) response. Scores are loaded into the students' e-portfolios for information purposes only. Scores on the formative quizzes are not used for final unit grading purposes. The goal of the formative assessment is to give students a sense of how they are performing and to identify early areas in which they may need to devote additional time or seek additional help from faculty. To facilitate this process, students are provided a list of learning objectives associated with items they missed on the formative assessment.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	X	**No**	

Small group facilitators for weekly Worked Case Example sessions are asked to complete an assessment form on each student in the group. This form includes space for narrative comments. These assessment forms are posted in each student's e-portfolio.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

The unit is taught as an interdisciplinary component of the Scientific Principles of Medicine course drawing faculty from different departments in the Paul L Foster School of Medicine. The basic science faulty and many of the clinical faculty teaching in the course are members of the Medical Education Department. Other clinical faculty members from the Department of Internal Medicine assist in the clinical integration. A course coordinator and assessment coordinator for year 2 courses/units provides logistical assistance and assistance with the day-to-day management of the delivery of the unit. In addition IT and Audiovisual staff are available to assist course directors and faculty. There is ample teaching space available for the course, including a sufficient number of small group classrooms, lecture space, laboratories, clinical simulation laboratories, and gross anatomy dissection space. Computers, computer software, library resources, and the personnel needed to support computer-based and library-based instruction are adequate to meet the teaching needs.

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students complete anonymous on-line evaluations at the end of each unit. Results below are based on a 5-point scale with 1 representing "Strongly disagree" and 5 indicating "Strongly Agree."

Unit 8 Evaluation Data	2010-2011 Renal/ Endocrine	*2011-2012 Renal
This unit was well organized.	3.5	3.6
The learning objectives were clearly identified.	3.9	4.0
The unit met the identified learning objectives.	3.9	4.0
The order of clinical presentations made sense to me.	3.5	3.7
The Basic Science material was well integrated.	3.5	3.7
The amount of material presented was reasonable.	3.7	4.2
I knew what I was supposed to be learning and why.	4.0	3.9
The methods used to evaluate my performance were fair	3.9	3.7
The Clinical presentation "schemes" contributed to my learning.	3.9	3.7
The Process Worksheets contributed to my learning.	3.7	3.5
The lectures helped me learn the material.	4.1	3.6
The Work Case Examples helped me learn the material.	3.9	4.0
The Anatomy labs helped me learn the material.	2.7	3.5
Overall, I've learned useful knowledge and/or skills during this unit.	4.3	4.2
N	24	57
Class size at date	37	58
Response Rate	65%	98%

*Please note: In 2011-12, the renal and endocrine components of the curriculum were divided into two units rather than being integrated into one. The content for each discipline remained the same.

Identify major successes in the course and problems to be overcome.

Successes:
Student performance on renal questions on the USMLE Step 1 was among the two best areas in our curriculum. Informal feedback from clinical clerkship faculty has indicated that our third year students are performing as well as residents in areas of acid-base and electrolyte abnormalities.

Challenges:
Optimal delivery of our core physiology and pathology remains a challenge. Student evaluations favor passive delivery modes over more active engagement on their part, but their performance has not suffered from more active modes. Our informal survey of student knowledge of renal pathology, done a few months after the course ended, suggested that students were not yet able to use their knowledge in a successful analytic way. Apparently their own additional study later in the year helped them to reach a higher level of learning. Our experience mirrors that of other schools we are in contact with via a renal teaching listserve that we subscribe to. We lean toward reduced formal lecturing with increased use of problem-solving sessions supervised by faculty. Specifically we are looking to accumulate additional teaching cases that are more complex than our Worked-Case Examples, and use these as a springboard for sessions requiring higher level problem solving on the part of the students.

Topic Appendix: Renal Unit

1. ANATOMY / HISTOLOGY / EMBRYOLOGY

- Evolution of the nephron from marine life to terrestrial mammals
- Urinary system
- Visual anatomy
- Radiological anatomy
- Embryological development of the urogenital system
- Histology of kidneys and urinary tract

2. BIOCHEMISTRY

- Renal metabolism
- Hormonal regulation of salt and water balance

3. GENETICS

- Renal disease of genetic origin

4. MICROBIOLOGY/IMMUNOLOGY

- Urinary tract infections
- Sexually transmitted diseases
- Bacteriology, virology, and parasitology
- Transplantation, tumor immunity and immunotherapy

5. NUTRITION

- Nutrients and kidney function
- Nutritional and metabolic consequences of chronic renal failure
- Dietary management of chronic renal disease
- Sodium, diet and hypertension

6. PATHOLOGY

- Kidney
- Lower urinary tract

7. PHARMACOLOGY

- Autonomic pharmacology and the urogenital tract
- Drug pharmacokinetics and renal effectors
    - Nonsteroidal anti-inflammatory agents
    - Adrenocortical steroids – renal effects
    - Agents that affect calcium and phosphate homeostasis
    - Diuretics and renal function
    - Cancer chemotherapy
    - Penicillins and cephalosporins

- Aminoglycosides
- Tetracyclines, azithromycin and erythromicin
- Sulfonamides, trimethoprim and quinolones
- Urinary antiseptics
- Anti-schistosomal drugs

- Gout and purine metabolism
- Immunosuppressive agents

8. PHYSIOLOGY

- Renal structural-functional relationships, glomerular filtration and renal blood flow.
- Solute and water transport along the nephron, including mechanisms of secretion and absorption
- Urine concentration and dilution
- Regulation of acid base balance

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PART B. REQUIRED COURSE FORM

Course title:	Scientific Principles of Medicine Unit 9: Endocrine
Sponsoring department or unit:	Department of Medical Education Department of Internal Medicine
Name of course director:	Stephen Sandroni, MD/Curt Pfarr, PhD/Amy Trott, PhD /Elmus Beale, PhD/Tamis Bright, MD

List all organizational units (e.g., physiology department, nursing school, library), including the lead department, with ongoing involvement in the course and the number of instructional staff from each such unit:

Organizational Unit	**Number of Teaching Staff Involved**
Medical Education	15
Internal Medicine	9
Family Medicine	2
Biomedical Sciences	1

COURSE OBJECTIVES

Are there written objectives for the course? (check)

Yes	✓	**No**	

Briefly summarize the objectives/content areas covered in the course.

This six week unit of Scientific Principles of Medicine addresses glucose, lipids, intermediary metabolism of these entities, and diseases processes associated with their abnormalities in the context of the following clinical presentations:

1. Hypertension
2. Hypothalamus/Pituitary Axis
3. Disorders of thyroid function
4. Diabetes and obesity

The sequence of these clinical presentations has been structured so that the concepts developed during the study of one topic provide a foundation for the subsequent topic. As with the other courses in the SPM sequence, basic information is provided for each clinical presentation including a brief definition, a statement of its clinical significance, and a list of the potential causes for the presentation. “Process worksheets” and “worked case examples” are employed by the small groups as in previous SPM units.

Basic information is provided for each clinical presentation, including a brief definition and a statement of its clinical significance. A list of the potential causes for the presentation is addressed along with a schematic representation of the relationships of those causal entities. This list of causes and the associated schematic representation provides the basis for discussion of basic science principles including underlying anatomic, biochemical, and patho-physiological concepts. Management concerns including appropriate

pharmacology are discussed. A list of basic science topics covered in this unit can be found in the attached Topic Appendix.

Preparation for Teaching

A majority of the instruction in this unit is delivered by faculty members in the department of medical education who participated in the development and planning of the unit. Consequently, they are well aware of the goals and objectives of the unit and how their individual material relates to that presented by other faculty members. Faculty members from the clinical departments who participate in the unit as clinical presentation "scheme presenters" and as facilitators in "Worked Case Example" (WCE) small group sessions are briefed by the unit director(s) regarding the goals and objectives of the session(s) in which they will participate. The unit directors review and give scheme presenters feedback on their particular presentations. WCE facilitators are provided with session materials (power points case material, "process work sheets) and are briefed on the goals and objectives of the given session. Whenever possible, new small group facilitators observe more experienced facilitators to learn about the WCE process.

Are any of the following involved in the course as lecturers, small group facilitators, and/or laboratory instructors?

	Yes	**No**
Residents*		✓
Graduate Students		✓
Postdoctoral Fellows		✓

If yes, describe how they are informed about the course objectives and prepared for their teaching role.

*On occasions a resident may accompany a faculty member to observe and participate in WCE sessions. The faculty member, however, is responsible for conducting the session and evaluating student participation.

If the entire course is taught at more than one site (e.g., at geographically separated instructional sites), describe how instructional staff at all sites are oriented to the course objectives and the grading system.

Instruction in this course takes place at one site only, the campus of PLFSOM.

REQUIRED COURSE FORM (Continued)

Course title:	Scientific Principles of Medicine: Endocrine Unit

Student Evaluation

If NBME subject (shelf) examinations are used, give the mean scores for the last three classes:

Not applicable.

Year:			
Score:			

Check all the formats that are used in examinations or other evaluations that students must take in order to pass the course:

✓	Multiple-choice, true/false, matching questions		Laboratory practical items
	Fill-in, short answer questions		Problem-solving written exercises
	Essay questions or papers		Presentations
	Oral exams		Preceptor ratings
	OSCE or standardized patient examination	✓	Other (describe) Small group assessment

Briefly describe any formative assessment activities that occur during the course (practice examinations, quizzes, etc.)

Students participate in a 25-30 item formative assessment each week of this unit covering material presented in the preceding week. Typically these items are multiple choice questions written in the USMLE vignette format and they are drawn from the item pool that is being developed for each of the Scientific Principles of Medicine units. The formative assessment is delivered electronically in a secure environment and students receive immediate feedback on how many items they answered correctly. They also are able to review each of the items with annotations prepared by the item author explaining the correct (keyed) response. Scores are loaded into the students' e-portfolios for information purposes only. Scores on the formative quizzes are not used for final unit grading purposes. The goal of the formative assessment is to give students a sense of how they are performing and to identify early areas in which they may need to devote additional time or seek additional help from faculty.

Is a narrative evaluation of student performance submitted in addition to or as a component of the course grade? (check)

Yes	✓	**No**	

Small group tutors complete a brief evaluation of student performance and participation in the Worked Case Examples sessions. Faculty tutors are encouraged to provide brief narrative comments. These narrative comments are reviewed by the senior associate dean for medical education, the associate dean for student affairs and the college masters at the end of the year and a summary narrative is constructed and provided to the student in their e-portfolios. The summary narratives are intended to be provide formative feedback. However, problems with professionalism (e.g., disruptive or disrespectful behavior) that persist, despite feedback, could be referred to the Grading and Promotion committee for action.

COURSE OUTCOMES/EVALUATION

Comment on the adequacy of faculty and other resources to teach the course (e.g., educational space, computer hardware and software, support personnel).

This course, like all of the others in the SPM curriculum is delivered by an interdisciplinary cadre of basic science and clinical faculty. While most of these faculty members are affiliated with the department of medical education, several members of the clinical faculty play an active role as CP lecture presenters and small group tutors or facilitators. The PLFSOM enjoys excellent educational facilities including state-of-the art lecture halls, laboratories, flexible-use teaching space (e.g., for interactive and Team-Based Learning activities), small group rooms, etc. All units within SPM are supported by full time course coordinators and an assessment coordinator for formative and summative assessment. Centralized IT and Audiovisual support is also made available to all courses and units of instruction within SPM.

In general we have sufficient faculty for this unit, but did experience some challenges in finding enough tutors for the small group "Worked Case Example" sessions. It was necessary on a few occasions to combine into larger groups. (See challenges section below.)

Provide a summary of student feedback on the course (and any other available evaluation data) for the past two academic years; include the percent of students providing evaluation data. If the course is new or has been significantly revised, provide evaluation data for the new version of the course only. If problems have been identified by student evaluations or other data, describe how they are being addressed.

Students completed an anonymous on-line evaluation at the end of this unit of the SPM course. We used a 5-point scale with 5 indicating a high level of agreement/satisfaction.

Endocrine Unit Evaluation Results	2010-2011 Renal/ Endocrine	2011-2012 *Endocrine
This unit was well organized.	3.5	3.5
The learning objectives were clearly identified.	3.9	4.1
The unit met the identified learning objectives.	3.9	4.1
The order of clinical presentations made sense to me.	3.5	3.1
The Basic Science material was well integrated.	3.5	3.9
The amount of material presented was reasonable.	3.7	4.1
I knew what I was supposed to be learning and why.	4.0	4.1
The methods used to evaluate my performance were fair.	3.9	4.0
The Clinical presentation "schemes" contributed to my learning.	3.9	4.1
The Process Worksheets contributed to my learning.	3.7	4.2
The lectures helped me learn the material.	4.1	4.1
The Worked Case Examples helped me learn the material.	3.9	4.1
The self-taught modules helped me learn the material.	NA	2.8
The Anatomy labs helped me learn the material.	2.7	NA
Overall, I've learned useful knowledge and/or skills.	4.3	4.2
N	24	58
Class size at date	37	58
Response Rate	65%	100%

*Please note: In the 2011-12 Academic Year Endocrine was treated as a separate unit and evaluated separately.

Identify major successes in the course and problems to be overcome.

Successes:

- Students performed well in this unit and performed well on NBME Comprehensive Basic Science Exam on items linked to the endocrine system.
- Students are generally quite satisfied with this unit.

Challenges:

- Students expressed concern about the order of the clinical presentations. The faculty is considering re-sequencing of presentations to address diabetes and obesity earlier in the unit.
- Students expressed dissatisfaction with the "self-taught" approach to pharmacology. We are recruiting an additional pharmacologist to reduce teaching burden and will schedule more face-to-face contact time next year.
- We do not have enough Endocrinologists on faculty to serve as facilitators of small groups (n=10) with expanding class size. Next year we will expand our invitation to family physicians and general internists. Faculty in these specialties are well prepared to serve as tutors for second year medical students being introduced to common endocrine problems.

Topic Appendix: Renal/Endocrine Unit

1. ANATOMY / HISTOLOGY / EMBRYOLOGY

GROSS

- Neuroendocrinology - hypothalamus/pituitary
- Thyroid and parathyroid
- Adrenal gland

HISTOLOGY

- Pancreatic islets
- Neuroendocrinology & hypothalamus/pituitary
- Thyroid and parathyroid glands
- Adrenal gland
- Amine precursor uptake and decarboxylase (APUD) cells

EMBRYOLOGY

- Pancreatic islets
- Neuroendocrinology - hypothalamus/pituitary
- Thyroid and Parathyroid
- Adrenal gland
- Amine precursor uptake and decarboxylase (APUD) cells
- Pineal gland

2. BIOCHEMISTRY

- Pancreatic islet hormones
  - Glucagon
  - Insulin
  - Somatostatin
  - Pancreatic polypeptide
- Hypothalamus and pituitary
- Thyroid gland and parathyroid
- Adrenal
  - Cortex
  - Adrenal medulla
  - Enterochromafin cells
- Regulation of fuel homeostasis

3. GENETICS

- Genetic disorders of endocrine function

4. MICROBIOLOGY/IMMUNOLOGY

- Immune modulators of pancreatic islets
- Thyroid and immune function

5. NUTRITION

- Diabetes, insulin deficiency and fuel homeostasis
- Fuel metabolism review and overview
- Hormones and nutrient metabolism
- Biological determinants of appetite regulation
- Glucose management and diabetes

6. PATHOLOGY

- Pancreatic islets
- Neuroendocrinology - hypothalamus/pituitary
- Thyroid and parathyroid
- Adrenal
    - Cortex
    - Medulla

7. PHARMACOLOGY

- Pancreatic islet hormones
- Neuroendocrinology and the hypothalamus/pituitary
- Thyroid replacement therapy
- Parathyroid dysfunction and calcium – phosphorus balance
- Adrenal
    - Dysfunction and therapeutics
    - Adrenal cortex and pharmacologic adjuncts
- Growth and development deficits and growth hormone
- Energy production and metabolism as affected by therapeutics

8. PHYSIOLOGY

- Pancreatic islets and modulation of alpha, beta, and delta cells
- Neuroendocrinology - hypothalamus/pituitary
- Thyroid function – iodine, thyroglobulin, T3, T4, rT3, TBG

- Parathyroid modulation of bone homeostasis
- Adrenal modulation of corticosteroids and glucocorticoids
- Growth and development deficits and the role of growth hormone
- Energy production and metabolism in health and disease
- Adaptation to hostile environments
- Composition and volume of extracellular fluid

PART C. REQUIRED CLERKSHIP FORM

[Update, June 30, 2012]

Clerkship title:	Internal Medicine (Internal Medicine-Psychiatry Block)
Sponsoring department or unit:	Internal Medicine
Name of clerkship director:	Rafael Gonzalez-Ayala, MD (Harry Davis, MD to assume role in July 2012)

Internal Medicine and Psychiatry share a 16 week block during which students participate in educational and clinical activities for both disciplines. A number of shared topics have been identified and didactic session address both internal medicine and psychiatric issues (i.e. dementia, delirium, grief and dying, psychosomatic disorders, somatoform disorders, sleep disorders, substance abuse and psychiatric symptoms of medical and neurological illnesses). Internal medicine and psychiatry attendings round together with the students weekly. Of these 16 weeks, about 10 weeks are allotted to internal medicine activities.

Rotations

List the required rotations that are part of the clerkship and the average amount of time spent in each (if there are variations across sites, provide a range).

The Internal Medicine component of this block consists of the following:

- Internal Medicine In-patient ward (8 weeks)
- Ambulatory Clinic (one-half day per week)
- Sub-specialty selective (2 weeks)

Clerkship Objectives

Are there written objectives for the clerkship?

Yes	✓	**No**	

Briefly describe or summarize the objectives for the clerkship. Were they taken from or based on objectives established by national organizations or were they developed internally?

The educational objectives of this clerkship were developed internally by members of the Department of Internal Medicine and with input from an interdisciplinary year 3-4 curriculum design team consisting of additional faculty from the Department of Medical Education, Department of Psychiatry, and the Office of Curriculum, Evaluation, and Accreditation. The objectives of the Internal Medicine component of the Internal Medicine/Psychiatry block are consistent with the learning goals and objectives developed by the Clerkship Directors in Internal Medicine (CDIM) to serve as guide for the development of clerkship experiences in internal medicine.

The 31 institutional learning objectives of the Paul L. Foster School of Medicine, which have been mapped on to the ACGME competency domains, served as a framework for organizing the objectives of

the internal medicine component of the block. The alpha-numeric code associated with the goals and objectives below refer to the institutional learning objectives described in Section II, ED-1, 1-A of the database. Specific learning objectives are included in the syllabus which is available for inspection on-site.

MEDICAL KNOWLEDGE

The student will evaluate at least 1 patient from a list of 32 clinical presentations or diagnosis from the following organ systems or general areas (MK 3-4). Please see Section II ED-2 for a listing of required conditions.

- Cardiovascular
- Respiratory
- Renal/Genitourinary
- Infectious diseases
- Gastrointestinal
- Endocrine
- Hematology/Oncology
- Rheumatology
- Neurology
- General (e.g., fever, rash, substance abuse)

PATIENT CARE

The student will:

1. Demonstrate the ability to perform and accurately record a complete history and physical examination on hospitalized and ambulatory patients and develop diagnosis and management skills. (PC 1, 2, 6)
2. Demonstrate efficient use of diagnostic testing, including the understanding of basic procedures commonly performed on the internal medicine wards, and displays the ability to provide information needed by the patient to provide informed consent for such procedures. (PC 5)
3. Maintain adequate written records on the progress of illnesses of each assigned patient and communicate effectively, both orally and in writing, with patients and their families. (PC3-4, ICS-2)

INTERPERSONAL AND COMMUNICATION SKILLS

During the course of this clerkship the student will:

1. Demonstrate the ability to communicate effectively with both colleagues and patients, including discussing with the patient (and family as appropriate) ongoing health care needs, using appropriate language, and avoiding jargon and medical terminology. (ICS 1, 3)
2. Appropriately utilizes interpreters and communicates effectively with patients and families who speak another language, maintaining professional and appropriate personal interaction. (ICS 3)

PROFESSIONALISM/ETHICS

Throughout this clerkship, the student will:

1. Demonstrates sensitivity and compassion to the diverse factors affecting patients and their health care beliefs and needs, including age, gender, sexual orientation, religion, culture, income and ethnicity. (PROF 2, 3, 5, 7)
2. Show respect for each patient's unique needs and background and how these factors affect the patient's concerns, values and health care decisions. (PROF 2)
3. Display demeanor, speech, and appearance consistent with professional and community standards.
4. Demonstrate dedication to the highest ethical standards governing physician-patient relationships, including privacy, confidentiality, and the fiduciary role of the physician and health care systems. (PROF 4, 6, 8, 9)

PRACTICE BASED LEARNING AND IMPROVEMENT

The student will:

1. Demonstrate the ability to utilize varied methods of self-directed learning and information technology to acquire information in the basic and clinical sciences needed for patient care. (PBL 2, 3, 5)
2. Demonstrates continuous efforts to improve clinical knowledge and skills through effective use of available learning resources and self-directed learning. (PBL 7)
3. Accurately assesses the limits of his or her medical knowledge in relation to patients' problems, accepts feedback from the faculty, and applies feedback to improve clinical practice. (PBL 4)

SYSTEM BASED PRACTICE

The student will:

1. Develop knowledge and understanding of the organization of health care delivery system and the professional, legal, and ethical expectations of physicians. (SBL 2)
2. Understand and utilize ancillary health services and sub-specialty consultants properly. (SBL 2)

Describe the process used to define the kinds of patients, clinical conditions, or procedural skills and the clinical settings for such experiences that are needed to meet clerkship objectives. At what point during the clerkship are individual students' clinical experiences reviewed to assure that learning objectives are being met, and who conducts that review?

The patient conditions and procedural skills expected of students are based on the learning objectives and competencies described above. These are consistent with national guidelines for clerkship experiences in internal medicine and they also reflect nearly 40 years of institutional experience providing clerkship experiences as a regional campus of TTUHSC Lubbock School of Medicine before the accreditation of the Paul L. Foster School of Medicine as an independent medical school.

The clerkship director is ultimately responsible for ensuring that student clinical experiences are appropriate for meeting clerkship objectives. Students record their patient encounters and the procedures they perform in an on-line electronic patient encounter log (OP-Log). The clerkship director reviews individual students' clinical experiences mid-way through the rotation. Every effort is made to provide students with "real patient" experiences. If this is not possible, alternatives in the form of computerized cases, high fidelity simulation, and/or standardized patient encounters will be employed. Based on student Op-log entries, a decision will be made within 7-10 days of the end of the clerkship about whether it will be necessary to assign an alternative method for meeting specific clinical expectations.

Who is responsible for ensuring that each student's clinical experiences are appropriate to meet the objectives of the clerkship? Describe the actions that would be taken if a student were not making satisfactory progress in meeting clerkship expectations for clinical experiences.

Preparation for Teaching

Attending faculty and residents (see below) will be oriented to the experience by the Clerkship Director and provided copies of the syllabus and evaluation forms that they will use to assess student performance.

If resident physicians teach in the clerkship or otherwise supervise medical students, how are they informed about the clerkship objectives and prepared for their teaching role?

In addition to the required Residents as Teacher program conducted by the Office of Graduate Medical Education, the Clerkship Director meets with residents who are supervising and evaluating students to review the goals, objectives, and organization of the clerkship and also to review the student assessment form that the residents are expected to complete on each of their students. Residents also have access to the clerkship syllabus.

How are faculty members across instructional sites oriented to the clerkship objectives and the evaluation system?

Currently, most students are assigned to either University Medical Center, our major affiliate, but two students per rotation are assigned to the internal medicine service at William Beaumont Army Medical Center at Fort Bliss in El Paso. The clerkship director meets with the faculty at each of these sites to review the goals and objectives of the clerkship and to review the assessment methods that all must employ in evaluating student performance.

REQUIRED CLERKSHIP FORM (Continued)

Clerkship title:	Internal Medicine

Methods for Evaluating Clerk Performance

Describe the methods used in the clerkship to evaluate students' core clinical skills. How does the school ensure that such evaluation occurs for all students?

The following methods are used to assess student knowledge, skills, attitudes, and behaviors:

- NBME Internal Medicine exam
- Student clinical assessment form, which includes a professionalism component, which is completed by faculty and residents supervising the student (see Section II Appendix x).
- Observed history and physical evaluation form
- Evaluation of 15 patient write-ups
- Review of on-line patient encounter log
- Evidence-Based Medicine Search
- End of block OSCE
- End of year 3 comprehensive OSCE

The Clerkship Director is responsible for ensuring that each of these assessment measures has been completed. All must be completed to record a student grade.

List all contributors to the final clinical evaluation of the clerk (e.g., full-time faculty, volunteer attending physicians, resident physicians, others).

Faculty (salaried and volunteer) and residents who have sufficient contact with students to render a judgment on their performance are asked to complete the clinical assessment instrument. This information is reviewed by the clerkship director who then completes the final evaluation that is the basis for assigning a grade for the clerkship.

If NBME subject (shelf) examinations are used, give mean scores for the last three years.

PLFSOM is implementing its clerkship curriculum for the first time in the current academic year. National data is presented as a means of comparing PLFSOM students with a national benchmark.

Year	2011-12	National Average
Score	76.2	75.5

Is a narrative evaluation of student performance submitted in addition to or as a component of the clerkship grade?

Yes	✓	No	

Narrative comments are required on the end of unit assessment evaluation report on each student.

Clerkship Outcomes/Evaluation

Comment on the adequacy of faculty (full-time, part-time, and volunteer), patients, and other resources for this clerkship.

The faculty oversee student activities in three settings:

1. University Medical Center of El Paso by full-time Texas Tech University/Department of Internal Medicine faculty
2.William Beaumont Army Medical Center by full-time Texas Tech University/Paul L. Foster non-salaried (volunteer) faculty
3. Texas Tech Internal Medicine Outpatient Clinic by full-time Texas Tech University/Department of Internal Medicine faculty.

The number of faculty who contribute to teaching students during the clerkship is adequate at this point, but will be challenged by an increasing number of medical students in the coming academic years as we eventually expand to 100 per year. Additional faculty members are being recruited and the institution is developing new and expanded affiliations with private hospitals to meet this need. Feedback is gathered from medical students whether individual faculty members have been successful teachers and role models on the wards. These data is reviewed by the Clerkship Director, communicated to the Department Chairman. The patients are adequate in volume and scope necessary to meet the requirements of the clerkship.

Provide a summary of student feedback on the clerkship (and any other evaluation data) for the past two academic years; include the percent of students providing evaluation data. Note any recent changes in the clerkship. If problems have been identified by student evaluations or other data, describe how these are being addressed.

At the end of each Block students are asked to complete on-line, anonymous evaluations on each of the clerkships in the block. (Please see results below.)

Internal Medicine Class of 2013 AY2011-2012 (Response rate = 95%)				
Offering Block	1	2	3	Overall
This block was well organized.	55%	75%	92%	75%
The learning objectives were clearly identified.	64%	67%	85%	72%
The block met the identified learning objectives	64%	67%	75%	69%
The amount of material presented during the block was reasonable.	91%	75%	54%	72%
Shared learning experiences between the two disciplines in this block contributed to my understanding of clinical medicine.	36%	75%	38%	50%
Individual Clerkship				
The methods used to evaluate my performance during this clerkship provided fair measures of my effort and learning.	45%	50%	38%	44%
In this clerkship, duty hour policies were adhered to strictly.	55%	67%	46%	56%
I had appropriate exposure to ambulatory patients.	82%	67%	62%	69%
I had enough patient management opportunities.	73%	83%	100%	86%
I received sufficient supervision during my clinical interactions.	100%	67%	77%	81%
I received sufficient feedback on my performance.	82%	75%	65%	74%
The clinical presentation schemes helped me organize my approach to patient care.	36%	58%	54%	50%
The clerkship provided appropriate preparation for the shelf exam.	36%	67%	69%	58%
I was observed delivering patient care.	100%	75%	100%	92%
Overall, I learned useful knowledge and/or skills during this clerkship.	100%	83%	92%	92%

Identify major successes in the clerkship and challenges to be overcome.

Successes:

- Students provided with a wide variety of patient/clinical experiences.
- Students performing well on NBME Shelf-exam and on faculty assessments of clinical skills.
- Shared learning experiences with psychiatry (e.g., joint rounds, psychiatric conditions presenting as medical illnesses, substance abuse, etc.) are exposing students to the relevance of each discipline for patient care. We will build on this and expand integrated learning experiences in the future.

Challenges:

- Expanding class size and fourth year sub-I and MICU rotations will increase the number of learners per ward team. However, patient volume is sufficient to ensure that students will have the patient contacts needed to meet clerkship goals and objectives. We will explore scheduling modifications to maximize students' patient care experiences if necessary. We are also negotiating additional affiliations in the community for future growth and expansion.
- The "clinical schemes" from years 1-2 have not been consistently employed in teaching and learning. To promote better vertical integration, beginning with block 3, we have been requiring

students to demonstrate the application of appropriate schemes on required H and P write-ups/presentations.

- We will continue to work on improving the frequency and educational value of joint learning experiences between internal medicine and psychiatry. There are many opportunities for demonstrating the mutual relevance of each discipline.

PART C. REQUIRED CLERKSHIP FORM

Clerkship title:	Psychiatry (Internal Medicine and Psychiatry Block)
Sponsoring department or unit:	Psychiatry
Name of clerkship director:	Dan Blunk, MD

Psychiatry and Internal Medicine share a 16 week block during which students participate in educational and clinical activities for both disciplines. A number of shared topics have been identified and didactic session address both internal medicine and psychiatric issues (e.g., dementia, delirium, grief and dying, psychosomatic disorders, somatoform disorders, sleep disorders, substance abuse and psychiatric symptoms of medical and neurological illnesses). Internal medicine and psychiatry attendings round together with the students frequently. Of these 16 weeks, about 6 weeks are allotted to the psychiatry clerkship activities. In addition to these 6 weeks in psychiatry, students are assigned to a longitudinal selective experience one-half day per week for 15 weeks.

Rotations

List the required rotations that are part of the clerkship and the average amount of time spent in each (if there are variations across sites, provide a range).

The Psychiatry component of this block consists of the following:

- In-patient Psychiatry = 2 weeks
- Out-patient Psychiatry = 4 weeks

In addition to these rotations, students will participate in a 15, half-day per week selective experience. Possible selective experiences include:

- Consultation-liaison psychiatry (medical/surgical, pediatrics, or emergency department)
- Sleep medicine
- Child-Adolescent Clinic
- Psychotherapy
- Clinical research
- Child Guidance Center
- Psychiatric Emergency Service
- Psychiatry Walk-In Clinic at Alternatives Behavioral Health
- Neurology Clinic

Clerkship Objectives

Are there written objectives for the clerkship?

Yes	✓	No	

Briefly describe or summarize the objectives for the clerkship. Were they taken from or based on objectives established by national organizations or were they developed internally?

The goals and objectives of this clerkship were developed internally but are consistent with those adopted by the Association of Directors of Medical Student Education in Psychiatry. The goals and objectives of this clerkship are also influenced by institutional expectation that students will be given the opportunity to revisit the Clinical Presentations (CPs) that were addressed during the first two years of the curriculum, with a greater emphasis on evidenced-based treatment. Further, faculty members in psychiatry and internal medicine have identified a number of "shared" topics for integrative teaching and learning. The psychiatric seminars that will have participation of both faculty members from Psychiatry and Internal Medicine include the following topics: conditions which mimic physical disease; somatoform disorder cases; delirium, amnesic and other cognitive disorders; dementia; grief and dying; psychiatric presentation of neurological disease; psychiatric presentation of medical disease; and psychosomatics. The Internal Medicine seminars in which psychiatrists also participate include infectious disease (HIV), endocrine (diabetes and thyroid diseases), rheumatology (connective tissue diseases), geriatrics, and gastroenterology lectures.

Clerkship goals are organized by ACGME competency domains (alpha-numeric code refers to Paul L. Foster School of Medicine institutional learning objectives listed in Section II ED-1, 1-A):

MEDICAL KNOWLEDGE

Objectives (MK-1-4, PC 1, 2, PBL 1-6):

1. The student should recognize common psychiatric disorders seen in a variety of settings, ranging from the chronically, mentally ill to ambulatory patients. The conditions the student will be asked to evaluate and help manage include the following:
    a. Schizophrenia and other psychotic disorders
    b. Anxiety Disorders
    c. Cognitive Disorders
    d. Depressive Disorders
    e. Mania/Hypomania
    f. Personality Disorders
2. The student will have exposure to emergency psychiatry and will be asked to participate in risk assessments. The student should have knowledge about the following:
    a. Suicidal/homicidal patient
    b. Crisis intervention
    c. Treatment methods in emergency situations
3. The student should be able to recognize common psychiatric disorders seen in children and adolescent patients, including conditions not previously listed such as pervasive developmental disorders and disruptive behavior disorders.

4. The student will work to become proficient in doing a complete psychiatric evaluation, mental status exam, biopsychosocial formulations, and laboratory methods used in psychiatry.
5. The student will work to become proficient in developing a treatment plan, including appropriate suggestions for pharmacotherapy and/or psychotherapies.
6. The student will also have exposure to forensic psychiatry and psychiatric syndromes associated with medical illnesses.

PATIENT CARE

Objectives:

1. The student will work to become proficient in doing a complete psychiatric evaluation, including a present and past psychiatric history, developmental history, family history, educational history, sociocultural history, substance abuse history, medical history, and a mental status exam. (PC- 1, 3-6; ICS- 2)
2. Based on a complete psychiatric evaluation, the student needs to develop and document a DSM multiaxial diagnosis, an evaluation plan for appropriate laboratory and medical examination, and a treatment plan derived from the biopsychosocial formulation. (PC- 1, 5)
3. The student will need to assess and document the patient's potential for self-harm, harm to others, and appropriate interventions. (PC- 2)

INTERPERSONAL AND COMMUNICATION SKILLS

Objectives:

1. The student will strive to develop the interpersonal skills which will facilitate an effective therapeutic relationship with culturally diverse patients, and their families. (ICS-1)
2. The student will be expected to work on interpersonal skills that reflect an underlying attitude of respect for others, the desire to gain understanding of another's position and reasoning, a belief in the intrinsic worth of all human beings, the wish to build collaboration, and the desire to share information in a consultative, rather than a dogmatic, fashion. (ICS-1)
3. The student will be expected to work on their ability to (ICS-1-3):
    - Listen to and understand patients and their families
    - Communicate effectively with patients and their families, using verbal, nonverbal, and writing skills as appropriate.
    - Foster a therapeutic alliance with their patients, as indicated by the patient's feelings of trust, openness, rapport, and comfort in the relationship with the student.
    - Transmit information to patients and families in a clear meaningful manner.
    - Educate patients and their families about medical, psychological and behavioral issues.
    - Appropriately utilize interpreters and communicate effectively with patients and families who speak another language.

- Communicate effectively and respectfully with physicians and other health professionals in order to share knowledge and discuss management of patients.

PROFESSIONALISM/ETHICS

Objectives:

1. The student will demonstrate respect, compassion and integrity (Prof-3, 7).
   - A responsiveness to the needs of patients and society that supersedes self-interest (Prof-2, 9).
   - Accountability to patients, society, and the profession (Prof-2, 4, 6).
   - A commitment to excellence and ongoing professional development (PBL-3, 5, 7).
2. The student will demonstrate a commitment to ethical principles pertaining to the provision or withholding of clinical care (Prof-1).
   - The student will attend a discussion seminar on the ethics in psychiatry.
   - The importance of confidentiality of patient information and informed consent shall be stressed to the student.
3. It is expected that the student will develop a sensitivity and responsiveness to the patient's culture, age, gender and disabilities (Prof-3, 7, 8).

PRACTICE-BASED LEARNING AND IMPROVEMENT

Objectives:

1. The student will be expected to develop a well-rounded knowledge of the delineated psychiatric disorders and the various treatment modalities.

2. The student should be exposed to an environment that will promote the student's ability to recognize and accept limitations in one's knowledge base and clinical skills (PBL-4).

3. The student will be exposed to an environment which will stress the development of a mindset that will allow the student to accept the absolute need for lifelong learning (PBL-3, 7).

4. The students will maintain a log of the cases they have seen so the clerkship director can be certain the student is getting the necessary exposure to a variety of psychiatric conditions. This is essential to develop the necessary clinical skills and knowledge base in psychiatry. The student will also have appropriate supervision while developing their caseload.

5. The students will be expected to review and critically assess the scientific literature in order to promote a higher quality of care (PBL-2, 5).

SYSTEMS-BASED PRACTICE

The students of Paul L. Foster School of Medicine have the unique opportunity to observe and learn different systems interacting to provide for the care of patients. The students, in a combined block with Internal Medicine and Psychiatry, will have models of this interaction throughout their learning experience in their third year. The students will also be exposed to how healthcare professionals, (psychiatrists, psychologists, social workers, licensed professional counselors and nurses) interact in psychiatry to provide for the optimal treatment of a patient (SB-1, 2).

Objectives:

1. Internal Medicine and Psychiatry will have one half day designated for didactic sessions. Many of these will be shared topics to both specialties. (i.e. dementia, delirium, grief and dying, psychosomatic disorders, somatoform disorders, sleep disorders, and psychiatric symptoms of medical and neurological illnesses). This will allow the students to see the interaction of these two specialties.

2. Efforts will be made to have the students exposed to a wide variety of systems that treat psychiatric patients. This will be inpatient experience for the chronically mentally ill, day hospital and ambulatory clinics for less severely ill patients. This will allow for discussion of the level of care that has proven effectiveness but may be more cost effective. Hopefully, through this exposure, the student can appreciate the impact of managed care.

3. Part of the requirement in our day hospital setting and inpatient hospital experience is to have students participate in the treatment team of their supervising psychiatric physician. This will allow the student to better understand how various mental health professionals interact to meet the emotional needs of a patient.

4. Part of the students' experience will also be participation in groups or individual therapy sessions with other mental health professionals besides psychiatrists. This will help the student understand how the exposure of the various mental health professions dovetails to meet the needs of a psychiatric patient.

5. El Paso offers a unique experience to understand how the various systems have been developed to meet the needs of diverse cultures. Most of the hospital/day hospital programs available in El Paso are bicultural and have access to bilingual mental health professionals. This unique experience will allow our students to fully appreciate culturally diverse systems and how they meet the needs of our culturally diverse population.

Describe the process used to define the kinds of patients, clinical conditions, or procedural skills and the clinical settings for such experiences that are needed to meet clerkship objectives. At what point during the clerkship are individual students' clinical experiences reviewed to assure that learning objectives are being met, and who conducts that review?

The educational committee of the Department of Psychiatry at Texas Tech University – Paul L. Foster School of Medicine has set the kinds of patients, clinical conditions and the clinical settings for the experiences to meet the clerkship objectives. The Education Committee is composed of the chairman of the department of psychiatry, the clerkship director, the associate chair for clinic operations, the assistant clerkship director, and the clerkship coordinator. This committee meets frequently. In addition, the clerkship directors of psychiatry and internal medicine with their clerkship coordinators meet on a bimonthly basis to coordinate activities within the IM/Psych block. Prior to the creation of the Paul L. Foster School of Medicine, TTUHSC-El Paso was a regional clinical campus of the School of Medicine in Lubbock for nearly 40 years. Consequently, the institution and its faculty have considerable experience in the design and delivery of clerkship education for medical students. The types of patients, clinical conditions, and settings of care are consistent with the goals and objectives of the clerkship, and with the integrated learning goals of the block which psychiatry and medicine share. Finally, the selection of patient types is also influenced by the institutional goal of revisiting the diagnostic clinical presentation schemes employed in the first two years of the curriculum. These clinical presentations are listed along with the psychiatric diagnoses students are expected to encounter in Section II ED-2.

Students record their patient encounters in the on-line electronic patient encounter log system (OP-log). The clerkship director reviews each student's Op-log entries at the mid-way point and end of the rotation. Every effort is made to provide students with "real patient" experiences. If this is not possible, the

clerkship director will assign appropriate case from Case Files in Psychiatry. Thus far it has not been necessary to employ alternative methods for meeting clerkship clinical goals and objectives.

Who is responsible for ensuring that each student's clinical experiences are appropriate to meet the objectives of the clerkship? Describe the actions that would be taken if a student were not making satisfactory progress in meeting clerkship expectations for clinical experiences.

The clerkship director is responsible to make certain that each student's clinical experiences are appropriate to meet the objectives of the clerkship. Before the midterm evaluation, the clerkship director will review the evaluations for each student and discuss these with the student. This will allow plenty of time to correct any deficiencies in the patient log, knowledge base, clinical skills, professionalism, etc. If there are any deficiencies identified a corrective action plan will be presented to the student. The clerkship director will then continue to monitor the student's progress to see if effective changes have been implemented.

Preparation for Teaching

Attending faculty and residents (see below) are oriented to the experience by the clerkship director and provided copies of the syllabus and evaluation forms that they will use to assess student performance.

If resident physicians teach in the clerkship or otherwise supervise medical students, how are they informed about the clerkship objectives and prepared for their teaching role?

Residents are required to participate in a "Residents as Teachers" program that is administered by the Office of Graduate Medical Education. In addition to this each of the residents are given a copy of *A Handbook for Medical Teachers*. The clerkship director also discusses the curriculum and the clinical assessment forms at the annual resident's retreat.

How are faculty members across instructional sites oriented to the clerkship objectives and the evaluation system?

Faculty members receive a copy of the syllabus with the goals and objectives for the clerkship and the institution (as documented in Section II ED-2 of the database). Clerkship related issues can be raised at the bi-monthly meeting of department faculty. The clerkship director orients volunteer faculty members who provide students with longitudinal experiences in the community. He is also in frequent contact with these faculty members throughout the Block.

REQUIRED CLERKSHIP FORM (Continued)

Clerkship title:	Psychiatry

Methods for Evaluating Clerk Performance

Describe the methods used in the clerkship to evaluate students' core clinical skills. How does the school ensure that such evaluation occurs for all students?

The following methods are used to assess students' knowledge, skills, and attitudes:

- NBME Psychiatry examination
- Student Clerkship Assessment form (including professionalism component) completed by faculty and residents.
- End of block OSCE
- Students also complete several formative quizzes developed by the clerkship director to help them assess their mastery of concepts in psychiatry. The quizzes do not factor into the final grade of the student. It is designed to assist the students' understanding of the reading assignments and to have exposure to how questions are formulated over various topics. It does help the clerkship director to assess the students' progress in expanding their knowledge base. If there are problems in this regard, this is discussed with the student at their mid-rotation evaluation.
- End of Year 3 comprehensive OSCE.

List all contributors to the final clinical evaluation of the clerk (e.g., full-time faculty, volunteer attending physicians, resident physicians, others).

Supervising faculty (paid and volunteer) and residents complete assessment forms on the students with whom they have sufficient contact. The clerkship director is responsible for assembling the ratings from faculty and residents and formulating the final performance grade.

If NBME subject (shelf) examinations are used, give mean scores for the last three years.

PLFSOM is implementing its clerkships for the first time in the 2011-12 AY. Only one year's data is available. National averages are provided as a benchmark.

Year	2011-12	National Average
Score	80.8	78.7

Is a narrative evaluation of student performance submitted in addition to or as a component of the clerkship grade?

Yes	✓	**No**	

Narratives are required components of the student assessment system.

Clerkship Outcomes/Evaluation

Comment on the adequacy of faculty (full-time, part-time, and volunteer), patients, and other resources for this clerkship.

We are well staffed to meet the needs of the students from Paul L. Foster School of Medicine. The Department of Psychiatry is currently composed of six full-time faculty, a full-time psychologist, two part-time faculty, three full-time clinical faculty that are employed by the El Paso Psychiatric Center, eight volunteer clinical faculty that work in the private sector, and 12-14 resident physicians. For students interested in neurology, a longitudinal selective is available with two full time neurologists at TTUHSC-PLFSOM and one volunteer clinical neurologist in the private sector. The Center of Excellence in Neurosciences has four full time faculty and one half time faculty to help students who are interested in research in the neurosciences. The chairman is currently recruiting another child-adolescent psychiatrist and psychologist. El Paso also has an abundance of psychiatric patients and facilities to treat these patients.

Provide a summary of student feedback on the clerkship (and any other evaluation data) for the past two academic years; include the percent of students providing evaluation data. Note any recent changes in the clerkship. If problems have been identified by student evaluations or other data, describe how these are being addressed.

At the end of each block, students complete an anonymous on-line evaluation of the two clerkships they participated in during that block.

Psychiatry

Class of 2013 AY2011-2012 (Response rate = 95%)

Offering Block	1	2	3	Overall
This block was well organized.	55%	75%	92%	75%
The learning objectives were clearly identified.	64%	67%	85%	72%
The block met the identified learning objectives	64%	67%	75%	69%
The amount of material presented during the block was reasonable.	91%	75%	54%	72%
Shared learning experiences between the two disciplines in this block contributed to my understanding of clinical medicine.	36%	75%	38%	50%
Individual Clerkship				
The methods used to evaluate my performance during this clerkship provided fair measures of my effort and learning.	100%	92%	100%	97%
In this clerkship, duty hour policies were adhered to strictly.	100%	92%	100%	97%
I had appropriate exposure to ambulatory patients.	91%	100%	100%	97%
I had enough patient management opportunities.	82%	100%	100%	94%
I received sufficient supervision during my clinical interactions.	90%	100%	100%	97%
I received sufficient feedback on my performance.	100%	100%	100%	100%
The clinical presentation schemes helped me organize my approach to patient care.	73%	75%	85%	78%
The clerkship provided appropriate preparation for the shelf exam.	90%	92%	100%	94%
I was observed delivering patient care.	90%	92%	100%	94%
Overall, I learned useful knowledge and/or skills during this clerkship.	100%	100%	100%	100%

Identify major successes in the clerkship and challenges to be overcome

Successes:

- We have achieved a high level of integration of psychiatric topics and internal medicine topics in this "shared" block.
- The Psychiatry clerkship contributes to the vertical integration of the curriculum through its continuing utilization of the clinical presentation "schemes" that served as a major pedagogical tool in the first two years of the educational program.
- Students uniformly give this clerkship very high marks for the quality of the learning experience and the effectiveness of the clerkship director.
- Student performance on the NBME psychiatry shelf examination is very good.
- Consistent with integration of the IM/Psych block, each student has been exposed to this interface through participation in the consultation liaison (C-L) service. The director of the C-L service has been tremendous assets in having the students better understand this interface. His evaluations by the students have been outstanding and his longitudinal selectives have always been the first selected.
- Having students develop study notes over various topics from their mandatory reading assignments has allowed the students to be more involved with the psychiatry clerkship and function as teachers for their classmates. This involvement has contributed to better scores on the NBME.
- The use of questions from the Psychiatric Residents In Training Exams (PRITE) has allowed the students to better understand psychiatric disorders and treatment. This has also had an impact on improved NBME scores in psychiatry.
- An associate Chair for Clinical Service has been recruited to actively expand the outpatient clinic to better provide quality experiences for our students.

Challenges:

- As the number of students increases each year at PLFSOM, it will be more challenging to find sufficient longitudinal selectives for our students. The Department of Psychiatry continues to actively recruit additional faculty. Another possible solution to meet this need would be to have the longitudinal selectives be every other week until sufficient faculty have been recruited.
- Finding adequate time for students to do their assigned psychiatry reading while rotating in the inpatient IM services in our shared block system. This is being addressed with the IM clerkship director and we are actively working to find a solution.
- We were disappointed that students did not rate the opportunities for shared learning between internal medicine and psychiatry more highly. One of our goals for the next academic year is to improve this component of the clerkship. The clerkship directors are meeting to identify opportunities for joint learning experiences that will enhance both internal medicine and psychiatry.

PART C. REQUIRED CLERKSHIP FORM [Updated 6-30-12]

Clerkship title:	Obstetrics and Gynecology (OB-GYN and Pediatrics Block)
Sponsoring department or unit:	Obstetrics and Gynecology
Name of clerkship director:	Heidi Lyn, MD

Rotations

OB-GYN is taught together with Pediatrics in a combined 16 week block. The OB-GYN portion adds up to 8 weeks. Some topics that will be addressed during the OB-GYN/Pediatrics blocks have been identified as "shared topics" (e.g., adolescent OB-GYN, STDs, prematurity) and will be covered through integrative lectures, workshops, seminars, case conferences, or shared rounds with all students in the block regardless of student's specific rotation assignment in the block.

List the required rotations that are part of the clerkship and the average amount of time spent in each (if there are variations across sites, provide a range).

- Labor and Delivery (2 weeks)
- Comprehensive OB Service (1 week)
- Out-patient OB-GYN (1week)
- Gynecologic Oncology Service (1 week)
- Breast clinic (1 week)
- Benign Gynecology service (2 weeks)

Clerkship Objectives

Are there written objectives for the clerkship?

Yes	✓	**No**	

Briefly describe or summarize the objectives for the clerkship. Were they taken from or based on objectives established by national organizations or were they developed internally?

The objectives for this clerkship were developed internally based the objectives enumerated in the clerkship guide prepared by the Association of Professors of Gynecology and Obstetrics. Clerkship objectives also reflect institutional expectations to revisit and review relevant clinical presentations (CPs) addressed during the first two years of the curriculum as part of the Scientific Principles of Medicine and Medical Skills courses. The CPs associated with OB-GYN are listed in the OB-GYN section of ED-2 in Section II of the database.

The following objectives, organized by ACGME Competency domains are addressed in this clerkship (the codes following the entries below corresponds with the institutional learning objectives of the Paul L. Foster School of Medicine as recorded in Section II ED1, 1-A of the 2012 database.).

MEDICAL KNOWLEDGE

By the end of this clerkship experience students will be able to:

- Provide evidence based, age appropriate preventive and health maintenance care (MK-3)
- Recognize the signs, symptoms, and physical findings associated with commonly occurring conditions (MK-1, 2, 4; PC-4, 6, PBL-1, 6).

PATIENT CARE

By the end of this clerkship experience, students will demonstrate the ability to:

- Obtain a competent clinical data base on obstetrical and gynecological patients, and perform a competent pelvic exam in the gravid and non-gravid patient.(PC-4)
- Develop knowledge and proficiency in the provision of ambulatory care to the uncomplicated pregnant patient, and manage common conditions and complications associated with pregnancy.(PC-6)
- Develop competency at the level of the MS III in the management of uncomplicated labor and delivery, and recognition of the indications for operative obstetrical intervention.(PC-2)
- Develop appreciation for the proficient management of high risk pregnancies and for the management of complications of labor and delivery. (PC-1)
- Develop proficiency at the level of the MS III in the management of ambulatory gynecological patient presentations. (PC-3)
- Perform or assist in the performance of Pap smears, wet prep and KOH preps, pelvic exams, deliveries and ultrasounds.(PC-3)
- Utilize diagnostic testing and imaging resources effectively and efficiently. (PC-5)

INTERPERSONAL AND COMMUNCATON SKILLS

Throughout this clerkship students will demonstrate the ability to:

- Communicate effectively with patients and their families. (ICS-1)
- Appropriately utilize interpreters if necessary to communicate with patients with limited English language proficiency. (ICS-1, 2, PROF-7)
- Communicate effectively and respectfully with physicians, and other health professionals in order to share knowledge and discuss management of patients. (ICS-1,3)
- Maintain professional and appropriate personal interaction with patients. (PROF-3.5)
- Use effective listening, verbal and writing skill to communicate with patients and member of the health care team. (ICS-1,2,3)

PROFESSIONALISM/ ETHICS

Throughout this clerkship, students will demonstrate a commitment to:

- Being sensitive to patient and family concerns (PROF-3, 5, 7).
- Maintaining confidentiality and respecting patient privacy (PROF1, 8).
- Managing personal biases in caring for patients of diverse populations and different backgrounds and recognizing how biases may affect care and decision-making (PROF1, 2, 4, 5, 7).

- Meeting professional obligations and the timely completion of assignments and responsibilities (PROF -6).
- Advocate for patient needs (PROF-9).

PRACTICE BASED LEARNING AND IMPROVEMENT

During this clerkship experience, the student will:

- Demonstrate the use electronic technology (e.g., PDA, PC, internet) for accessing and evaluating Evidenced-Based medical information (e-medicine, journals AAFP, NEJM, American Journal of Obstetrics and Gynecology, etc) (PBL-5).
- Accept feedback from the faculty and incorporate this to improve clinical practice (PBL-4).

SYSTEM BASED PRACTICE

During this clerkship experience, the student will demonstrate the ability to:

- Utilize ancillary health services and specialty consultants properly (SBP-2).

Describe the process used to define the kinds of patients, clinical conditions, or procedural skills and the clinical settings for such experiences that are needed to meet clerkship objectives. At what point during the clerkship are individual students' clinical experiences reviewed to assure that learning objectives are being met, and who conducts that review?

The patient conditions and procedural skills expected of students are based on the learning objectives and competencies described above. These are consistent with national guidelines for a clerkship experience in OB-GYN and also reflect more than 30 years of institutional experience providing clerkship education as a regional campus of TTUHSC Lubbock School of Medicine prior to our independent accreditation as a 4-year medical school.

Students record their patient encounters and the procedures they perform in the on-line electronic patient encounter log (Op-log). The clerkship coordinator reviews Op-log entries weekly. If there is a deficiency, based on the experiences a student should have given the specific rotation the student is on, she notifies the clerkship director who then intervenes by modifying the student assignment or by selecting an appropriate alternative. Every effort is made to provide students with "real patient" experiences. If this is not possible, alternatives in the form of directed readings, computerized cases, high fidelity simulation, and/or standardized patient encounters is employed

Who is responsible for ensuring that each student's clinical experiences are appropriate to meet the objectives of the clerkship? Describe the actions that would be taken if a student were not making satisfactory progress in meeting clerkship expectations for clinical experiences.

The clerkship director is responsible for reviewing student progress and performance in achieving required clerkship objectives. The clerkship director reviews each student's OP-Log patient encounter entries and all available evaluations on completion of the first month of the OB-GYN portion of the clerkship block. If a student is not meeting clinical expectations, the clerkship director will modify the student's schedule or arrange an alternative method of meeting an objective as discussed above.

Departmental faculty and residents report to the clerkship director on the student's progress throughout the rotation. If deficiencies are noted, the clerkship director is responsible for addressing those issues with the student immediately. The clerkship director outlines the steps necessary for achieving satisfactory

student progress. The clerkship director conducts a formal mid-rotation evaluation to assess the progress of each student.

Preparation for Teaching

Attending faculty are updated monthly on clerkship status. Faculty input is solicited. Each attending is responsible for one formal didactic session. Materials for preparation are provided to them.

If resident physicians teach in the clerkship or otherwise supervise medical students, how are they informed about the clerkship objectives and prepared for their teaching role?

Residents are required to participate in a "Residents as Teachers" program administered by the Office of Graduate Medical Education. In addition, the clerkship director also meets with residents who will be supervising students to review the goals, objectives, and assessment criteria of the clerkship. Residents will have access to the syllabus.

How are faculty members across instructional sites oriented to the clerkship objectives and the evaluation system?

At present all instruction and clinical activity related to this experience occurs at one site, University Medical Center of El Paso.

REQUIRED CLERKSHIP FORM (Continued)

Clerkship title:	Obstetrics and Gynecology

Methods for Evaluating Clerk Performance

Describe the methods used in the clerkship to evaluate students' core clinical skills. How does the school ensure that such evaluation occurs for all students?

Immediate verbal feedback is given. Written evaluations are collected weekly. In addition, the students are tested on suturing and performance of a pelvic exam. They are given immediate verbal feedback and written evaluation. The clerkship director reviews student activity and OP-log to determine adequacy of exposure. Clerkship director also oversees collection of clinical evaluation.
(Note: if OP-log criteria are not met: the student may be assigned simulation or reading to cover the deficit. Some experiences (such as vaginal delivery) cannot be simulated, and the student's schedule is adjusted to provide this experience.)

List all contributors to the final clinical evaluation of the clerk (e.g., full-time faculty, volunteer attending physicians, resident physicians, others).

Faculty members and residents who have sufficient contact with students to observe and assess their performance are asked to complete clinical assessments using forms designed by the school and department. The clerkship director reviews this information and provides the final summative assessment and assigns the final grade.

If NBME subject (shelf) examinations are used, give mean scores for the last three years.

As a new medical school this information is available for only the 2011-12 AY. National data provided by the USMLE is included below to provide a national benchmark for comparison.

Year	2011-12	National Average
Score	74.9	74.4

Is a narrative evaluation of student performance submitted in addition to or as a component of the clerkship grade?

Yes	✓	**No**	

All students are provided with narrative comments as part of the clerkship grade.

Clerkship Outcomes/Evaluation

Comment on the adequacy of faculty (full-time, part-time, and volunteer), patients, and other resources for this clerkship.

Patient volume is more than adequate to provide students with the clinical experiences necessary to gain an appreciation of the scope of practice of OB-GYN and familiarity with commonly encountered health conditions affecting women. The number of faculty is sufficient and the department is currently recruiting additional faculty that will expand the pool of available teachers.

Provide a summary of student feedback on the clerkship (and any other evaluation data) for the past two academic years; include the percent of students providing evaluation data. Note any recent changes in the clerkship. If problems have been identified by student evaluations or other data, describe how these are being addressed.

At the end of each block, students complete anonymous on-line evaluations of their experience for each of the clerkships sharing the block.

Obstetrics & Gynecology Class of 2013 AY2011-2012 (Response rate= 95%)				
Shared Block	1	2	3	Overall
This block was well organized.	64%	64%	55%	61%
The learning objectives were clearly identified.	64%	45%	64%	58%
The block met the identified learning objectives	64%	73%	70%	69%
The amount of material presented during the block was reasonable.	73%	55%	91%	73%
Shared learning experiences between the two disciplines in this block contributed to my understanding of clinical medicine.	36%	27%	55%	39%
Individual Clerkship				
The methods used to evaluate my performance during this clerkship provided fair measures of my effort and learning.	55%	45%	90%	**63%**
In this clerkship, duty hour policies were adhered to strictly.	73%	55%	91%	**73%**
I had appropriate exposure to ambulatory patients.	100%	82%	100%	**94%**
I had enough patient management opportunities.	91%	64%	100%	**85%**
I received sufficient supervision during my clinical interactions.	100%	82%	90%	**91%**
I received sufficient feedback on my performance.	55%	41%	91%	**62%**
The clinical presentation schemes helped me organize my approach to patient care.	45%	36%	82%	**55%**
The clerkship provided appropriate preparation for the shelf exam.	82%	73%	82%	**79%**
I was observed delivering patient care.	100%	100%	100%	**100%**
Overall, I learned useful knowledge and/or skills during this clerkship.	100%	82%	100%	**94%**

Identify major successes in the clerkship and challenges to be overcome.

Successes:

- Students exposed to a diversity of clinical skills.
- Faculty teaching and didactics are well-received.

Challenges:

- Locating suitable patients for the longitudinal patient experience has been a challenge. The clerkship director is enlisting other members of the faculty to help locate patients suitable for this experience.
- Students do not always recognize when faculty are providing them feedback. As part of the orientation to the clerkship for faculty and residents, the clerkship director is devoting more attention to feedback skills. She is also encouraging faculty and residents to preface their

feedback with an explicit statement to the effect: “I would like to give you some feedback on…” It is encouraging that over 90% of the students in Block 3 agreed that they had received sufficient feedback. We will continue to monitor and encourage faculty and residents to provide transparent feedback.

- Residents and some faculty are not familiar with the clinical presentation schemes used in years 1-2. The clerkship director will highlight the role of the schemes in clerkship education and assist faculty and residents in incorporating appropriate schemes in didactic presentations and in a series of pelvic examination simulation exercises.
- The “shared” learning experiences were not particularly well received. The clerkship directors in OB-GYN and Pediatrics have proposed enhancements in this integrated clerkship block to highlight areas within each discipline that compliments the other. These enhancements have been approved by the CEPC and will be implemented in the 2012-13 academic year.

PART C. REQUIRED CLERKSHIP FORM

Clerkship title:	PEDIATRICS (OB-GYN-PEDIATRICS Block)
Sponsoring department or unit:	Department of Pediatrics
Name of clerkship director:	Marie Logvinoff, MD/Lynn Hernan, MD

PEDIATRICS is taught together with Obstetrics and Gynecology in a combined 16 week block. Each discipline has the equivalent of 8 weeks of student contact time. Some topics that are addressed during the OB-GYN/PEDIATRICS blocks have been identified as "shared topics" (e.g., adolescent OB-GYN, STDs, prematurity) and are covered through integrative lectures, workshops, seminars, case conferences, or shared rounds with all students in the block regardless of student's specific rotation assignment in the block.

Rotations

List the required rotations that are part of the clerkship and the average amount of time spent in each (if there are variations across sites, provide a range).

The pediatrics component of the integrated Pediatrics/OB-GYN rotation occurs in the following settings:

- Newborn and intermediate care nursery (1 week)
- Ambulatory Pediatrics (4 weeks-- 2 weeks general pediatrics, 2 weeks subspecialty pediatrics)
- In-patient service (2 weeks-- 1 week on days, 1 week on nights)
- Individualized Learning Program (1 week)

Clerkship Objectives

Are there written objectives for the clerkship?

Yes	✓	**No**	

Briefly describe or summarize the objectives for the clerkship. Were they taken from or based on objectives established by national organizations or were they developed internally?

The objectives for the PEDIATRICS clerkship component of the OB-GYN/PEDIATRICS Block are based on the APA/COMSEP (Council on Medical Student Education in Pediatrics) General Pediatric Clerkship Curriculum. These objectives are organized by ACGME competency domains and also reflect the Institutional Learning Objectives documented in Section II ED-1-A of this database. The following objectives have been developed for the PEDIATRICS clerkship. These objectives are linked to the PLFSOM Institutional Learning Objectives (see codes associated with each set of objectives).

MEDICAL KNOWLEDGE

Objectives: Recognize the signs, symptoms, physical findings of common pediatric problems including the following (PLFSOM Institutional Learning Objectives: MK-1, 2, 3, 4):

- Health Supervision
- Growth

- Development
- Behavior
- Nutrition
- Prevention
- Issue unique to adolescence
- Issue unique to newborn
- Medical genetics and dysmorphology
- Common acute pediatric illness/common pediatric complaints
- Common chronic illness and disability
- Therapeutics
- Fluids and electrolytes management
- Pediatric emergencies
- Child Abuse

PATIENT CARE

By the completion of this clerkship experience, students will be able to:

- Determine which patients can be managed in a general inpatient setting and which require higher levels of care and expertise in a critical care unit (PC-2).
- Demonstrate skills at the MS III level in evaluating, diagnosing, managing, and determining the appropriate disposition of pediatric patients (PC-1, PBL-1, 6)
- Develop differential diagnoses, planning diagnostic studies, formulate and implement therapeutic options and plans for discharge of patients under the student's care (PC-6).
- Utilize appropriate consultants/subspecialists. (PBL 3, 4)
- Utilize diagnostic testing and imaging resources effectively and efficiently (PC-5).

INTERPERSONAL AND COMMUNCATON SKILLS

Students will demonstrate the ability to:

- Communicate effectively with families and patients (ICS-1).
- Interview adolescent patients in an effective manner (ICS-1, PROF-7).
- Appropriately utilize interpreters, if necessary, to communicate with non-English speaking patients (ICS-1).
- Communicate effectively and respectfully with physicians and other health professionals in order to share knowledge and discuss management of patients (ICS-3)
- Maintain professional and appropriate personal interaction with patients (ICS-1, 3).
- Use effective listening, verbal and writing skill to communicate with patients, families, and member of the health care team (ICS-1, 2).

PROFESSIONALISM/ ETHICS

During this clerkship, students will demonstrate:

- Sensitivity to patient and family concerns (PROF-3, 5, 7).
- Tolerance for parent and patient differences in culture, beliefs, attitudes, and lifestyle (PROF -7)
- The ability to manage personal biases in caring for patients of diverse populations and different backgrounds and to recognize how these biases may affect care and decision-making (PROF- 3, PBL-7).
- Respect for patient privacy and confidentiality (PROF -1, 5).
- Commitment to following through with professional obligations and the timely completion of assigned tasks and duties (PROF -6).
- Commitment to treat faculty, residents, staff, and fellow students with respect and courtesy (PROF-5).
- Advocate for patient needs (PROF -9).
- Demonstrate professionalism by dressing appropriately, being punctual for rounds, completing assigned tasks on time and showing respect for all members of health care team.

PRACTICE BASED LEARNING AND IMPROVEMENT

During this clerkship experience, the student will:

- Demonstrate the use of electronic technology (e.g., PDA, PC, internet) for accessing and evaluating evidenced-based medical information (e-medicine, journals AAP, NEJM, PEDIATRICS, etc) (PBL-3, 5).
- Know how to access recommended guidelines for “best practice” in each area of Pediatrics.
- Accept feedback from the faculty and incorporate this to improve his or her clinical practice (PBL-4).

SYSTEM BASED PRACTICE

During this clerkship experience, the student will demonstrate the ability to:

- Utilize ancillary health services and specialty consultants properly (SBL-2).
- Understand medical expenses coverage including Medicaid, Chipp, private insurance or no coverage and recognize the implications of type of coverage in the management of children. (SBL-2)
- Identify barriers to effective care and initiate QI process. (SBL-2)

Describe the process used to define the kinds of patients, clinical conditions, or procedural skills and the clinical settings for such experiences that are needed to meet clerkship objectives. At what point during the clerkship are individual students’ clinical experiences reviewed to assure that learning objectives are being met, and who conducts that review?

The patient conditions and procedural skills expected of students are based on the learning objectives and competencies described above. The clerkship uses the template of the Council on Medical Student Education in Pediatrics (COMSEP) clinical encounter table to identify the types of patients and core conditions students should see and to determine the clinical settings (ambulatory, inpatient or acute care) that are most appropriate for encountering patients with these conditions.

Students record their patient encounters and the procedures they perform in an on-line electronic patient encounter log (OP-log). The faculty and the senior resident, on a daily basis are aware of the specific patient assigned to the student and are making a conscious effort to direct additional patients to the students based on the requirements of the clerkship. The clerkship director reviews individual students' clinical experiences at the mid-way point and end of the rotation to discuss the rotation experience. If a student is not meeting clinical objectives, the clerkship director will take appropriate steps to assure satisfactory completion. This may involve discussions with the faculty and residents supervising the student, making adjustments to the schedule, or assigning the student an alternative means of meeting the objectives (e.g., Computer-Assisted Learning in Pediatrics Program cases—see <www.clippcasses.org>).

Who is responsible for ensuring that each student's clinical experiences are appropriate to meet the objectives of the clerkship? Describe the actions that would be taken if a student were not making satisfactory progress in meeting clerkship expectations for clinical experiences.

The clerkship director is ultimately responsible for ensuring that each student's clinical experiences are appropriate to meet clerkship objectives. Each morning the faculty or senior resident reviews the patients and makes assignments based on the types of patients encountered in previous days to maximize student exposure and to maximize the opportunity to meet clinical expectations. Virtual (on line) or simulated patients can be used at the end of rotation if necessary to meet unmet objectives. The decision to use an alternative is made in the final 7-10 days of the rotation.

Preparation for Teaching

Attending faculty and residents (see below) are oriented to the experience by the clerkship director and provided copies of the syllabus and evaluation forms that they will use to assess student performance.

If resident physicians teach in the clerkship or otherwise supervise medical students, how are they informed about the clerkship objectives and prepared for their teaching role?

Residents are required to participate in a "Residents as Teachers" program that is administered by the Office of Graduate Medical Education. In addition, the clerkship director meets with residents who have teaching responsibilities to review goals, objectives, expectations, and methods and criteria for assessing student performance. Residents also have access to the syllabus for the block and the clerkship. Well defined expectations/ guidelines are communicated to the teaching resident in each area of Pediatrics (nursery, clinic, wards). All students evaluate the teaching resident at the completion of a two week block.

How are faculty members across instructional sites oriented to the clerkship objectives and the evaluation system?

At present all instruction and clinical activity related to this experience occurs at two sites, El Paso Children's Hospital and the Texas Tech Health Sciences Center – Outpatient Clinic.

REQUIRED CLERKSHIP FORM (Continued)

Clerkship title:	Pediatrics

Methods for Evaluating Clerk Performance

Describe the methods used in the clerkship to evaluate students' core clinical skills. How does the school ensure that such evaluation occurs for all students?

CLINICAL EVALUATIONS

On-going written evaluations (clinical performance and professionalism) of each student are solicited from all faculty and residents who have had sufficient contact with the student at least once every 2 – 3 weeks. Standard evaluation forms developed by Paul L Foster School of Medicine are used. The scores from these evaluations are reviewed and summarized by the Clerkship Director.

DIRECT OBSERVATION

To determine competency in history taking and physical examinations, each student is directly observed doing a newborn examination (while in the nursery rotation) and a history and physical examination of an older child (either on the inpatient or outpatient rotations).

MEDICAL RECORDS

On all clinical services, students are expected to write appropriate notes. Obviously, the specific content of the notes will be dictated by the specific service. In general, they should be legibly written, and adequately reflect findings (historical, physical, laboratory, etc.), assessment, and plan. These will be reviewed by faculty and/or residents. The quality of a student's written records will be considered in the clinical evaluations. With implementation of EMR within a year, students will be able to access their patient's data; however their EMR notes will have to be cosigned by faculty or senior resident.

ADMISSION HISTORIES AND PHYSICAL EXAMINATIONS

On inpatient services, Histories and Physicals are expected to be thorough, complete and follow the recommended outline/format for Pediatrics. During the clerkship, each student submits written copies of two admission notes (one from the inpatient service and one from the nursery service) for formal evaluation and feedback.

CASE PRESENTATIONS

The ability to present cases is key to clinical education. Students must be able to present in a variety of situations- attending rounds, inpatient and outpatient services, nursery, case conferences, etc.
During the clerkship, each student is required to present and discuss a case at case conference.

DEPARTMENTAL EXAMINATIONS

Students will be given two (2) in-house examinations during the rotation. They cover information from required readings, lectures, and self-learning materials.

OSCE

Students are required to participate in and pass an OSCE at the end of the block.

NATIONAL BOARD OF MEDICAL EXAMINATION (NBME)

At the end of the rotation every student will take the NBME shelf exam in pediatrics. A minimum percentile score by the quarter in which the exam is taken is required for successful completion of the clerkship. Failure of the NBME will require remediation and reexamination.

List all contributors to the final clinical evaluation of the clerk (e.g., full-time faculty, volunteer attending physicians, resident physicians, others).

Faculty pediatricians and residents in pediatrics who have sufficient contact with students to assess their performance are asked to complete the clerkship assessment form. This information is reviewed by course directors who then complete a final summative assessment and assign the student grade for the clerkship.

If NBME subject (shelf) examinations are used, give mean scores for the last three years.

The clerkships curriculum for the PLFSOM was implemented for the first time in the 2011-12 AY. Consequently we only have shelf-exam results for the current year. National averages provided by the NBME are included to serve as a national benchmark.

Year	2011-12	National Average
Score	77.2	76.9

Is a narrative evaluation of student performance submitted in addition to or as a component of the clerkship grade?

Yes	✓	**No**	

Narrative comments are required components of the student assessment system at PLFSOM.

Clerkship Outcomes/Evaluation

Comment on the adequacy of faculty (full-time, part-time, and volunteer), patients, and other resources for this clerkship.

In February 2012, a new, state-of-the-art Children's Hospital of El Paso opened its doors adjacent to the medical school and University Medical Center. A number of new physicians are being recruited into the Department of Pediatrics to meet expanding clinical needs. Increase in faculty numbers will off-set the growth of the student body. Subspecialty faculty will bring new patients into the educational program.

Provide a summary of student feedback on the clerkship (and any other evaluation data) for the past two academic years; include the percent of students providing evaluation data. Note any recent changes in the clerkship. If problems have been identified by student evaluations or other data, describe how these are being addressed.

All students are asked to complete an on-line anonymous evaluation on the clerkships sharing a block. (See results below.)

Pediatrics Class of 2013 AY2011-2012 (Response rate=95%)				
Offering Block	1	2	3	Overall
This block was well organized.	64%	64%	55%	61%
The learning objectives were clearly identified.	64%	45%	64%	58%
The block met the identified learning objectives	64%	73%	70%	69%
The amount of material presented during the block was reasonable.	73%	55%	91%	73%
Shared learning experiences between the two disciplines in this block contributed to my understanding of clinical medicine.	36%	27%	55%	39%
Individual Clerkship				
The methods used to evaluate my performance during this clerkship provided fair measures of my effort and learning.	82%	36%	91%	70%
In this clerkship, duty hour policies were adhered to strictly.	82%	100%	100%	94%
I had appropriate exposure to ambulatory patients.	100%	82%	91%	91%
I had enough patient management opportunities.	91%	82%	90%	88%
I received sufficient supervision during my clinical interactions.	91%	100%	100%	97%
I received sufficient feedback on my performance.	82%	82%	100%	88%
The clinical presentation schemes helped me organize my approach to patient care.	45%	36%	55%	45%
The clerkship provided appropriate preparation for the shelf exam.	45%	40%	82%	56%
I was observed delivering patient care.	100%	91%	100%	97%
Overall, I learned useful knowledge and/or skills during this clerkship.	100%	100%	100%	100%

Identify major successes in the clerkship and challenges to be overcome.

Successes:

Students have been evaluated by experienced faculty who judge their performance to be at the expected level. NBME scores confirm this perception. Significant numbers of students have expressed an interest in a career in pediatrics. We are expanding the curriculum to include the addition of new faculty. The new El Paso Children's Hospital is a state-of-the-art facility that is attracting new faculty from all over the country (and world) and will provide the backdrop for expansion of the teaching and patient base.

Challenges:

- Students are very focused on the standardized test rather than the experience of Pediatrics. We will continue to emphasize the need for and model interaction with Pediatric patients.
- The "shared" learning experiences were not particularly well received. The clerkship directors in OB-GYN and Pediatrics have proposed enhancements in this integrated clerkship block to highlight areas within each discipline that compliments the other. These enhancements have been approved by the CEPC and will be implemented in the 2012-13 academic year.
- Continued increase in size of medical school class will outgrow our sites for clinical experiences. To address this we are taking the following actions:

a. Addition of pediatric hospitalists to the faculty allows for 24 hour/7 days a week coverage of the inpatient service. We are able to accommodate the increased class size for 2012 – 2013 by dividing the El Paso Children's Hospital inpatient service into 2 unique rotations for students – an inpatient day service and inpatient night service. Routine admissions occur during day hours while emergency admissions occur at night. The service provides different pediatric experiences under the supervision of in-house faculty and residents who will provide teaching.
b. Addition of pediatric subspecialists to the faculty will provide increasing numbers and diversity of pediatric patients for both the inpatient and outpatient services. A growing inpatient census will require more teams to care for the patients, and will accommodate more students as the number of teams grows.
c. We are working to establish other outpatient sites as the student body grows. These include the TTUHSC satellite clinics, other clinics, and community pediatricians' offices. This will provide the students with a variety of outpatient experiences.

PART C. REQUIRED CLERKSHIP FORM	
Clerkship title:	Surgery (Surgery-Family Medicine Block)
Sponsoring department or unit:	Surgery
Name of Clerkship director:	Angel M. Morales Gonzalez M.D., F.A.C.S.

[Update, June 30, 2012]

Surgery and Family Medicine share a 16 week block. During this block students participate in both clerkships. While each discipline has developed learning goals and objectives unique to the discipline, opportunities for shared learning experiences have also been developed. Didactic time is shared and a number of sessions have been designed to illustrate the integration of family medicine and surgical perspectives on health, illness and disease. The proportion of time allocated to the surgery clerkship experiences is equal to about 10 weeks time. The surgery component of this block is scheduled to be roughly 70% in-patient and 30% out-patient.

Rotations

List the required rotations that are part of the clerkship and the average amount of time spent in each (if there are variations across sites, provide a range).

The surgical component of the block consists of the following rotations:

- General Surgery (in-patient, operating room, outpatient surgery and clinic) — 6 weeks
- Surgery selective (in-patient, operating room, and outpatient) — 4 weeks
    - Pediatric surgery
    - Anesthesiology
    - Ophthalmology
    - Orthopedic surgery
    - Trauma and critical care surgery
    - Plastic surgery
    - Ear, nose and throat

Clerkship Objectives

Are there written objectives for the clerkship?

Yes	✓	**No**	

Briefly describe or summarize the objectives for the clerkship. Were they taken from or based on objectives established by national organizations or were they developed internally?

The surgery component of the surgery/family medicine block is designed to provide students with educational experiences that will introduce them to a surgical approach to the diagnosis and treatment of diseases. Students participate in the pre-, intra-, and post-operative care of patients. The specific learning objectives of this clerkship are in accordance with the Association of Surgical Educators' recommendations for third year medical students. Further, faculty members in surgery and family

medicine have identified a number of shared topics for integrative teaching and learning (e.g., pre-operative assessment, post-operative care, wound care, pain management, fractures and dislocations, etc.).

Example core learning objectives of the surgical clerkship experience tied to the Accreditation Council on Graduate Medical Education (ACGME) competency domains are provided below. The alpha-numeric code attached to the example learning objectives corresponds to the institutional objectives listed in Section II ED-1-A of the database. Specific sub-specialty learning objectives have been developed for the selective component of the experience. Specific learning objectives are included in the syllabus which will be available for on-site review.

MEDICAL KNOWLEDGE

Objectives:
The student will know the following anatomical considerations at the MS III level:

- The basic anatomy of the abdomen including its viscera and anatomic spaces (MK-1, 2)
- The anatomy of the chest, including the heart and lungs (MS-1, 2)

The student will know, at the MS III level, the diagnostic criteria for commonly occurring disorders within the following categories (please see specific surgery entries for ED-2 in Section II of the database) (MK-2, 3, 4):

- Alimentary tract/abdominal
- Hepatobiliary/Pancreas
- Breast
- Vascular/Cardiac/Thoracic
- Endocrine
- Trauma/Critical Care

PATIENT CARE

By the end of the surgery clerkship, the student will demonstrate the ability to:

- Consistently obtain a reliable history and perform an appropriate physical examination (PC-2, 4, 6, ICS-2)
- Develop a problem list, differential diagnosis, and plan for treatment (PC-6, PBL 1, 6)
- Actively participate in the pre-operative and post-operative management of patients examined and evaluated (PC-1)
- Utilize diagnostic testing and imaging resources effectively and efficiently (PC-5)
- Demonstrate knowledge of surgical scrubbing technique, sterile technique, proper attire, and proper conduct in the operating room
- List steps in the placement of a tube thoracostomy
- Demonstrate the correct handling of tissues, techniques of wound closure, and the selection of suture materials appropriate for each clinical situation
- Correctly use common surgical instruments
- Demonstrate the ability to evaluate and provide appropriate care of trauma patients (PC-2)

INTERPERSONAL AND COMMUNCATON SKILLS

Throughout this clerkship, students will demonstrate the ability to:

- Communicate effectively with patients and their families (ICS-1,3)
- Appropriately utilize interpreters, if necessary, to communicate with patients with limited English language proficiency (ICS-1)
- Communicate effectively and respectfully with physicians and other health professionals in order to share knowledge and discuss management of patients (ICS-3)
- Record history and physical examination findings in a well organized manner and in an accepted format (ICS-2)

PROFESSIONALISM / ETHICS

Throughout this clerkship, students will demonstrate a commitment to:

- Being sensitive to patient and family concerns (Prof-3)
- Maintaining confidentiality and respecting patient privacy (Prof-1, 5)
- Managing personal biases in caring for patients of diverse populations and different backgrounds and recognizing how biases may affect care and decision making (Prof-3, 7)
- Advocate for patient needs (Prof-9)
- Meeting professional obligations and the timely completion of assignments and responsibilities

PRACTICE BASED LEARNING AND IMPROVEMENT

During this clerkship experience, the student will:

- Demonstrate the use of technology (e.g. portable electronic devices) for accessing and evaluating evidence based medical information (PBL-5)
- Demonstrate search skills using PICO questions and acquire results applicable to the provision of clinical surgical care (PBL-2, 3)
- Accept feedback from the faculty and incorporate this to improve clinical practice (PBL-4,7)

SYSTEM BASED PRACTICE

During this clerkship experience, the student will demonstrate the ability to:

- Recognize the role that each ancillary service (e.g. physical therapy, speech pathology, case managers, nurse coordinators) plays in the treatment of surgical illnesses (SBP-1)
- Identify the components of the in-hospital and outpatient care network (e.g. inpatient admission, observation admission, long term care facility, rehabilitation facility, home health facility) and the role each plays in the discharge process and the health care system (SBP-2)
- Recognize and understand different funding sources for patient care and how the presence or lack of these affects individual and community health (SBP-2)

Describe the process used to define the kinds of patients, clinical conditions, or procedural skills and the clinical settings for such experiences that are needed to meet clerkship objectives. At what point during the clerkship are individual students' clinical experiences reviewed to assure that learning objectives are being met, and who conducts that review?

The patient conditions and procedural skills expected of students are based on the learning objectives and competencies described above. These are consistent with national guidelines for clerkship experiences in surgery and also reflect nearly 40 years of institutional experience providing clerkship experiences as a regional campus of the TTUHSC Lubbock School of Medicine before 2011.

Students record their patient encounters and the procedures they perform in *Op-log*, an on-line patient encounter log. Individual students' clinical experiences are reviewed by the clerkship director during the mid-clerkship evaluation and feedback session to ensure that students have had the clinical experiences needed to meet clerkship objectives. Every effort is made to provide students with real patient experiences. If this is not possible, alternatives in the form of computerized cases, high fidelity simulation, standardized patient encounters or selected readings will be employed.

Who is responsible for ensuring that each student's clinical experiences are appropriate to meet the objectives of the clerkship? Describe the actions that would be taken if a student were not making satisfactory progress in meeting clerkship expectations for clinical experiences.

As noted above, the clerkship director is responsible for ensuring that student clinical experiences are appropriate for meeting clerkship objectives. At the mid-clerkship evaluation and feedback session the clerkship director will identify conditions that have not been seen, remind the student and/or attending faculty about the need for students to be exposed to required conditions, and identify appropriate alternative methods for meeting the requirement if actual patient encounters have not occurred by a week or so prior to the end of the clerkship.

Preparation for Teaching

Attending faculty and residents are oriented to the experience by the Clerkship director and provided access to the syllabus and evaluation forms that they will use to assess student performance. In addition to this, faculty members meet twice a year to discuss clerkship related issues. During these meetings, an update on the status of the clerkship is provided in both oral and written form. The written version of the clerkship update is circulated electronically to Faculty that could not attend the meeting. A departmental sign in sheet is used to ensure that all faculty members have read and are familiar with the latest clerkship update. The last Faculty meeting was held on April 30th, 2012. Minutes from these meetings are also kept by the Clerkship coordinator. A detailed faculty update was distributed on June 4, 2012.

If resident physicians teach in the clerkship or otherwise supervise medical students, how are they informed about the clerkship objectives and prepared for their teaching role?

All residents are required to participate in a "Residents as Teachers" program administered by the Office of Graduate Medical Education. The Clerkship director orients the residents once every year to their roles and responsibilities with particular emphasis on goals, objectives, and assessment methods and criteria. A resident orientation was held on May 10th, 2012. In addition, each resident is provided a copy of the clerkship syllabus, evaluation forms, and the latest written clerkship update distributed to faculty members. A departmental sign in sheet is used to verify and document that residents have read and are familiar with the latest clerkship update.

How are faculty members across instructional sites oriented to the clerkship objectives and the evaluation system?

At present all instruction and clinical activity related to this experience occurs at one site, University Medical Center of El Paso.

REQUIRED CLERKSHIP FORM (Continued)

Clerkship title:	Surgery

Methods for Evaluating Clerk Performance

Describe the methods used in the clerkship to evaluate students' core clinical skills. How does the school ensure that such evaluation occurs for all students?

1. Direct person-to-person evaluation by faculty and residents. There is a formative evaluation by the clerkship director at the mid-clerkship evaluation and feedback session and a summative evaluation at the end of the clerkship. These are both online.
2. There is an end-of-clerkship observed skills clinical exam (OSCE) to evaluate students' clinical patient evaluation skills. Students must pass this exam and are required to remediate if they do not.
3. Residents and faculty are asked to complete a clinical assessment form evaluating student performance.
4. Students take the National Board of Medical Examiners' surgery test to evaluate their medical knowledge. This is a summative exam.
5. End of year 3 OSCE

The clerkship director is responsible for ensuring that these assessments are completed on each student. The clerkship director is also responsible for reviewing all data on student performance and completing a final assessment and assigning the final grade. Based on Op-log entries, the clerkship director makes a decision during the last 7-10 days of the clerkship about assigning an alternative method for meeting clerkship clinical encounter expectations that had not been accomplished through direct patient care.

List all contributors to the final clinical evaluation of the clerk (e.g., full-time faculty, volunteer attending physicians, resident physicians, others).

Full time and part-time faculty members as well as resident physicians PGY-2 and above complete the clinical assessment forms that are used by the clerkship director to determine the final summative assessment and determine the final grade.

If NBME subject (shelf) examinations are used, give mean scores for the last three years.

This year marks the first year of the implementation of the PLFSOM clerkship curriculum. Data is only available for the 2011-12 AY.

Year	2011-12	National Average
Score	75.5	74.1

Is a narrative evaluation of student performance submitted in addition to or as a component of the clerkship grade?

Yes	✓	No	

A narrative statement is a required component of the clinical assessment of student performance for all clerkships.

Clerkship Outcomes/Evaluation

Comment on the adequacy of faculty (full-time, part-time, and volunteer), patients, and other resources for this clerkship.

Faculty, patients, and resources, including simulation, are adequate to meet the learning objectives for the clerkship with the current student body size.

Resources available to the students include the University Medical Center of El Paso, a teaching hospital which is also a Level One Trauma center. In February 14, 2012, the new El Paso Children's Hospital was inaugurated. This also serves a teaching site. The Texas Tech Surgical Clinic is located on the medical and academic campus. Learning areas for didactics include classrooms in the Medical Education building, classrooms in the Administration and Education Center building, and conference rooms available in the University Medical Center. The medical school also has a state-of-the-art simulation center.

Computer resources are available in the TTUHSC libraries. In addition, the TTUHSC library and TTUHSC website can be accessed from the University Medical Center 24 hours a day, 7 days a week. The library resources for surgery students include several textbooks, the web-based surgical manual, and access to numerous databases for literature searches. There are also online journal resources. Other resources include hospital call rooms, work areas for patient charting, examination rooms, and online access to diagnostic imaging.

Provide a summary of student feedback on the clerkship (and any other evaluation data) for the past two academic years; include the percent of students providing evaluation data. Note any recent changes in the clerkship. If problems have been identified by student evaluations or other data, describe how these are being addressed.

At the end of each block, students complete anonymous on-line evaluations on the two clerkships sharing the block.

Surgery

Class of 2013 AY2011-2012 (Response rate = 86%)

Offering Block	1	2	3	Overall
This block was well organized.	78%	67%	57%	66%
The learning objectives were clearly identified.	78%	75%	64%	71%
The block met the identified learning objectives	78%	67%	64%	69%
The amount of material presented during the block was reasonable.	100%	67%	79%	80%
Shared learning experiences between the two disciplines in this block contributed to my understanding of clinical medicine.	78%	33%	36%	46%

Individual Clerkship				
The methods used to evaluate my performance during this clerkship provided fair measures of my effort and learning.	44%	58%	71%	60%
In this clerkship, duty hour policies were adhered to strictly.	67%	92%	64%	74%
I had appropriate exposure to ambulatory patients.	89%	83%	86%	86%
I had enough patient management opportunities.	67%	58%	79%	69%
I received sufficient supervision during my clinical interactions.	89%	58%	92%	79%
I received sufficient feedback on my performance.	33%	54%	68%	54%
The clinical presentation schemes helped me organize my approach to patient care.	22%	25%	21%	23%
The clerkship provided appropriate preparation for the shelf exam.	33%	45%	64%	50%
I was observed delivering patient care.	78%	73%	93%	82%
Overall, I learned useful knowledge and/or skills during this clerkship.	89%	91%	100%	94%

Identify major successes in the clerkship and challenges to be overcome.

Successes:

- Student performance on the NBME surgery test has been above average despite the fact that in our integrated approach to clerkships PLFSOM students must take two shelf exams at the end of each block.

Challenges:

- Competing demands for faculty time related to clinical responsibilities and resident education has directly or indirectly had the following consequences:
    - Delays in the timely filling out of student evaluations.
    - Students' perceptions that they are not being provided with desired level of supervision and feedback
    - Students' perceptions of the level of how well the clerkship was preparing them for success on the shelf-exam. (However, as noted, student performance is quite good on this particular measure of learning.)
    - Students' overall satisfaction with their education during the surgery clerkship.

- True integration of patient encounters and didactic sessions has proven to be difficult in the past three blocks. Once again, commitment to other responsibilities produces a challenge for faculty participation in both planning and implementation of fully integrated experiences and didactics.

Plans for addressing challenges:

- Several new faculty members are slated to join the faculty during the 2012-13 academic year. This will improve the student-faculty ratio and hopefully improve student perceptions.
- We have been stressing the importance of timely student evaluation and feedback in faculty meetings and informational session about the clerkship. The senior associate dean for medical education met with the department about this issue and the department chair, in support of the clerkship director, has communicated frequently via e-mail with department faculty members regarding his expectations that student evaluations be completed.

- The Surgery and Family Medicine clerkship directors are meeting to produce better integration of didactic and clinical experiences. Improved integration and coordination of didactic topics will provide additional opportunities for revisiting the clinical schemes from years 1-2.