

Office of the Dean

November 26, 2014

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Dear Drs. Barzansky and Hunt,

Please see the attached status report requested in the letter of October 21, 2013. We hope that we have provided all of the requested information. Please do not hesitate to contact me personally if there are any issues with this status report, whatsoever.

Sincerely,

Joseph I. Shapiro, M.D.  
Dean, Joan C. Edwards School of Medicine  
Professor of Medicine  
Marshall University

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**STATUS REPORT**

A. *IS-16 (diversity)*

1. Based on the institution's definition of diversity, complete the following table:

School-Identified Diversity Categories	Medical Students				Faculty				Staff*	
	First-year students		All students		Basic Science		Clinical Science			
	2013-2014 (n=75)	2014-2015 (n=79)	2013-2014 (n=287)	2014-2015 (n=289)	2013-2014 FT=40	2014-2015 FT=39	2013-2014 FT=186	2014-2015 FT=197	2013-2014	2014-2015
<b>URM</b>	12% (9)	7% (5)	7% (19)	7% (20)	1% (1)	1% (1)	6% (14)	6% (14)	3% (11)	3% (12)
<b>All Minorities<sup>#</sup></b>	28% (21)	17% (13)	17% (50)	17% (49)	4% (10)	4% (10)	14% (31)	14% (32)	4% (13)	8% (29)
<b>Women</b>	41% (31)	42% (33)	35% (101)	37% (106)	8% (17)	8% (18)	28% (64)	29% (68)	96% (329)	88% (305)
<b>From Appalachia Counties</b>	79% (59)	80% (63)	70% (201)	73% (209)	4% (8)	3% (8)	10% (22)	11% (25)	10% (36)	11% (38)
<b>Rural WV Resident</b>	36% (19/53 Res.)	35% (21/61 Res.)	37% (63/170 Res.)	35% (64/183 Res.)	5% (12)	6% (15)	27% (61)	26% (62)	72% (246)	72% (248)
<b>Total</b>	75	79	287	289	40	39	186	197	343	345

Percentages provided are % of each category as part of total full-time faculty (e.g. 7.6% of full-time faculty are Women basic science faculty members). Actual numbers in parentheses.

\* Administrative staff is defined as all other personnel who are not students, house staff, or physicians.

# All Minorities is defined as URM plus Asians and Pacific Islanders

Residents (House Staff)	2013-2014 (n = 163) % (n)	2014-2015 (n = 167) % (n)
<b>URM</b>	6% (9)	8% (13)
<b>All Minorities</b>	16% (26)	20% (32)
<b>Women</b>	40% (65)	35% (58)
<b>Rural Hometowns (WV Residents only)</b>	9% (15)	10% (16)
<b>West Virginia Resident</b>	26% (42)	27% (45)

2. In order for the LCME to better understand the level of effort that the school is making to improve diversity, complete the following tables:

Offers Made to Medical School Applicants						
School-identified Diversity Categories	Academic year 2013-2014			Academic year 2014-2015		
	Number of Offers Declined	Number of Students Enrolled	AY 2013-14 Total Offers N=123 Total and N=80 Residents	Number of Offers Declined	Number of Students Enrolled	AY 2014 Total Offers N=118 Total N=87 Residents
URM	31% (4)	69% (9)	11% (13)	55% (6)	45% (5)	10% (11)
All Minorities	19% (5)	81% (21)	21% (26)	50% (13)	50% (13)	22% (26)
Women	46% (26)	54% (31)	46% (57)	33% (16)	67% (33)	42% (49)
From Appalachia Counties	36% (33)	64% (59)	75% (92)	33% (30)	67% (63)	79% (93)
Rural (WV Residents Only)	42% (14)	58% (19)	41% (33)	37% (12)	63% (21)	38% (33)
<b>Total</b>	<b>49</b>	<b>80</b>	<b>123</b>	<b>39</b>	<b>79</b>	<b>118</b>

Offers Made to Applicants for Faculty Positions						
School-identified Diversity Categories	2013			2014 (to date)		
	Number of Offers Declined	Number of Faculty Hired	2013 Total Offers	Number of Offers Declined	Number of Faculty Hired	2014 Total Offers
<b>URM</b>	2	4	6	1	0	1
<b>All Minorities</b>	3	12	15	1	1	1
<b>Women</b>	2	12	14	2	5	7
<b>Rural Hometowns (WV Residents only)</b>	4	2	6	0	3	3
<b>Total</b>	8	37	42	3	29	32

Please note that the number of URM is increasing dramatically across all aspects of the organization. We attribute this to our new policies and the excellent work of our diversity director, Dr. Shelby Campbell, who helped us develop and implement these policies.

B. *ED-5-A (active learning and independent study)*

1. Complete the attached table with the instructional formats used in years one and two of the curriculum during the 2014-2015 academic year. Note the changes from the time of the 2011 full survey and 2013 focused survey visits.

As a means to further improve integration across all four years of the curriculum, the Curriculum Committee moved away from content domain-specific discipline based courses in the first two years in favor of more integrated systems based blocks. The change went into effect for the academic year 2013-2014. We are therefore providing separate tables for the two different curriculums that were in place during the previous site visits and the current curriculum.

**ED-5-A Table 1: YEAR ONE/ACADEMIC PERIOD ONE FOR ACADEMIC YEAR 2014-2015**

Course	Formal instructional hours					Total
	Lecture	Lab	Small groups*	Patient contact	Other†	
Elements of Medicine	95	3	25	0	21.5	144.5
Structure and Function I	61.5	50.5	0	0	6	118
Structure and Function II	87	41	2	0	14	144
Structure and Function III	56	17.5	9	0	8	90.5
Structure and Function IV	49.5	29	12.5	0	1.5	92.5
Introduction to Clinical Skills	12.5	0	19	9	11	51.5
<b>TOTAL</b>	<b>361.5</b>	<b>141</b>	<b>67.5</b>	<b>9</b>	<b>62</b>	<b>641</b>

\* Includes case-based or problem-solving sessions

† Team-Based Learning, Large Group Discussions, Peer Teaching, and Demonstrations

**ED-5-A Table 2: YEAR TWO/ACADEMIC PERIOD TWO FOR ACADEMIC YEAR 2014-2015**

Course	Formal instructional hours					Total
	Lecture	Lab	Small groups*	Patient contact	Other†	
Principles of Disease	82	2	30	0	30.5	144.5
Diseases and Therapeutics I	43	1.5	19.5	0	13.5	77.5
Diseases and Therapeutics II	65.5	0	23	0	6	94.5
Diseases and Therapeutics III	48.5	0	44.5	0	33	126
Diseases and Therapeutics IV	84	0.5	3	0	9	96.5
Advanced Clinical Skills	11.5	0	19.5	9	34.5	74.5
<b>TOTAL</b>	<b>334.5</b>	<b>4</b>	<b>139.5</b>	<b>9</b>	<b>126.5</b>	<b>613.5</b>

\* Includes case-based or problem-solving sessions

† Team-Based Learning, Large Group Discussions, Peer Teaching, and Demonstrations

**ED-5-A - Courses and Instructional Formats and Contact Hours for Year One  
Comparing Academic Years 2009-2010 and 2012-2013**

Course	Academic Year	Lecture	Lab	Small groups	Patient contact	Other	Total
<b>Gross Anatomy</b>	12-13	78.5	81.5	9	0	18	187
	09-10	89.5	96	2	0	16	203.5
<b>Behavioral Medicine and Ethics</b>	12-13	28	0	6	0	3	37
	09-10	55	0	1.5	0	3	59.5
<b>Microanatomy and Ultrastructure</b>	12-13	12	22	10	0	1	45
	09-10	34	30	3	0	0	67
<b>Introduction to Clinical Medicine</b>	12-13	10.5	0	16.5	6.5	1	34.5
	09-10	19	30	10	17	4	80
<b>Molecular Basis of Medicine</b>	12-13	93	0	13.5	0	18	124.5
	09-10	112	0	8	0	0	120
<b>Neuroscience</b>	12-13	85	8	26.5	0	9	128.5
	09-10	77	9	6	0	12	104
<b>Physiology</b>	12-13	81	0	28	0	7	116
	09-10	88	0	9	0	13	110
<b>TOTAL</b>	12-13	388	111.5	109.5	6.5	57	672.5
	09-10	474.5	165	39.5	17	48	744

**ED-5-A - Courses and Instructional Formats and Contact Hours for Year Two  
Comparing Academic Years 2009-2010 and 2012-2013**

Course	Academic Year	Lecture	Lab	Small groups	Patient contact	Other	Total
<b>Approach to</b>	12-13	33	1	68.5	0	11.5	114
	09-10	93	0	6	1	67	167
<b>Advanced Clinical</b>	12-13	8	0	10.5	5.25	0	23.75
	09-10	11	0	0	25	5	41
<b>Immunology</b>	12-13	33.5	0	15	0	2.5	51
	09-10	38	0	0	0	7	45
<b>Medical</b>	12-13	74	3	6	0	2	85
	09-10	83	3	2	0	1	89
<b>Pathology</b>	12-13	118	0	25	0	13.5	156.5
	09-10	159	0	0	0	6	165
<b>Pharmacology</b>	12-13	73	1	20	0	19.5	113.5
	09-10	87	0	2	0	15	104
<b>Psychopathology</b>	12-13	15	0	0	0	8	23
	09-10	25	0	0	0	0	25
<b>TOTAL</b>	12-13	354.5	5	145	5.25	57	566.75
	09-10	496	3	10	26	101	636

2. Provide the average number of scheduled hours per week in the first and second years of the curriculum during the 2014-2015 academic year. Provide sample weekly schedules that illustrate the amount of time in the first and second years of the curriculum that students spend in scheduled activities. Note any changes from the time of the 2011 full survey and 2013 focused survey visits

**ED-5-A Table 5- Year One and Year Two Total Student Contact Hours and Percentage of Didactic Lecture Hours Comparing the Indicated Academic Years**

	<b>2009-2010</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>
Year One Contact Hours	744	672.5	650	641
Year Two Contact Hours	636	567	525	613.5
Total Contact Hours	1380	1239.5	1150	1254.5
Didactic Lecture Hours	970.5	742.5	575	696
Percentage of Didactic Lecture	70%	60%	50%	55%*

\* Percentage of Didactic Lecture went up in 2014-2015 as a result of ongoing course review and adjustment to courses that were recommended by the curriculum committee based on identified gaps specifically in the second year curriculum. We have recently hired an experienced expert in engaged learning who is examining our pedagogy and assisting us in improving our teaching methods with hopes of reducing this number further.

**ED-5-A Table 6- Average Weekly Contact Hours for Year One and Year Two Students**

<b>Academic Year</b>	<b>2009-2010</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>
<b>Total Hours</b>	1380	1239.5	1150	1254.5
<b>Total Weeks</b>	80	81	81	81
<b>Hours/Week</b>	17.3	15.3	14.2	15.5

3. Provide examples that illustrate the opportunities that exist in years one and two of the curriculum for students to do the following steps (a through e below) as a single process:
  - a. Assess their learning needs, individually or in groups
  - b. Identify, analyze, and synthesize information relevant to their learning needs
  - c. Assess the credibility of information sources
  - d. Share the information with their peers and supervisors
  - e. Receive feedback on their information retrieval and synthesis skills

As part of the ongoing continuous quality improvement process implemented by the curriculum committee, each course director must complete a report that includes a list of opportunities for these steps to occur. We have compiled these reports into a single list that is available in **APPENDIX 1**. Having recently recruited an expert in engaged learning as the Associate Dean for Medical Education, we fully anticipate increasing the educational opportunities that favor life-long learning.

C. *ED-21 (cultural competence)*

1. List the courses and clerkships in which all students learn about issues related to cultural competence in health care and describe the objectives related to cultural competence that are covered in each. Note whether the instruction occurs through formal teaching, informal exposure in the clinical setting, or both.

The list of courses and clerkships that provide opportunities for students to learn about cultural competence can be found in **APPENDIX 2**. We have increased the number of educational opportunities for students from 121 at the time of 2013 limited site visit to 154 as of this report. Note that this number does not include the informal exposures that may occur in the clinical setting.

2. Provide examples of how students' acquisition of knowledge, skills, and behavioral objectives related to cultural competence are assessed.

For the 2014-2015 academic year, the clinical skills courses in the first and second year have incorporated specific learning activities aimed at addressing the medical humanities including professionalism, ethics, research, cultural competence and inter-professional education. (**SEE APPENDIX 3**) These Clinical Competency Exams addressing these five areas occur 8 times a year for both the first and second year students.

Beginning in the 2013-2014 academic year, we modified our third and fourth year curriculums to include a clinical competency exam (CCE) on all of the required clerkships. These CCE's are performed using standardized patients from culturally diverse backgrounds. They are video recorded and reviewed with the student by the clerkship director. The standardized patients provided feedback to the student on their ability to interact with patients from culturally diverse backgrounds.

Students who struggle with any aspect of the CCE, including culturally diversity issues, undergo a remediation process with structured educational pieces aimed at improving student performance. The student then repeats a CCE that has been modified so as not to be identical to confirm they have achieved competency in the area of concern.

At the end of the third year, all students are required to perform an end of the year CCE that consists of 6 standardized patient encounters modeled after the USMLE Clinical Skills exam. All six are recorded and all six standardized patients provide constructive feedback to the students as we have trained the standardized patients to do. Each student meets with one of a core group of four faculty members who have undergone specific training to provide useful feedback and watch each of their six encounters. Student who struggle with cultural diversity or any other aspect of the CCE undergo a structured remediation and then repeat a set of three patient encounters using different clinical and diversity elements to be certain the student has obtained competency in these areas.

Students who excel during their CCEs receive commendations from either the standardized patient or the faculty member, which is reflected in the Medical Student Performance Evaluation in the fourth year.



- Provide data from the 2014 AAMC Medical School Graduation Questionnaire (GQ) and data from an internal survey of medical students in all classes on their perception of the adequacy of instruction related to providing culturally appropriate care for diverse populations. For the AAMC GQ, provide national comparison data.

<b>2014 Internal Survey By Class of Student Satisfaction with Training for Culturally Diverse Populations</b>					
	<b>Very Dissatisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>Neutral (%)</b>	<b>Satisfied (%)</b>	<b>Very Satisfied (%)</b>
<b>The Diversity within my medical school class enhanced my training and skills to work with individuals from different backgrounds</b>					
MS-1 (n=58)	5.2	5.2	24.1	43.1	22.4
MS-2 (n=58)	0.0	12.1	31.0	25.9	31.0
MS-3 (n=44)	0.0	9.1	29.6	43.2	18.2
MS-4 (n=36)	5.6	22.2	30.6	19.4	22.2
<b>My knowledge or opinion was influenced or changed by becoming more aware of the perspectives of individuals from different backgrounds</b>					
MS-1 (n=58)	3.5	1.7	32.8	46.6	15.5
MS-2 (n=58)	3.4	5.2	32.8	39.7	19.0
MS-3 (n=44)	2.3	9.1	27.3	43.2	18.2
MS-4 (n=36)	5.6	19.4	22.2	41.7	11.1
<b>I believe I am adequately prepared to care for patients from different backgrounds</b>					
MS-1 (n=28)	0.0	7.1	35.7	32.1	25.0
MS-2 (n=22)	0.0	0.0	27.3	27.3	45.4
MS-3 (n=21)	0.0	4.8	23.8	33.3	38.1
MS-4 (n=36)	0.0	8.3	8.3	47.2	36.1

We have come to recognize that while (we believe) the students receive very good exposure to cultural diversity, they do not always recognize the teaching point as being a cultural diversity issue. We are making efforts to help student better understand what cultural diversity is and improve their ability to recognize these elements as they appear in the curriculum. These efforts include a revamped clinical skills course that includes identified cultural diversity elements as described in Appendix 2. Additionally faculty members are making efforts to identify and describe what elements are culturally diverse and why they are important during the active learning sessions.

<b>2014 Internal Survey By Class of Student Satisfaction with Training for Culturally Diverse Populations</b>			
	<b>Inadequate (%)</b>	<b>Appropriate (%)</b>	<b>Excessive (%)</b>
Culturally appropriate care for diverse populations			
MS-1 (n=58)	15.5	79.3	5.2
MS-2 (n=58)	8.6	86.2	5.2
MS-3 (n=44)	13.6	81.8	4.6
MS-4 (n=36)	19.4	77.8	2.8

<b>Information from the 2014 GQ Concerning Benefits of Cultural Diversity</b>					
	<b>Very Dissatisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>Neutral (%)</b>	<b>Satisfied (%)</b>	<b>Very Satisfied (%)</b>
<b>My knowledge or opinion was influenced or changed by becoming more aware of the perspectives of individuals from different backgrounds.</b>					
JCESOM 2012 (N=54)	5.6	9.3	24.1	53.7	7.4
JCESOM 2013 (N=60)	1.7	5.0	23.3	53.3	16.7
JCESOM 2014 (N=47)	2.1	6.4	29.8	42.6	19.1
All schools (2014)	0.8	3.3	16.7	55.1	24.1
<b>The diversity within my medical school class enhanced my training and skills to work with individuals from different backgrounds.</b>					
JCESOM 2012 (N=54)	9.3	18.5	25.9	38.9	7.4
JCESOM 2013 (N=60)	5.0	15.0	21.7	38.3	20.0
JCESOM 2014 (N=47)	4.3	19.1	25.5	27.7	23.4
All schools (2014)	3.9	10.2	23.6	39.8	22.5

**Information from the 2014 GQ Concerning Benefits of Cultural Diversity**

	Inadequate (%)	Appropriate (%)	Excessive (%)
<b>Women’s Health</b>			
<b>JCESOM 2012 (N=55)</b>	1.8	96.4	1.8
<b>JCESOM 2013 (N=61)</b>	6.6	91.8	1.6
<b>JCESOM 2014 (N=47)</b>	0.0	100	0.0
<b>All schools (2014)</b>	7.6	90.2	2.2
<b>Culturally appropriate care for diverse populations</b>			
<b>JCESOM 2012 (N=55)</b>	36.4	61.8	1.8
<b>JCESOM 2013 (N=60)</b>	18.3	80.0	1.7
<b>JCESOM 2014 (N=47)</b>	17.0	78.7	4.3
<b>All schools (2014)</b>	12.9	79.2	7.9
<b>Health Determinants</b>			
<b>JCESOM 2012 (N=55)</b>	23.6	72.7	3.6
<b>JCESOM 2013 (N=59)</b>	20.3	78.0	1.7
<b>JCESOM 2014 (N=47)</b>	6.4	93.6	0.0
<b>All schools (2014)</b>	12.3	85.5	2.1

We are pleased to see a trend toward improvement in the areas of women’s health and health determinants as indicated by the percent inadequate being better than the “All Schools” average. Culturally appropriate care for diverse populations has been cut in half but continues to be a little less than the “All Schools” average. We believe that the redesigned clinical skills courses and increase in CCE participation in the third and fourth year will continue to reduce the percent responding inadequate at JCESOM.

D. *ED-33 (curriculum management)*

- A. Provide minutes and other pertinent documents from academic years 2013-2014 and 2014-2015 that provide evidence of curriculum development and follow-up on activities designed to achieve appropriate vertical and horizontal integration of curriculum content.

The documents can be seen in **APPENDIX 4**. The 12 member integration subcommittee went through all 115 diseases that had been select as tools for integration, Each disease was discussed with content experts and objectives were developed that included year specific objectives as well as connecting them with the appropriate competency. The year specific subcommittees reviewed the objectives to ensure that they had been integrated at the appropriate horizontal and vertical positions within the curriculum. Once reviewed and approved by all subcommittees each of the 115 diseases was reviewed, amended, and approved by the entire curriculum committee. All these disease specific objectives where then posted to a website where faculty could have access when preparing learning activities or course work.

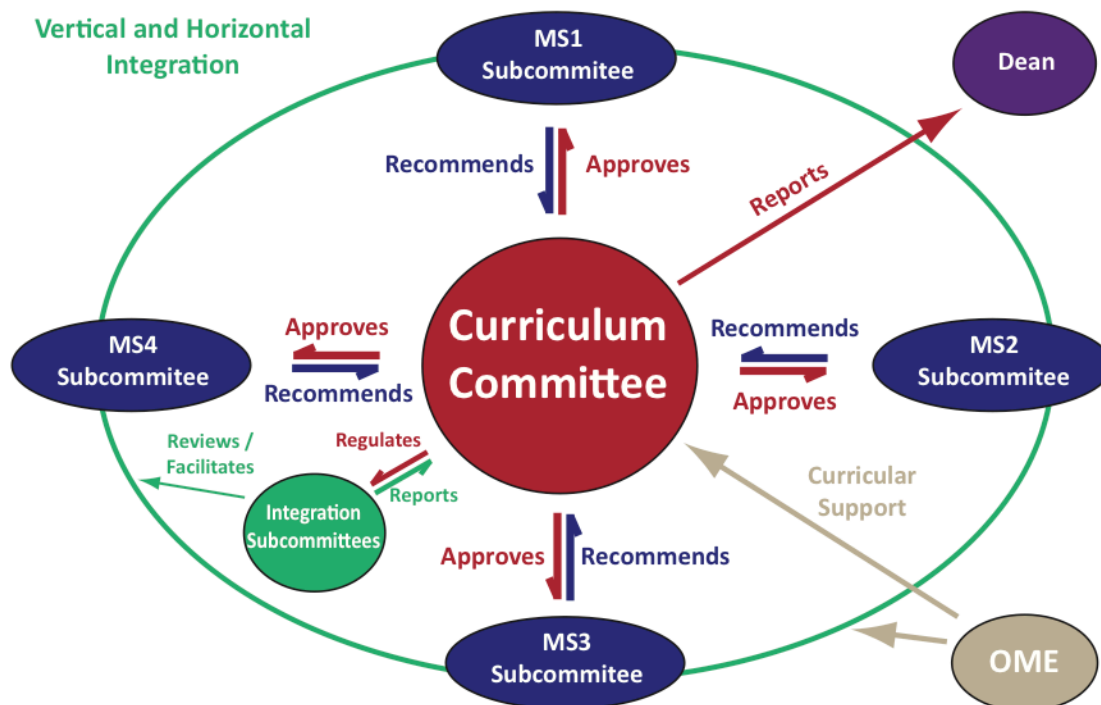
Once the disease specific objectives were integrated across the four years, the question became how best to monitor the curriculum in an ongoing fashion? The integration subcommittee initially struggled with how best to report the effect of this integration process to the curriculum committee in a meaningful fashion. Working together they ultimately developed an “Integration Report” that had real utility (**See Appendix 5 – Diabetes Mellitus Integration Report**). As you can see, this report allows one to view both horizontal integration within the year and vertical integration across all four years. They also incorporated the number of internal questions being used to assess knowledge as well as the number of times students were reporting seeing a patient with that specific disease.

An unplanned outcome of these reports was that they allowed us to identify both gaps and redundancies within the curriculum. To illustrate, in the report for diabetes mellitus, it appears as though diabetes is not covered in three of the five blocks in the first year curriculum. We felt that this was unlikely given that those blocks include cardiac and renal material. Upon review with the faculty, it was discovered that they do indeed discuss the effects of diabetes but had just not tagged it correctly in our internal curriculum database.

These changes have allowed the integration subcommittee to transition to more of an oversight role for maintaining both horizontal and vertical integration. Each of the 115 diseases will undergo reporting on an annual basis using a rolling model of review. The integration subcommittee meets every 2 weeks. At each meeting 5 to 6 diseases are reviewed and forwarded to the curriculum committee with recommendations allowing all 115 diseases to be reviewed in an ongoing continuous quality improvement process. It is appreciated that this is an ongoing process that allows for further refinement of integration and interrogation of the curriculum at a much finer level than ever before.

- B. Describe the methods used to monitor curriculum content and to identify gaps and unplanned redundancies. Provide examples, as available, of gaps or redundancies that were identified and describe how these were addressed.

The Curriculum Committee (CC) uses the following model for curriculum management and oversight of horizontal and vertical integration:



The CC controls the curriculum and approves the work and recommendations of all subcommittees. The CC reviews and approves or recommends appropriate changes to the content and pedagogy on a continual basis. The CC also tracks, using the curriculum database and reports from its subcommittees, the diseases, themes, competencies, pedagogies and assessments and recommends appropriate additions or modifications to the curriculum. The CC provides a curriculum report to the Dean, via its chair and the Vice Dean for Medical Education, on a regular basis.

The Year Subcommittees, are composed of block leaders or clerkship directors who are responsible for the coordination and delivery of the curriculum including horizontal and vertical integration, pedagogy and student assessment. Horizontal integration is achieved through use of the curriculum map database and regular meetings of each Year Subcommittee.

Vertical integration is achieved by regular joint meetings of the Year Subcommittees and block/clerkship representatives as appropriate. This process involves analysis of the curricular content using the curriculum map database and feedback from the faculty. Block leaders and clerkship directors provide ongoing content review for gaps and redundancies and report to the Year Subcommittees.

The Integration Subcommittee facilitates this process by reviewing the material to ensure that approved competencies, diseases and themes are integrated appropriately. The Integration Committee provides regular reports to the CC and Year Subcommittees on integration progress.

The Office of Medical Education provides curricular support to the CC and to the various subcommittees.

Gaps and redundancies are identified using three different approaches at the JCESOM. This includes the course reports to the curriculum committee (see **Appendix 6**), which helps identify horizontal gaps or redundancies. The integration subcommittee reports help to identify both horizontal and vertical gaps and redundancies within the curriculum that can then be addressed by the CC. Finally, using our in-house curriculum database, we developed a heat map of the curriculum as defined by tagging of the Step 1 content with in the curriculum database and compared it to the Step 1 Content Specifications.

## **SPECIFIC EXAMPLES OF GAPS AND REDUNDANCIES**

### **Gaps and Redundancies Identified in the Course Reports:**

(Verbatim from the course reports)

In the second unit of the Elements of Medicine there are several faculty-covering aspects of molecular regulation (lac operon) that could be consolidated. This involves portions of several lectures. These lectures have been consolidated for the 2014-2015 academic year

We removed some material in integration of metabolism, so that it could be addressed in the Endocrine/Reproductive portion of Structure and Function IV, and instead more comprehensively addressed diabetes and metabolic syndrome from a metabolic standpoint.

In Structure and Function I, there was a remaining small amount of overlap noted between material presented by Drs. Grover and Richardson. This overlap has been eliminated.

In Structure and Function II, autonomic nervous system was presented as an overview lecture, but was not covered in the anatomy lab. An autonomic nervous system lab was added for the 2014-2015 academic year.

Class sessions with major focus on anatomy need to include more radiological images. Radiology has a theme was reorganized to include more images in the appropriate sections of the course.

Renal anatomy was presented as an overview lecture. A kidney wet lab session will be added in the 2015 curriculum.

There are still some redundancies involving Elements of Medicine and Structure and Function IV with respect to (1) pancreatic hormones, (2) lipid and carbohydrate digestion and (3) lactation. Faculty members met and integrated these particular areas to include only planned redundancies.

Within Structure and Function IV, GI is nicely partitioned among several professors with no overlap of content. By contrast, there is some redundancy in the coverage of the female reproductive system, at least with respect to some of the stated objectives. There was some duplication of content involving basic science lectures and two of the clinical correlations. Clinical and basic science faculty met to integrate and restrict the overlap to only those elements that were felt to need emphasis.

In Structure and Function IV there is a series of lectures by basic scientists and clinicians on pregnancy. Dr. Niles lecture in Elements of Medicine on metabolic adaptations to pregnancy would fit nicely into this sequence. So the lecture was moved for the 2014-2015 academic year.

There is a gap in sexual differentiation regarding uterine development and uterine abnormalities. Two active learning sessions were added to address this gap.

Because the mechanism of hemostasis and thrombosis is taught during Principles of Disease, this would be the appropriate time to teach anticoagulation drugs and then just do a quick review in the cardiovascular section of Diseases and Therapeutics III.

Dermatomyositis was covered both in the dermatology and the musculoskeletal sections. This topic was realigned to limit it to a planned redundancy.

Whereas diuretics, vasodilators & Inhibitors of the renin angiotensin aldosterone system were covered from the perspective of hypertension, these drugs are used to treat a number of other cardiovascular and non-cardiovascular diseases. These drugs should be covered early in the course as drug classes used for various indications and then referred to specifically when discussing treatment of particular diseases. To address this issue at least in part, students were given handouts covering the pharmacology of diuretics from a broader perspective.

The pathology and pathophysiology of heart failure was not covered in sufficient detail during the relevant classes/case discussions. To address this, an independent learning session with an extra credit summative assessment was developed and available to students at the end of the CV portion of the course.

In both the respiratory and renal sections of Diseases and Therapeutics III, there appeared to be some excess repetition of the basic anatomy and physiology of the systems as some individual faculty introduced their topics. It is recommended that this be examined and appropriate measures be taken to reduce any unplanned and unnecessary redundancies in this introductory material.

There is also a gap in teaching the Male GU Exam (External Genitalia, Hernia, and Prostate Exams), specific activities were added to Structure and Function IV to address male anatomy. Additionally, one of our new urologist has been recruited to do some sessions in the clinical skill lab.

No assessment is done of the students' ability to perform and document a skin exam. Our new chair of Dermatology has initiated sessions with the students to identify and document abnormalities while performing a skin exam.

There is no assessment of the students' ability to identify common abnormal physical exam findings. This gap is being addressed in the redesigned clinical skills course.

### **Gaps and Redundancies Identified in the Integration Subcommittee Reports:**

There is a gap in the teaching of the clotting cascade and bleeding disorders, which should be taught in conjunction. To address this educational session on these topics were rearranged within the curriculum.

There are limited opportunities in the third and fourth year to learn about bleeding disorders. Upon further investigation it was discovered that Internal Medicine, Pediatrics, and Ob/Gyn all had educational activities based on bleeding disorders.

There is a gap in teaching gall stone formation and medications in the first and second years. These gaps were corrected by incorporating more educational activities related to these topics.

There appears to be a gap regarding digestive issues related to cystic fibrosis in the first two years of the curriculum. For example, there are no sessions tagged in the GI or Pancreatic sections for cystic fibrosis despite the course director confirming there is a small group session that involves pancreatic enzyme replacement for patients with cystic fibrosis. Faculty will be asked to reassess their tagging of sessions that may include cystic fibrosis as a learning topic.

Diabetes mellitus is not well integrated horizontally in the first year curriculum. For example, there are no sessions in the renal section tagged with diabetes, which seems unlikely and was confirmed by the course director. Faculty will be asked to re-evaluate their tagging of sessions to get a more accurate picture of when diabetes is actually included in the learning activity

Meningitis is not well covered in the first year curriculum and there is a deficiency in the amount of adult meningitis covered in the third year of the curriculum. Three new learning activities were added to the first year curriculum for 2014-2015 specifically to include the anatomy and physiology of the meninges. Neurology and Internal Medicine have both agreed to address this deficiency in the third year curriculum.

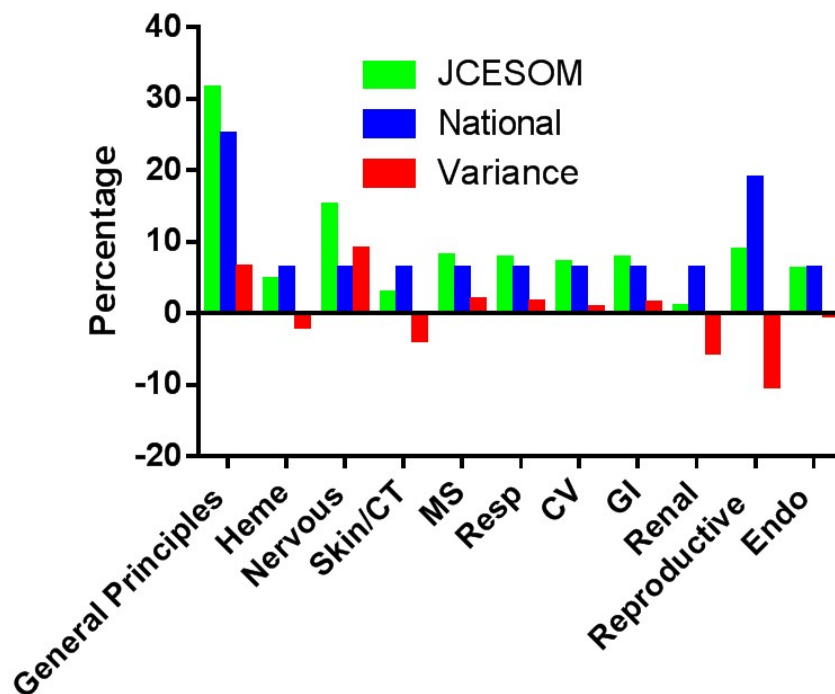
There is poor horizontal integration of upper GI bleeding in the curriculum. An emphasis will be made by faculty to identify areas in the curriculum that may be affected by GI bleeding and emphasize the potential impact on other organ systems.

**Gaps and Redundancies Identified using a Comparison with the USMLE Step 1 Content Outline:**

Lastly, we queried our own internal database to determine how well our content was aligned with the USMLE Step 1 Content Specifications. The curriculum is supposed to be tagged based on the Step 1 Content Outline provided as a drop down menu when faculty are uploading their educational activities.

Educational Activity Breakdown by % of Activities Tagged in the Database				
Systems	MS 1 (%)	MS 2 (%)	Total (%)	USMLE (%)
General Principles	25.9	36.7	31.4	20.0
Hematopoietic & Lymphoreticular Systems	2.7	6.5	4.6	7.2
Central & peripheral nervous Systems	20.1	10.0	15.1	7.2
Skin & Related connective Tissue	2.4	3.0	2.7	7.2
Musculoskeletal System	8.0	8.1	8.0	7.2
Respiratory System	6.9	8.5	7.7	7.2
Cardiovascular System	6.7	7.3	7.0	7.2
Gastrointestinal System	7.1	8.1	7.6	7.2
Renal/Urinary System	1.5	0.3	0.9	7.2
Reproductive System	9.2	8.2	8.7	15.0
Endocrine System	9.1	3.2	6.1	7.2

**Gaps and Redundancies in the Curriculum as Identified by Comparison to USMLE Step 1 Content Specification**





Clearly there has been an emphasis on the general principles along with the central and peripheral nervous systems, while there has been a lack of adequate coverage in other areas, most notably, the renal and reproductive/urinary system. We recognize that this may reflect simple errors in tagging and may not truly be deficiencies, however, it does serve as a guidepost for curriculum evaluation. There are some potential redundancies in some areas and potential gaps in others. This information will help guide us as we move forward with our continuous quality improvement of the curriculum. For the entire list of curricular content as tagged in our internal database please see **Appendix 7**.

- C. Provide student performance and satisfaction data on the effectiveness of the school's curricular redesign.

### MS1 Comprehensive Final

Year	Percent Correct	Standard Deviation
2012	75%	8
2013	74%	7
2014	75%	8

### MS2 Mini-Boards

	2012		2013		2014	
	MUSOM	National	MUSOM	National	MUSOM	National
<b>Intro to Clinical Diagnosis</b>	555 (SD 75)	544*	554 (SD 85)	544*	575 (SD 87)	544*
<b>Micro</b>	605 (SD 80)	518 (SD 104)*	603 (SD 111)	518 (SD 104)*	554 (SD 104.4)	518 (SD 104)*
<b>Mico + Immuno</b>	605 (SD 88)	514 (SD 114)*	604 (SD 118)	514 (SD 114)*	555 (SD 107)	514 (SD 114)*
<b>Path</b>	553 (SD 81)	516 (SD 95)*	540 (SD 93)	516 (SD 95)*	521 (SD 87)	516 (SD 95)*
<b>Pharm</b>	565 (SD 90)	537 (SD 113)*	546 (SD 89)	537 (SD 113)*	551 (SD 91)	537 (SD 113)*

\* 2011-2013 combined

### Comprehensive Basic Science Self-Assessment (CBSSA)

	2011	2012	2013	2014
<b>Mean Score</b>	327	433	446	411

### Step 1

	<b>MUSOM 2011</b>	<b>National 2011</b>	<b>MUSOM 2012</b>	<b>National 2012</b>	<b>MUSOM 2013</b>	<b>National 2013</b>	<b>MUSOM 2014</b>	<b>National 2014</b>
<b>Mean Score</b>	213 (SD 22)	224 (SD 22)	226 (SD 18)	227 (SD 22)	224 (SD 20)	228 (SD 21)	223 (SD 21)	230 (SD 20)
<b>Percent Passing</b>	89%	94%	99%	95%	96%	96%	90%*	96%

\* The reason for the decline in percent passing for first time takers is uncertain. We have undertaken a thorough investigation of potential problems including curricular issues, admissions policies, and the impact of being on probation when this class was undergoing the interview process.

### Step 2CK

	<b>MUSOM 2011-12</b>	<b>National 2011-12</b>	<b>MUSOM 2012-13</b>	<b>National 2012-13</b>	<b>MUSOM 2013-14</b>	<b>National 2013-14</b>
<b>Mean Score</b>	231 (SD 18)	237 (SD 21)	230 (SD 15)	238 (SD 19)	237 (SD 16)	240 (SD 18)
<b>Percent Passing</b>	100%	98%	97%	98%	99%	97%

### Step 2CS

	<b>MUSOM 2011-12</b>	<b>National 2011-12</b>	<b>MUSOM 2012-13</b>	<b>National 2012-13</b>	<b>MUSOM 2013-14</b>	<b>National 2013-14</b>
<b>Percent Passing</b>	99%	97%	95%	98%	90%*	96%

\* Clinical Skills courses and clerkship evaluations underwent a major transition during the 2013-2014 academic year. This resulted in more challenging clinical scenarios, improved standardized patient training, and more frequent Clinical Competency exams during the first three years of medical school. We believe that our efforts have paid off as we have a 100% pass rate for the 2014-2015 academic year.

## Student satisfaction data based on Course Evaluations:

<b>MS 1</b>	<b>2010-2011 (mean ± SD)</b>	<b>2011-2012 (mean ± SD)</b>	<b>2012-2013 (mean ± SD)</b>	<b>2013-2014 (mean ± SD)</b>
<b>I understand my individual responsibilities for this course/clerkship.</b>	4.2 ± 0.9	4.4 ± 0.7	4.3 ± 0.9	4.3 ± 0.8
<b>This course/clerkship is well organized.</b>	4.0 ± 1.0	4.2 ± 0.9	4.1 ± 0.9	4.1 ± 1.0
<b>This course/clerkship provides me with clear goals and objectives.</b>	4.2 ± 0.9	4.3 ± 0.7	4.2 ± 0.9	4.2 ± 0.9
<b>The course material and lectures match the goals and objectives of this course/clerkship.</b>	4.3 ± 0.7	4.4 ± 0.7	4.3 ± 0.8	4.4 ± 0.7
<b>The required textbook(s) or other reading material help me to understand the topics presented in this course/clerkship.</b>	4.0 ± 0.9	4.2 ± 0.9	3.9 ± 1.1	4.1 ± 1.0
<b>Rate the overall quality of this course/clerkship.</b>	4.1 ± 0.9	4.2 ± 0.8	4.1 ± 1.0	4.2 ± 0.8
<b>This course/clerkship clearly incorporates concepts and techniques of assessing and improving the management and care of patients.</b>	4.2 ± 0.9	4.26 ± 0.8	4.1 ± 1.0	4.2 ± 0.9
<b>The clinical correlations are helpful to integrate basic science concepts into clinical practice.</b>	4.2 ± 0.9	4.4 ± 0.8	4.2 ± 0.9	4.4 ± 0.8
<b>MS 2</b>	<b>2010-2011 (mean ± SD)</b>	<b>2011-2012 (mean ± SD)</b>	<b>2012-2013 (mean ± SD)</b>	<b>2013-2014 (mean ± SD)</b>
<b>I understand my individual responsibilities for this course/clerkship.</b>	4.2 ± 0.9	4.4 ± 0.8	4.4 ± 0.8	4.2 ± 0.9
<b>This course/clerkship is well organized.</b>	4.0 ± 1.0	4.2 ± 0.9	4.3 ± 0.8	4.1 ± 1.1
<b>This course/clerkship provides me with clear goals and objectives.</b>	4.2 ± 1.0	4.3 ± 0.9	4.4 ± 0.8	4.2 ± 1.0
<b>The course material and lectures match the goals and objectives of this course/clerkship.</b>	4.3 ± 0.8	4.4 ± 0.7	4.4 ± 0.7	4.2 ± 0.9
<b>The required textbook(s) or other reading material help me to understand the topics presented in this course/clerkship.</b>	4.1 ± 1.1	4.2 ± 0.9	4.3 ± 0.8	4.1 ± 1.0
<b>Rate the overall quality of this course/clerkship.</b>	4.1 ± 1.0	4.3 ± 0.8	4.3 ± 0.8	4.1 ± 1.0
<b>This course/clerkship clearly incorporates concepts and techniques of assessing and improving the management and care of patients.</b>	4.2 ± 0.8	4.4 ± 0.8	4.4 ± 0.8	4.2 ± 0.9
<b>The clinical correlations are helpful to integrate basic science concepts into clinical practice.</b>	4.3 ± 0.8	4.4 ± 0.7	4.4 ± 0.8	4.2 ± 1.0

E. MS-19 (Career Counseling)

1. Provide data from the 2014 AAMC GQ on student satisfaction with career planning services. Include national comparison data.

<b>Information from the 2014 GQ Concerning Career Planning Services</b>					
	<b>Very Dissatisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>Neutral (%)</b>	<b>Satisfied (%)</b>	<b>Very Satisfied (%)</b>
<b>Career preference assessment services</b>					
<b>JCESOM 2012 (N=44)</b>	11.4	13.6	29.5	34.1	11.4
<b>JCESOM 2013 (N=53)</b>	3.8	17.0	17.0	34.0	28.3
<b>JCESOM 2014</b>	0.0	4.3	26.1	47.8	21.7
<b>All schools (2014)</b>	4.1	10.7	21.2	40.2	23.8
<b>Information about alternative medical careers</b>					
<b>JCESOM 2012 (N=45)</b>	15.6	31.1	15.6	31.1	6.7
<b>JCESOM 2013 (N=47)</b>	6.4	14.9	21.3	31.9	25.5
<b>JCESOM 2014</b>	4.9	31.7	26.8	24.4	12.2
<b>All schools (2014)</b>	8.4	23.5	26.3	25.2	16.7
<b>Information about specialties</b>					
<b>JCESOM 2012 (N=50)</b>	8.0	10.0	28.0	44.0	10.0
<b>JCESOM 2013 (N=56)</b>	3.6	5.4	17.9	41.1	32.1
<b>JCESOM 2014</b>	0.0	6.5	13.0	50.0	30.4
<b>All schools (2014)</b>	3.1	9.1	17.6	43.8	26.4
<b>Overall satisfaction with career planning services</b>					
<b>JCESOM 2012 (N=51)</b>	9.8	13.7	31.4	37.3	7.8
<b>JCESOM 2013 (N=54)</b>	3.7	9.3	18.5	40.7	27.8
<b>JCESOM 2014</b>	0.0	4.3	23.9	47.8	23.9
<b>All schools (2014)</b>	3.9	10.4	20.7	42.4	22.7

2. From an internal survey of medical students in all classes, provide data, by class, on student satisfaction with the process of and resources for career advising (Part 1: Satisfaction)

<b>2014 Internal Survey By Class of Student Satisfaction with Career Advising</b>					
	<b>Very Dissatisfied (%)</b>	<b>Dissatisfied (%)</b>	<b>Neutral (%)</b>	<b>Satisfied (%)</b>	<b>Very Satisfied (%)</b>
<b>Career preference assessment services</b>					
MS-1 (n=54)	2.0	0.0	13.7	52.9	31.4
MS-2 (n=42)	0.0	2.4	29.3	46.3	22.0
MS-3 (n=43)	4.9	2.4	12.2	61.0	19.5
MS-4 (n=41)	2.5	10.0	7.5	57.5	22.5
<b>Medical Career Development Sessions</b>					
MS-1 (n=58)	1.7	3.4	22.4	29.3	43.1
MS-2 (n=59)	3.4	1.7	33.9	45.8	15.3
MS-3 (n=43)	0.0	2.3	11.6	62.8	23.3
MS-4 (n=43)	5.3	10.5	39.5	36.8	7.9
<b>Information about specialties</b>					
MS-1 (n=58)	3.4	10.3	10.3	50.0	25.9
MS-2 (n=59)	1.7	11.9	27.1	44.1	15.3
MS-3 (n=43)	0.0	4.7	11.6	58.1	25.6
MS-4 (n=43)	5.3	5.3	28.9	50.0	10.5
<b>Information about alternative medical careers</b>					
MS-1 (n=58)	0.0	8.6	50.0	34.5	6.9
MS-2 (n=59)	1.7	11.9	52.5	18.6	15.3
MS-3 (n=43)	2.3	16.3	48.8	30.2	2.3
MS-4 (n=43)	7.9	15.8	63.2	10.5	2.6
<b>Marshall Mentor Advising Program</b>					
MS-1 (n=58)	0.0	3.4	10.3	37.9	48.3
MS-2 (n=59)	0.0	6.8	15.3	35.6	42.4
MS-3 (n=43)	4.7	7.0	16.3	48.8	23.3
MS-4 (n=43)	7.9	13.2	21.2	36.8	21.1
<b>Overall Satisfaction with career planning services</b>					
MS-1 (n=58)	0.0	1.7	22.4	51.7	24.1
MS-2 (n=59)	0.0	3.4	39.0	37.3	20.3
MS-3 (n=43)	0.0	0.0	16.3	67.4	16.3
MS-4 (n=43)	0.0	7.9	34.2	50.0	7.9

3. From an internal survey of medical students in all classes, provide data, by class, on student satisfaction with the process of and resources for career advising (Part 2: Usefulness)

<b>2014 Internal Survey By Class of Perceived Usefulness of Career Advising Activities</b>					
	<b>Did not use (%)</b>	<b>Not useful (%)</b>	<b>Somewhat useful (%)</b>	<b>Moderately Useful (%)</b>	<b>Very Useful (%)</b>
<b>Advising/Mentoring</b>					
MS-1 (n=58)	1.7	1.7	31.0	19.0	46.6
MS-2 (n=59)	0.0	5.1	33.9	22.0	39.0
MS-3 (n=43)	0.0	9.3	23.3	32.6	34.9
MS-4 (n=43)	2.6	21.1	28.9	26.3	21.1
<b>Careers in Medicine website</b>					
MS-1 (n=58)	13.8	0.0	22.4	22.4	41.4
MS-2 (n=59)	20.3	3.4	30.5	23.7	22.0
MS-3 (n=43)	7.0	2.3	14.0	27.9	48.8
MS-4 (n=43)	10.5	13.2	36.8	23.7	15.8
<b>Specialty interest groups panels/presentations</b>					
MS-1 (n=58)	8.6	0.0	20.7	27.6	43.1
MS-2 (n=59)	6.8	1.7	22.0	30.5	39.0
MS-3 (n=43)	4.7	2.3	14.0	32.6	46.5
MS-4 (n=43)	13.2	5.3	28.9	34.2	18.4
<b>Career conversations seminars</b>					
MS-1 (n=58)	3.4	1.7	12.1	37.9	44.8
MS-2 (n=59)	0.0	0.0	20.3	42.4	37.3
MS-3 (n=43)	0.0	2.3	9.3	58.1	30.2
MS-4 (n=43)	5.3	13.2	23.7	31.6	26.3

On August 1, 2014, a new individual accepted the position as Dean of Student Affairs. This individual has completely embraced the “Careers in Medicine” program offered by the AAMC which was very underutilized by her predecessor. The students have been much more actively involved in their career planning. They participate in the workshops and show up for “Specialty Speed Dating” on a regular basis. We are certain the increased use of “Careers in Medicine” will only continue to improve the above percentages.

F. MS-24 (student educational debt)

1. Provide a copy of the most recent LCME Part 1-B Financial Aid Questionnaire.

**SEE APPENDIX 8**

2. Complete the following table for the indicated academic years.

First-year tuition and fees	AY 2012-2013	AY 2013-2014	AY 2014-2015
<b>In-state students</b>	\$20,080	\$20,080	\$20,080
<b>Out-of-state students</b>	\$47,670	\$47,670	\$47,670
<b>Average medical school debt of graduating students with debt</b>	\$172,324	\$152,487	\$160,736*
<b>Average total educational debt of graduating students with debt</b>	\$179,927	\$165,677	\$175,044*
<b>Percent of students with medical school debt over \$250,000</b>	2.8% (total students =290)	4.2% (total students =288)	4.0 % * (total students =297)
<b>Percent of enrolled students receiving institutional scholarship support</b>	50% (146/290)	49% (140/288)	50%* (149/297)
<b>Average scholarship support to students receiving institutional scholarships</b>	\$13,531	\$14,347	\$13,729*

\* There will be an additional disbursement from the Edwards Foundation Trust in January 2015 which will be directed entirely towards further reducing student indebtedness. This disbursement is expected to be as much as another \$1.2 million. However, since we don't know the exact amount of this disbursement, the numbers presented in 2014-2015 are PRIOR to this allocation.

In the past, a decision was made to increase the cost of living in regards to the student budget. Unfortunately this cost of living adjustment was calculated incorrectly and resulted in our students having a cost of living budget equivalent to students living in larger cities. Once this issues was recognized we began lowering the cost of living budget gradually each year to get the budget down to a figure much more realistic for a student living in Huntington, WV. To offset some of this financial burden we have continued our efforts aimed a increasing scholarship availability for our students. We have also frozen tuition for the school of medicine for the 2014-15 and 2015-2016 academic years.

3. Compare the amount of institutional scholarship support available during the 2014-2015 academic year with that available at the time of the 2011 full survey visit and the 2013 limited survey visit. Describe steps currently being taken to increase scholarship funding.

**MS-24 Table 3- Total Institutional Scholarship 2010-2013**

<sup>4</sup> <sup>5</sup> Class	Waiver	Scholarship	Class Total
<sup>6</sup> <sup>7</sup> 2010-2011	\$228,683	\$232,210	\$460,893
2011-2012	\$450,407	\$373,208	\$823,615
2012-2013	\$703,917	\$1,270,300	\$1,972,217
2013-2014	\$807,855	\$1,111,433	\$1,919,288
2014-2015	\$817,358	\$1,228,295*	\$2,045,683*

\*These numbers will increase substantially with the disbursement of the Edwards Foundation Trust in January 2015.

4. Provide data from the 2014 AAMC GQ on student satisfaction with financial aid and debt counseling services. Include national comparison data.

Information from the 2014 GQ Concerning Financial Aid and Debt Counseling					
	Very Dis-Satisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very Satisfied (%)
<b>Financial aid administrative services</b>					
<b>JCESOM 2012</b>	4.4	4.4	22.2	44.4	24.4
<b>JCESOM 2013</b>	1.8	0	3.6	47.3	47.3
<b>JCESOM 2014</b>	4.5	4.5	9.1	40.9	40.9
<b>All schools (2014)</b>	3.6	7.0	14.3	36.5	38.6
<b>Overall educational debt management counseling</b>					
<b>JCESOM 2012</b>	4.7	14.0	18.6	46.5	16.3
<b>JCESOM 2013</b>	3.6	3.6	3.6	46.4	42.9
<b>JCESOM 2014</b>	0.0	0.0	17.1	41.5	41.5
<b>All schools (2014)</b>	2.8	8.3	16.5	40.2	32.3

During the probationary process, we hired an individual whose task it was to improve educational debt management. This individual has worked diligently to improve the budgets, provide debt management workshops, and function as a primary resource for all financial aid issues. It seems this strategy has been beneficial. For the last two years more than 80% of students have been satisfied or very satisfied on the graduate questionnaire. In 2014, we had no student answering dissatisfied or very dissatisfied on the graduate questionnaire. Lastly, we have remained above the national average for satisfied and very satisfied with financial aid administrative services.



G. FA-5 (scholarly productivity)

1. Provide the following data, by department (basic science and clinical), for the two most recent years (academic or calendar years, whichever is used in the medical school's accounting of faculty scholarly efforts).

Department	Amount of funded research dollars		Number of peer-reviewed publications/presentations			
	2012	2013	2012		2013	
			Publications	Presentations	Publications	Presentations
Anatomy and Pathology	\$20,000	0	7	14	11	4
Biochemistry and Microbiology	\$584,556	\$995,658	22	24	19	8
Family Medicine	\$1,971,891	\$2,063,727	6	11	10	7
Internal Medicine	\$199,991	\$769,303	42	31	39	28
Obstetrics and Gynecology	\$70,145	\$88,579	4	4	5	0
Pediatrics	\$38,164	\$183,906	9	11	13	8
Pharmacology, Physiology, and Toxicology	\$4,522,840	\$3,509,540	17	32	16	21
Psychiatry and Neuroscience	\$64,940	\$22,587	8	2	3	7
Surgery, Orthopedics, and Ophthalmology	0	\$293,004	23	16	25	26
<b>Total</b>	<b>\$7,472,527</b>	<b>\$7,926,304</b>	<b>138</b>	<b>145</b>	<b>141</b>	<b>109</b>

\*When faculty from multiple departments authored paper, only one department was credited.

NIH Funding (Awarded):      2012 = \$4,442,792      2013 = \$4,065,382      2014 = \$5,213,707

ALL Peer Reviewed Funding: 2012 = \$7,472,527      2013 = \$7,926,304      2014 = \$9,841,674

\*Note Multi-PI funding only credited to one Department

As demonstrated in the table, our efforts at improving our scholarly activity have been maintained. Especially when one recognizes that at the time of the 2011 full site visit we had three departments with no publications. We expect this area to continue to improve. We are currently interview for a new chair of biochemistry that should only further drive our efforts at improving scholarly activity at JCESOM (vida infra).

Please note that the research dollars are handled by 2 corporations within our University. All federal and foundation monies are managed by our Marshall University Research Corporation (MURC) whereas clinical trial dollars are handled by our physician corporation, Marshall Health. For the basic science departments, all of the funds resided within MURC but for the clinical departments, these dollars resided both within MURC and Marshall Health.

2. Describe the status of the school's plan to use the projected interest (4.5% x \$7 million or approximately \$300,000 per year) from new research endowments to support pilot clinical and translational grants.

All the projected interest is committed to support translational research and pilot projects. Last year we spent about \$400K on studies coordinated by Nader Abraham, about \$200K on shortfall coverage of the translational research center and startup packages for new translational scientists either entirely "owned" by the SOM or collaboratively with MIIR (e.g., Uma Sundaram, Zijian Xie, Sandrine Pierre) totaling more than \$500K in addition to the \$250K committed to the seed grant program. In this coming year, we will continue these expenditures as we are in the process of developing a new COBRE application in 2016 and ultimately a CTSA application. Also, we hope to recruit a new Biochemistry/Microbiology chair who will certainly bring additional recruits with them. We are currently negotiating with 2 final candidates whose proposed recruitment packages range from 5-7M (over 3-5 years). As these proposed expenditures (certainly the Biochemistry/Microbiology chair recruitment) clearly exceed the margin that our school enjoys, we plan to dip into building reserves (which fortunately are large enough to accommodate either startup request) as well as develop new sources of revenue from clinical enterprises. Although economically challenging, we believe that we can identify sufficient funds to shore up what we acknowledge to be intellectual infrastructure gaps in our school.

*H. ER-6 (resources for clinical instruction)*

1. Provide the results of an internal survey of 3<sup>rd</sup> and 4<sup>th</sup> year students (by required clerkship/sub-internship and clinical site) on satisfaction, with the following areas:
  - a. Adequacy of the number of patients available

<b>Clerkship</b>	<b>Strongly Disagree %</b>	<b>Disagree %</b>	<b>Neutral %</b>	<b>Agree %</b>	<b>Strongly Agree %</b>
<b>Family</b>	1.4	0.0	1.4	21.4	75.7
<b>Internal</b>	2.9	2.9	0.0	36.2	58.0
<b>OB/GYN</b>	0.0	5.8	2.9	40.6	50.7
<b>Peds</b>	1.4	2.8	0.0	25.4	70.4
<b>Psych/Neuro</b>	3.1	7.7	9.2	35.4	47.7
<b>Surgery</b>	2.9	10.1	10.1	46.4	42.0

**(MS-IV Sub-I's/ICU)**

<b>Sub-Internship</b>	<b>Strongly Disagree %</b>	<b>Disagree %</b>	<b>Neutral %</b>	<b>Agree %</b>	<b>Strongly Agree %</b>
<b>Emergency</b>	2.9	2.9	2.9	35.3	55.9
<b>Family Sub-I</b>	0.0	0.0	0.0	33.3	66.7
<b>Internal Sub-I</b>	0.0	0.0	0.0	16.7	83.3
<b>Obstetrics Sub-I</b>	0.0	0.0	0.0	20.0	80.0
<b>Orthopedics Sub-I</b>	0.0	25.0	0.0	25.0	50.0
<b>Pediatrics Sub-I</b>	0.0	0.0	0.0	50.0	50.0
<b>Psychiatry Sub-I</b>	0.0	0.0	0.0	16.7	83.3
<b>Surgery Sub-I</b>	0.0	0.0	0.0	28.6	71.4
<b>Medical ICU</b>	0.0	0.0	33.3	33.3	33.3
<b>Neonatal ICU</b>	0.0	7.1	7.1	28.6	57.1
<b>Pediatric ICU</b>	0.0	0.0	0.0	44.4	55.6
<b>Surgery ICU</b>	0.0	0.0	0.0	36.3	63.6

b. Adequacy of the mix of patients available

**(MS-III Clerkships)**

<b>Clerkship</b>	<b>Strongly Disagree %</b>	<b>Disagree %</b>	<b>Neutral %</b>	<b>Agree %</b>	<b>Strongly Agree %</b>
<b>Family</b>	0.0	4.3	8.7	29.0	58.0
<b>Internal</b>	3.0	3.0	6.0	41.8	46.3
<b>OB/GYN</b>	2.9	1.5	7.3	38.2	50.0
<b>Peds</b>	1.4	1.4	1.4	42.9	52.9
<b>Psych/Neuro</b>	0.0	9.0	11.9	34.3	43.5
<b>Surgery</b>	1.4	14.5	7.2	37.7	39.1

**(MS-IV Sub-I's/ICU)**

<b>Sub-Internship</b>	<b>Strongly Disagree %</b>	<b>Disagree %</b>	<b>Neutral %</b>	<b>Agree %</b>	<b>Strongly Agree %</b>
<b>Emergency</b>	2.9	2.9	2.9	35.3	55.9
<b>Family Sub-I</b>	0.0	0.0	0.0	33.3	66.7
<b>Internal Sub-I</b>	0.0	0.0	0.0	28.6	71.4
<b>Obstetrics Sub-I</b>	0.0	0.0	0.0	25.0	75.0
<b>Orthopedics Sub-I</b>	0.0	25.0	0.0	25.0	50.0
<b>Pediatrics Sub-I</b>	0.0	0.0	0.0	25.0	75.0
<b>Psychiatry Sub-I</b>	0.0	0.0	0.0	33.3	66.7
<b>Surgery Sub-I</b>	0.0	0.0	14.3	0.0	85.7
<b>Medical ICU</b>	0.0	16.7	16.7	33.3	33.3
<b>Neonatal ICU</b>	0.0	7.1	7.1	57.1	42.9
<b>Pediatric ICU</b>	0.0	0.0	0.0	33.3	66.7
<b>Surgery ICU</b>	0.0	0.0	18.2	36.4	45.5

c. Overall quality of the clerkship

**(MS-III Clerkships)**

<b>Clerkship</b>	<b>Poor %</b>	<b>Fair %</b>	<b>Good %</b>	<b>Excellent %</b>
<b>Family</b>	0.0	1.4	24.3	74.3
<b>Internal</b>	7.4	10.3	41.2	41.2
<b>OB/GYN</b>	2.9	2.9	33.3	60.1
<b>Peds</b>	0.0	1.4	12.9	85.7
<b>Psych/Neuro</b>	0.0	6.0	36.4	57.6
<b>Surgery</b>	20.0	31.4	27.1	21.5

d. Usefulness of mid-clerkship feedback

(MS-III Clerkships)

Clerkship	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %
Family	1.5	5.9	19.1	36.8	36.8
Internal	3.0	15.1	18.2	40.9	22.7
OB/GYN	1.5	10.4	23.9	29.9	34.2
Peds	0.0	5.8	18.8	31.9	43.5
Psych/Neuro	0.0	9.2	16.9	40.0	33.9
Surgery	11.8	16.2	27.9	22.0	22.0

(MS-IV Sub-I's/ICU)

Sub-Internship	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %
Emergency	0.0	14.3	33.3	23.9	28.6
Family Sub-I	0.0	0.0	20.0	20.0	60.0
Internal Sub-I	0.0	0.0	0.0	60.0	40.0
Obstetrics Sub-I	0.0	0.0	50.0	0.0	50.0
Orthopedics Sub-I	0.0	0.0	66.7	0.0	33.3
Pediatrics Sub-I	0.0	0.0	16.7	33.3	50.0
Psychiatry Sub-I	0.0	0.0	0.0	16.7	83.3
Surgery Sub-I	0.0	0.0	50.0	0.0	50.0
Medical ICU	0.0	0.0	25.0	50.0	25.0
Neonatal ICU	0.0	0.0	33.3	33.3	33.3
Pediatric ICU	0.0	0.0	57.1	0.0	42.9
Surgery ICU	0.0	0.0	50.0	12.5	37.5

e. Timeliness of final grade reporting

(MS-III Clerkships)

Clerkship	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %
Family	0.0	1.5	1.5	37.9	59.1
Internal	0.0	1.6	3.2	46.8	48.4
OB/GYN	3.2	3.2	4.8	48.4	40.3
Peds	4.7	4.7	7.8	43.7	39.1
Psych/Neuro	1.7	1.7	5.1	45.8	45.8
Surgery	0.0	9.1	6.1	39.4	45.5

(MS-IV Sub-I's/ICU)

Sub-Internship	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %
Emergency	0.0	0.0	7.1	32.1	60.7
Family Sub-I	0.0	0.0	0.0	50.0	50.0
Internal Sub-I	0.0	0.0	16.7	16.7	66.7
Obstetrics Sub-I	0.0	0.0	0.0	25.0	75.0
Orthopedics Sub-I	0.0	0.0	0.0	33.3	66.7
Pediatrics Sub-I	0.0	0.0	0.0	14.3	85.7
Surgery Sub-I	0.0	0.0	0.0	33.3	66.7
Medical ICU	0.0	0.0	0.0	60.0	40.0
Neonatal ICU	0.0	0.0	0.0	44.4	55.6
Pediatric ICU	0.0	0.0	0.0	25.0	75.0
Surgery ICU	0.0	10.0	0.0	20.0	70.0

f. Quality of study space

	<b>Very Dissatisfied %</b>	<b>Dissatisfied %</b>	<b>Neutral %</b>	<b>Satisfied %</b>	<b>Very Satisfied %</b>
<b>All Classes</b>	2.0	1.0	35.9	30.3	30.8

g. Quality of supervision by faculty

<b>Department</b>	<b>Poor %</b>	<b>Fair %</b>	<b>Good %</b>	<b>Excellent %</b>
<b>Emergency</b>	5.6	8.3	30.6	55.5
<b>Family</b>	0.0	0.0	16.4	83.6
<b>Internal</b>	7.5	11.3	41.5	39.6
<b>Neurology</b>	0.0	1.9	9.6	88.5
<b>OB/GYN</b>	0.0	5.5	41.8	52.7
<b>Orthopedics</b>	12.0	18.0	38.0	32.0
<b>Peds</b>	0.0	5.0	21.6	84.3
<b>Psychiatry</b>	0.0	7.8	23.5	68.6
<b>Surgery</b>	16.7	27.3	25.7	15.0

h. Quality of supervision by residents

<b>Department</b>	<b>Poor %</b>	<b>Fair %</b>	<b>Good %</b>	<b>Excellent %</b>
<b>Family</b>	0.0	0.0	14.1	85.9
<b>Internal</b>	3.2	6.5	38.7	51.6
<b>OB/GYN</b>	6.3	7.9	34.9	50.8
<b>Orthopedics</b>	10.3	13.8	27.6	48.3
<b>Peds</b>	0.0	4.5	16.7	78.8
<b>Surgery</b>	10.9	34.4	31.3	23.4

i. Quality of clinical sites

<b>Site</b>	<b>Poor %</b>	<b>Fair %</b>	<b>Good %</b>	<b>Excellent %</b>
<b>Cabell Huntington Hospital</b>	0.0	0.0	41.7	58.3
<b>Huntington Internal Medicine Group</b>	0.0	0.0	30.0	70.0
<b>Marshall Health</b>	0.0	0.0	31.4	68.6
<b>Mildred Mitchell-Bateman Hospital</b>	3.1	6.3	43.8	46.9
<b>Pretera</b>	12.0	28.0	32.0	28.0
<b>Riverpark</b>	0.0	0.0	25.0	75.0
<b>Rural Clinic Placements</b>	0.0	0.0	36.7	63.3
<b>St. Mary's</b>	0.0	11.1	31.1	57.8
<b>VA Hospital</b>	3.0	18.2	43.9	34.8

2. Describe efforts to address any deficiencies with clinical sites identified by faculty and/or students.

### **Internal Medicine**

The Internal Medicine clerkship was rated as poor to fair by 17.7% of the student respondents. This prompted the Office of Medical Education to take action. A thorough review of all faculty and rotation specific evaluations was completed. A focus group was carried out with 12 students who had completed the rotation to further identify areas for potential improvement on that rotation. The Vice Dean of Medical Education and the Chair of the Curriculum Committee met with the clerkship director and potential areas of improvement were discussed. The major issues identified were the quality of the resident teaching of the medical students, relatively weak student specific lecture schedule, and the specialty specific weeks of the rotation where the students had a different attending each day that limited the student/attending interactions.

In conjunction with the Clerkship director and Chair of the Curriculum committee, an action plan was developed. The residents would receive a more intense “Residents as Teachers” curriculum. There will be a more robust set of lectures developed and their delivery will be made a priority because in the past they were frequently postponed or rescheduled and it became unclear to students when lectures were going to happen. Finally, the Clerkship Director is looking at a way to modify the student schedules so they can be assigned with more primary care physicians to provide stability and promote the teacher-student relationship.

### **Surgery**

The Surgery Clerkship was rated poor to fair by 51.4% of the student respondents. Once again this was a call to action for the Office of Medical Education. A thorough review of all faculty and rotation specific evaluations was completed. A focus group of 10 students who had already completed the rotation was conducted to further delineate the areas for potential improvement. The Dean and Vice Dean of Medical Education met with the chair and clerkship director to discuss potential areas of improvement. The major issue identified for this clerkship was that the students did not perceive that they were a valued member of the team. They frequently felt like they were in the way and the quality of teaching was considered poor relative to the other required clerkships.

To address these concerns several changes were implemented. A new Clerkship Director was identified and sent to the national meeting of the Association for Surgical Education. A robust faculty development plan with an emphasis on medical student education was initiated. And, thirdly, the residents underwent a thorough Resident as Teachers program aimed at providing them the knowledge base and skill set to allow them to be productive clinical educators.

### **Orthopedic Surgery**

The biggest concern regarding the findings for Orthopedic Surgery was the quality of the supervision by the residents. It was believed that this was the result of limited contact time between the students and residents. Students only spend one week of their eight-week surgery rotation on Orthopedics. The Orthopedic Surgery Residents received feedback on their performance and they suggested some changes to the student rotation schedule that would allow the student to spend the entire week with the same resident. They felt this would allow them to develop a better teaching relationship with the students.

The orthopedic attendings have really stepped up to be role models for the residents. Dr. Felix H. Cheung, associate professor in the department of orthopedics, department vice chair of operations and finance, and chief of the division of orthopedic oncology at Marshall University’s Joan C. Edwards School of Medicine, and an orthopedic oncologist at the Edwards Comprehensive Cancer Center was awarded the 2014 National Golden Apple Award for Teaching Excellence by the American Medical Student Association (AMSA).

## Psychiatry

The biggest weakness for Psychiatry was the off-site learning experiences – by far the most consistent complaint. Multiple volunteer faculty were utilized for teaching due to the small size of core faculty (at one time 2 psychiatrists). Of note, both Presteria and the VA saw turnover in faculty, which at times complicated placements. Finally, myriad other challenges presented themselves such as elimination of programs, changes to scheduling of clinical site activities, and high variation in the willingness of volunteer faculty to take students.

In July of 2013, Dr. Kelly Melvin was selected to be the Psychiatry Clerkship Director. Dr. Melvin instituted a number of changes to the rotation including changes to the grading scheme, the addition of Neurology, delivered in conjunction with the Psych rotation, and reducing the number of off-site rotations. In January of 2014, Dr. Suzanne Holroyd began her tenure as the new chair for the Department of Psychiatry. Her efforts only added to what Dr. Melvin had already started. She has managed to recruit four additional faculty members that will further reduce their dependence of off-site educational experiences. The experience at Presteria, which received the worst ratings, is being phased out as a training site.

Finally, the Department of Psychiatry recently received approval from the ACGME for a new Psychiatric Residency program, which will take its first residents in July 2015. We have every reason to believe that the presence of residents will only improve the quality of teaching and the learning environment for our students on the Psychiatry Rotation.

## APPENDIX 1: ACTIVE LEARNING AND INDEPENDENT STUDY

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Congenital Malformations of the Nervous System	CBL/I	1.0	1.0				X	X
Cerebrovascular Disease with Clinical Correlation	CBL/I	1.0	1.0				X	X
Mini Psych Evaluation-Clinical Skills	CBL/I	2.0	2.0	X	X		X	X
Central Nervous System Infection	CBL/I	3.0	3.0	X	X	X	X	X
Clinical Case-Child	CBL/I	2.0	2.0	X	X	X	X	X
Central Nervous System Tumors	CBL/I	1.0	1.0				X	X
Seizure Disorders	CBL/I	1.0	1.0				X	X
Clinical Case-Adult	CBL/I	2.0	2.0	X	X	X	X	X
Head Injury	Discussion-LG	2.0	2.0		X		X	X
Epidemiology	Discussion-SG	2.0	2.0	X	X		X	
Ethical Issues	Discussion-SG	2.0	2.0	X	X		X	
Headache	Discussion-SG	4.0	3.5	X	X	X	X	X
Neuro Jeopardy	Games	1.0	1.0	X				X
Peripheral Nervous System-Review	Indep. Learning	1.0	1.0	X	X			
Concepts of Neurophysiology & Neuropharmacology	Indep. Learning	1.0	1.0	X	X			X
Intro to the Psychiatric Interview	Indep. Learning	2.0	2.0	X	X			
Sexual Disorders	Indep.	2.0	2.0	X	X	X	X	X



	Learning							
Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Culturally Bound Syndromes	Indep. Learning	2.0	2.0	X	X	X	X	X
Research a Sleep Hygiene Plan	Indep. Learning	2.0	2.0	X	X	X	X	X
Eating Disorders	Indep. Learning	2.0	2.0	X	X	X	X	X
Alcoholism	Indep. Learning	1.0	1.0	X	X	X	X	X
Review Peripheral Nervous System	PBL	2.0	2.0	X	X	X	X	X

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Risk Factors for CV, Respiratory & Renal Diseases	Small Grp Discussion	1	2	X	X	X	X	
Review of Risk Factors for CV, Respiratory & Renal Diseases	Large Grp Discussion	1	0				X	X
Cardiovascular Exam	Ind Learn	1	2	X	X	X		
Hypertension Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Hypertension Cases	Large Grp Discussion	1	0				X	X
Dyslipidemia Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Dyslipidemia Cases	Large Grp Discussion	1	0				X	X
DVT and PE – Case Presentations	Cased Based Inst	2	2	X	X			
Myocardial Ischemia – Case Presentations	Cased Based Inst	2	2	X	X			
Myocardial Ischemia Cases	Small Grp Discussion	2	3	X	X	X	X	
Discussion of Myocardial Ischemia Cases	Large Grp Discussion	1	0				X	X
Heart Failure Cases	Small Grp Discussion	2	2	X	X	X	X	

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Discussion of Heart Failure Cases	Large Grp Discussion	1	0				X	X
CV Congenital Disorders	Cased Based Inst	1.5	0	X	X			
Research Theme - Evidence-Based Medicine "Point/Counterpoint"	Small Grp Discussion	1	1	X	X	X	X	
Research Theme - Evidence-Based Medicine "Point/Counterpoint"	Large Grp Discussion	1	0				X	X
Dysrhythmia Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Dysrhythmia Cases	Large Grp Discussion	1	0				X	X
Ethics Theme - Managed Care & Patient Advocacy	Small Grp Discussion	1	0	X	X	X	X	
Ethics Theme - Managed Care & Patient Advocacy	Large Grp Discussion	1	0				X	X
Pulmonary Embryology and Congenital and Newborn Respiratory Diseases	Cased Based Inst	2	0	X	X			
Pediatric Respiratory Disease Presentations	Cased Based Inst	1	0	X	X			

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Acute Respiratory Failure	Cased Based Inst	2	0	X	X			
Upper Respiratory Infection Cases	Small Grp Discussion	2	3	X	X	X	X	
Discussion of Upper Respiratory Infection Cases	Large Grp Discussion	1	0				X	X
Histamine & Antihistamines	Ind Learn	0	1	X	X	X		
Pneumonia Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Pneumonia Cases	Large Grp Discussion	1	0				X	X
Pediatric & Adult Asthma Cases	Small Grp Discussion	2	3	X	X	X	X	
Discussion of Pediatric & Adult Asthma Cases	Large Grp Discussion	1	0				X	X
COPD Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of COPD Cases	Large Grp Discussion	1	0				X	X
Pediatric Neck Masses	Cased Based Inst	2	0	X	X			
Head & Neck Neoplasms	Cased Based Inst	1	0	X	X			

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Adult Pulmonary Neoplasm Presentations	Cased Based Inst	1	0	X	X			
Renal Vascular & Glomerular Disease Cases	Small Grp Discussion	1	2	X	X	X	X	
Discussion of Renal Vascular & Glomerular Disease Cases	Large Grp Discussion	1	0				X	X
Acute Renal Failure	Cased Based Inst	1	0	X	X			
Chronic Renal Failure	Cased Based Inst	1	0	X	X			
Acute & Chronic Renal Failure Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Acute & Chronic Renal Failure Cases	Large Grp Discussion	1	0				X	X
Electrolyte & Acid Base Disorder Cases	Small Grp Discussion	2	2	X	X	X	X	
Discussion of Electrolyte & Acid Base Disorder Cases	Large Grp Discussion	1	0				X	X

Session	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Case discussions 3 2-session cases, student work between, one single session case	7	1.5 h per case	X	X	X	X	X
In-class case (PEM)	2	In-class	X	X	X	X	X
Nutrition modules	-	4 h	X	X	X	X	X
Nutrition project presentations	2	2	X	X	X	X	X
Movie forum: Bad Blood	4	- (in class)		X	X	X	X
Class forum – inquiry	3	(In class)	X	X	X	X	
Histology TBLs (3)	3	1 h	X	X		X	X
Histology Labs (3)	3	(as above)	X	X		X	X
Anticoagulant exercise	2	(In class)	X	X	X	X	X
Independent learning (self study; genetics problems; histo orientation, nutrition)	-	8	X	X			X
Peer teaching: Amino acids in metabolism	1.5	1	X	X	X	X	X
Peer Teaching: Differential Diagnosis of Anemia	1	1	X	X	X	X	X
Integration sessions/ large group discussions (2- 2h; regulation of gene expression, diabetes vs. metabolic syndrome)	4	-	X	X	X	X	X
Integration session (causes of anemia, small group)	2	-	X	X	X	X	X
Obesity Conference	4	-		X	X		
Theme-based large group discussions (Behavior Med, Research)	4	-	X	X	X	X	

Stem Cell Exercise		2	2	X	X	X	X	X
Session		Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Demonstrations (genetics and bioenergetics problems)		4	-		X			
Session		Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
4 Histology Labs		4	2h/lab-					
4 Histology TBL		4	TBL	X	X	X	X	X
14 Gross Anatomy Labs		42.5	2h/lab					
Spinal lesions problem solving - Lg group/IL		2	4h	X	X			X
Ion channels problem solving – Lg group/IL		1	2	X	X			X
Muscle problem solving/IL		1	2	X	X			X
Nerve problem solving – Lg group/IL		1	2	X	X			X
Pain problem solving – Lg group/IL		1	2	X	X			X
Synapse in Psychiatry and Neurology – Lg group discussion/IL		1	2	X	X	X	X	X
Study Design		2	0			X		

Session		Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
5 histology labs		8	2h/lab					
3 anatomy labs		9.5	2h/lab					
3 histology TBL		3	2 h/lab	X	X	X	X	X
Shock – large group discussion		1	2h	X	X		X	X
Obesity in CV disease – large group discussion		1	2h	X	X	X	X	X
Cardiac Failure I – independent learning		1	2h	X	X			X
Cardiac Failure II – large group discussion		1	2h	X	X	X	X	X
Diuretics – large group discussion		1	2h	X	X		X	X
Clinical relevance of excretory system – lg group		1	2h	X	X		X	X
COPD – independent learning		1	2h	X	X	X	X	X
Renal CBL		3	2h/CBL	X	X		X	



Session	Ped	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Case-Based Problem Solving - Intracranial Hemorrhage	Large Group Discussion	2.0	1.0	X	X		X	
Case-Based Problem Solving - Lesions of Brainstem	Large Group Discussion	2.0	1.0	X	X		X	
Cased-Based Problem Solving - Cerebral Cortex and Motor Systems	Large Group Discussion	2.0	1.0	X	X		X	
Skull Session 1	Large Group Discussion	2.0	1.0	X	X		X	
Skull Session 2	Large Group Discussion	1.0	1.0	X	X		X	
Review of Head and Neck	Large Group Discussion	1.0	1.0	X	X		X	
Skull Session Review	Large Group Discussion	1.0	1.0	X	X		X	
Review of Prosections of Head and Neck	Large Group Discussion	2.0	1.0	X	X		X	
Skull Session 3	Large Group Discussion	2.0	1.0	X	X		X	
Review of Head and Neck Anatomy	Large Group Discussion	1.0	1.0	X	X		X	
Lecture/Discussion Review of Prosections of Head and Neck	Large Group Discussion	1.0	1.0	X	X		X	
Review Skull Session	Large Group Discussion	1.0	1.0	X	X		X	

Importance of Research (Intro lecture) and Intro of Student Research Summer Stipend	Large Group Discussion	1.0	0.0	X	X		X	
Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Case-Based Problem Solving - Seizure Disorders and Amnesia	Small Group Discussion	2.0	2.0	X	X		X	
Introduction to Internal Brain Morphology	Laboratory	1.0	1.0	X	X		X	
External Brain Morphology	Laboratory	2.0	1.0	X	X		X	
Brainstem- Stained Sections	Laboratory	2.0	1.0	X	X		X	
Horizontal and Coronal Sections and MRI	Laboratory	2.0	1.0	X	X		X	
Histology of Senses	Laboratory	1.0	1.0	X	X		X	
Histology of Senses	Laboratory	1.0	1.0	X	X		X	
Preview Independent Study of Prosections	Laboratory	1.0	1.0	X	X		X	
Study of Head and Neck Prosections 1	Laboratory	1.0	1.0	X	X		X	
Study of Head and Neck Prosections 2	Laboratory	1.0	1.0	X	X		X	

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Newborn Rashes	TBL	2.5	0	X	X		X	
Infectious Diseases: Sepsis vs SIRS	SG	2	0		X			
Preventive Medicine Workshop	W	3	0	X	X	X	X	
Advance Directives	SG	1	0				X	
Difficult Patient Encounters	SG	1	0				X	
Gait Evaluation	SG	1	0	X			X	
Cardiovascular SG	SG	1	0	X	X		X	
Murmur Workshop	W	3	0	X			X	
Modes of Oxygen Delivery	SG	1	0	X			X	
Respiratory Distress and Ventilation	SG	1	0	X			X	
Renal Small Groups	SG	1	0	X			X	
Womens Health Workshop	W	4	0	X			X	
Abdominal Pain	SG	1	0	X			X	

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
The Patient Interview	SG	0.5	0		X		X	X
The Vital Signs	PT	0.5	0	X				
PMH, SocialHx, Family Hx, Surgical Hx	SG	2	0	X	X		X	X
Developing the HPI	CBL	1	0	X	X		X	X
Assessment of Behavior and General Appearance	SG	2	0	X	X	X	X	X
Draping	PT	1		X	X	X		
Cultural Awareness	TBL	1.5	0	X	X	X	X	X
Conflicts of Obligation and Confidentiality	SG	2	0		X		X	X
Peripheral Nerve Exam	PT	1	0	X			X	X
Peripheral Nerve Case and Documentation	SG	1	0	X		X	X	X
Lower Limb/Upper Limb Exam	PT	2	0	X			X	X
Lower Limb/Upper Limb Case Discussion and Documentation	SG	2	0	X			X	X
The Skin Exam	TBL	2	0	X			X	X
Cranial Nerve Exam	PT	1	0	X				
Neuro Case and Documentation	SG	1.5	0	X		X	X	X
Introduction to ENT	CBL	2	0	X		X	X	X

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
HENT Exam	PT	1	0	X				
HENT Case and Documentation	SG	1	0	X		X	X	X
Communication	Tutorial	1	0	X			X	X
Heart and Blood Vessel Exam	PT	1	0	X				
Heart/BV Case and Documentation/Harvey	SG	3	0	X			X	X
Chest and Lung Exam	PT	1	0	X				
Chest Case and Documentations	SG	1	0	X		X	X	X
Advance Directives	CBL	1	0	X			X	
Abdominal Exam	PT	1	0	X				
Abdominal Case and Documentation	SG	1	0	X		X	X	X
Euthanasia and PAS	SG	2	0	X			X	X

Session	Pedagogy	Contact Hours	Estimated Student Prep Time (hours)	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Androgens and Antiandrogens	Ind. Study	0	1	X	X		X	X
Pre-review: Female Reproductive Phys	Ind. Study	0	2	X				
Hematuria	Games	1	0	X	X		X	X
Dysuria	Case-Based	1	0	X	X		X	X
STI Self-Study and Quiz	Ind. Study	0	2	X	X	X	X	X
Male & Female GU Review Sheet	Ind. Study	0	2	X	X	X	X	
Women's Health TBL	TBL	2	1.5	X	X	X	X	X
Thyroid and Antithyroid Agents	Ind. Study	0	1	X	X	X		
Endocrine Review Sheet	Ind. Study	0	1	X	X	X	X	
Diabetes in Children	Case-Based	1	0	X			X	X
Diabetic Ketoacidosis	Case-Based	1	0	X			X	X
Diabetes TBL	TBL	2	2	X	X	X	X	X
Study Design: Case-control, cohort, randomized clinical trials	Large Grp Discussion	2	0	X		X		
Endocrine Homework	Ind. Study	0	1	X	X		X	X
GI Review Sheet	Ind. Study	0	2	X	X	X	X	
Pre-Review: GI physiology	Ind. Study	0	2	X				
Nutrition: Vitamin Def'cy and Excess	Ind. Study	0	2	X			X	X
Adult GI Disease	Case-Based	2	0	X				
Abdominal pain small group disc..	Sm Grp Discussion	2	0	X	X	X	X	X
GI Integrated Homework	Ind. Study	0	1	X	X	X	X	X
Environmental Pathology	Ind. Study	0	3	X			X	X

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills
Ethics/Professionalism: Physician-Pharmaceutical Industry Relations	Large Grp Discussion	2	0	X				
Liver Review Sheet	Ind. Study	0	1.5	X	X	X	X	
Population Genetics and Risk Assessment	Case-Based	1	0.5	X	X			
Treatment of Genetic Disease	Sm Grp Discussion	1	2	X	X		X	X
Jaundice TBL	TBL	2	2	X	X	X	X	X

MDC 714 S & F IV									
Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills	Demonstration of lifelong learning skills is a criterion for a grade on this activity
Histology of oral cavity and salivary glands	TBL	1	2	X	X	X	X	X	
	Lab	1							
Independent learning module: clinical anatomy of the inguinal canal	IL	2	0	X	X		X		X
Abdominal wall and inguinal region	Lab	4	0						
Histology of esophagus and stomach	TBL	1	2	X	X	X	X	X	
	Lab	1							
Viscera, peritoneum and celiac trunk	Lab	4	0						
Superior & inferior mesenteric vasculature; biliary & pancreatic ducts	Lab	4	0						
GI system case-based instruction	CBI	1.5	0	X	X		X		
Histology of digestive glands	TBL	1	2	X	X	X	X	X	
	Lab	1							
Posterior abdomen	Lab	4	0						
Diabetes/hypoglycemia independent learning	IL	1	1.5	X	X	X	X	X	X
	SG	1	0	X	X		X	X	
Small group discussion									



<b>Disease &amp; Therapeutics I MDC 751</b> Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills	Demonstration of lifelong learning skills is a criterion for a grade on this activity
Calcium homeostasis small group discussion	SG	1.5	0	X	X		X	X	
Histology of endocrine system	TBL	1	2	X	X	X	X	X	
	Lab	1							
Small group discussion on pituitary and somatic growth	SG	2	0	X	X		X	X	
Pelvic wall modules; prosection and ischioanal fossa	Lab	2	0						
Small group discussion on thyroid gland function and dysfunction	SG	1.5	0	X	X		X	X	
Urogenital triangle and bisection of pelvis	Lab	2	0						
Pelvic viscera	Lab	3	0						
Small group discussion on adrenal gland function and dysfunction	SG	1.5	0	X	X		X	X	
Histology of the male reproductive system; spermatogenesis	TBL	1	2	X	X	X	X	X	
	Lab	1							
Small group discussion on sexual differentiation and the male reproductive system	SG	2	0	X	X		X	X	
Histology of the female reproductive system	TBL	1	2	X	X	X	X	X	
	Lab	1							
Small group discussion on the female reproductive system	SG	2	0	X	X		X	X	
Pelvic clinical problems large group discussion	LG	2	0		X				

Principles of Disease MDC 750

Session	FACULTY	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills	Demonstration of lifelong learning skills is a criterion for a grade on this activity
Suture Workshop-Dr. Yarbrough		Simulation (optional)	2					x		
Introduction to Skin	Aaron M McGuffin (MPD)	Case-Based Instruction/Learning	2							
Anemia Small Group Cases	Aaron M McGuffin (MPD)	Discussion Small Group (<=12)	4		x	x	x	x	x	
Rheumatoid Arthritis	Aaron M McGuffin (MPD)	Independent Learning	1							
Ethics / Professionalism- Managing Medical Errors	Chuck W Clements II (FCH)	Discussion Small Group (<=12)	1.5		x	x		x	x	
Review- WBC pathology	Doreen C Griswold (PTH)	Discussion Large Group (>12)	1							
White Blood Cell Pathology- Review	Doreen C Griswold (PTH)	Discussion Large Group (>12)	1		x			x		
White Blood Cell Pathology LaboratoryBBSC LAB	Doreen C Griswold (PTH)	Laboratory	1.5		x	x		x		
Arthritis	Felix H Cheung (ORT)	Independent Learning and								
Arthritis- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1	1	x	x	x	x	x	
Orthopaedic Trauma	Felix H Cheung (ORT)	Independent Learning and								
Orthopaedic Trauma- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1	1	x	x	x	x	x	
Pediatric Orthopaedics	Felix H Cheung (ORT)	Independent Learning and								
Pediatric Orthopaedics- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1	1	x	x	x	x	x	
Spine and Hand	Felix H Cheung (ORT)	Independent Learning and								
Spine and Hand- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1	1	x	x	x	x	x	
Sports Medicine	Felix H Cheung (ORT)	Independent Learning and								
Sports Medicine- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1		x	x	x	x	x	
Tumor and Metabolic Bone Disease	Felix H Cheung (ORT)	Independent Learning and								
Tumor and Metabolic Bone Disease- Cases	Felix H Cheung (ORT)	Case-Based Instruction/Learning	1	1	x	x	x	x	x	
MS2 Orthoweek Project	Felix H Cheung (ORT)	Homework	1			x	x		x	x
Drug Treatment of Gout	Gary O Rankin (PMC)	Self-Directed Learning	1			x	x			
HIV/AIDS ModuleThe Clinicians perspective	María Guadalupe Lopez Marti (PED)	Case-Based Instruction/Learning	1		x					
Vector Borne Infections-Case Discussion	María Guadalupe Lopez Marti (PED)	Discussion Small Group (<=12)	1		x					x
Bacterial Zoonoses and infections after animal bites.	María Guadalupe Lopez Marti (PED)	Independent Learning	1		x					
Vector Borne Infections independent learning	María Guadalupe Lopez Marti (PED)	Independent Learning	1		x					
Bleeding Disorders	Nancy B Norton (PTH)	Case-Based Instruction/Learning	1		x	x		x	x	
Dermatopathology Review	Nancy B Norton (PTH)	Discussion Large Group (>12)	1		x					
Edema Hemorrhage Infarction	Nancy B Norton (PTH)	Independent Learning	1.5		x					
	Thomas H Dougherty (PTH)	Independent Learning	1							
Transfusion Medicine Cases	Thomas H Dougherty (PTH)	Case-Based Instruction/Learning	1	1	x	x		x	x	
Review Question Session- Bone joint skeletal muscle soft tissue	Thomas H Dougherty (PTH)	Discussion Large Group (>12)	2		x					
Epidemiology- Measures of Test Performance	Todd W Gress (MED)	Discussion Large Group (>12)	2	1		x		x	x	
Epidemiology- Measure of Morbidity and Mortality	Todd W Gress (MED)	Discussion Small Group (<=12)	2	1		x		x	x	
Bioterrorism Movie	Terry W Fenger (MCB)	Movie	1							

Session	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify analyze and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills	Demonstration of lifelong learning skills is a criterion for a grade on this activity
Critical Thinking and the Development of a Differential Diagnosis	2	1		X		X		
Introduction to Radiology	2	1		X				
Infectious Disease Case Study (Bacteriology)	1	1	X	X		X		
Effects of Age on the Immune System	1	1.5	X	X	X	X	X	
Infectious Disease Case Studies (Bacteriology)	2	1	X	X	X	X	X	
Infectious Disease Case Study (Intracellular Microbes)	2	1	X	X	X	X	X	
Ethics / Professionalism- Rationing and Conflicts of Interest	1.5	1		X	X	X	X	
Autonomic Nervous System Pharmacology - Adrenergics	1	0				X	X	
Autonomic Nervous System Pharmacology - Adrenergics	3	0	X	X		X	X	
Autonomic Nervous System Pharmacology - Adrenergics	3	2	X	X				
Autonomic Pharmacology Lab Simulation - Adrenergics	1	0.5	X	X			X	
Review of Peripheral Nervous System	1	1	X	X				
Use of Clinical Pharmacology Databases	2	0.5			X	X	X	
Cell Adaptation Cell Injury and Cell Death	1	1	X		X		X	X
Chronic Inflammation	1	1	X		X		X	X
INFLAMMATIONAcute InflammationChemical mediators	2.5	1	X		X		X	X
Cell Injury and Adaptation Homework	1	0.5	X		X		X	X
Case-Based Learning Cancer Therapy Homework	1	0	X	X	X		X	
Tracking a Klebsiella Outbreak at the NIH	1	1				X	X	X
Dose Response	1	1	X			X		
Antiparasitic Medications	1	1	X	X				
Bacteriology Lab 1	0.75	0	X	X	X	X		
Bacteriology Lab 2	1	0	X	X	X	X		
Antibiotic Case Studies	2	0.5	X	X		X		
Infectious Disease Case Study (Parasitology)	1.5	1				X	X	
Pharmacokinetics	2	1	X			X	X	
Corticosteroids 1	1	0	X					
Immunization and Vaccines	2	1.5			X	X		
Innate Immunity / Inflammation	2	1.5				X		
Case Study In Virology	1.5	1		X	X	X	X	
Autonomic Nervous System Pharmacology - Cholinergics	1	0	X	X		X	X	
Autonomic Nervous System Pharmacology - Cholinergics	3	0	X	X		X		
Autonomic Pharmacology Lab Simulation - Cholinergics	1	0	X	X				
Autonomic Nervous System Pharmacology - Cholinergics	3	0	X	X				
Transplantation Case Studies	1	0				X	X	
Bacterial Genetics	1	0	X	X	X	X	X	
Neoplasia- Epidemiology Clinical effects Terminology I and II Geno	3.5							
Immunology Review JEOPARDY	2							
Cells and Tissues	1							
Complement	0.5							
Cytokines	0.5							
Major Histocompatibility Complex	0.5							
In class worksheet (Immunology)	1.5							

**APPENDIX 2: LCME STANDARD ED21:**

The faculty and medical students of a medical education program must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments.

Course/Clerkship	System	Author	Educational Activity/ Pedagogy	Diversity Element	Diversity Objective	Assessment Method
Principles of Disease MDC 750	Principles of Disease	Kilgore	Small Group/ Case Study C. difficile Megacolon One hour	Juvenile with UTI treated with antibiotics	Recognize risk of severe disease in person with prior disease state	Facilitated Small Group; Discussion; Quiz
Principles of Disease MDC 750	Hematology Immunology	Fenger, Egleton	Small Group/Case Study One hour	21-year-old, African American woman with HIV + Herpes Simplex 2	Recognize higher rates of HSV-2 infection among in gender/racial populations	Facilitated Small Group; Discussion; Quiz
Principles of Disease MDC 750	Principles of Disease	Kilgore	Clinical case discussions on Chlamydia trachomatis	Outbreaks of LGV among MSM group Discussion of distribution of trachoma in Africa, Middle East, and South America	Recognize rates of NGU among different populations Recognize risk of disease based on sexual orientation/behaviors Recognize increased risk of trachoma based on geographic location or travel	Block exam with MCQs
Principles of Disease MDC 750	Principles of Disease	Kilgore	Clinical case discussions on Neisseria meningitides	Increased risk of N. meningitides in patients of lower socioeconomic, travelers to Africa, Mecca, and among groups (military recruits, college students)	Recognize increased risk of disease based on geography and occupation.	Block exam with MCQs

Course/Clerkship	System	Author	Educational Activity/ Pedagogy	Diversity Element	Diversity Objective	Assessment Method
Principles of Disease MDC 750	Principles of Disease	Jackman	TBL Application Exercise	Immunization for family members	Determine best choice of influenza immunization for various members of a family which includes a father with lymphoma, a daughter who is a single mother with a 2-month-old baby, a 15-year-old son and a 70-year-old grandfather.	Discussion within and between teams explaining their choices
Principles of Disease MDC 750	Principles of Disease	Jackman	TBL Application Exercise	Tetanus immunization	Compare recommendation for prevention of tetanus after an accident for a 15-year-old boy and his visiting friend from Mexico	Discussion within and between teams explaining their choices
Principles of Disease MDC 750	Ethics	Gallagher	Didactic followed by small and large group discussion	Ethical implications in rationing decisions based on citizenship, ethnicity, gender, age and/or lifestyle choices	Understand which factors are ethically appropriate to consider when making rationing decisions and which are not	Ethics
Principles of Disease MDC 750	Principles of Disease	Zeng	Immune-based disease, small group	Ethnicity	Effects of genetic variation in minority population on disease pathogenesis	Small group, quiz

<b>Course/Clerkship</b>	<b>System</b>	<b>Author</b>	<b>Educational Activity/ Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Principles of Disease MDC 750	Principles of Disease	Kilgore, Jackman	Discussion , Large Group	Age	Discuss the effects of the immune system for infants and elderly persons	MCS on institutional exam
Disease and Therapeutics II (IDM MDC 752)	Nervous	Norton	Case Study Small group	A middle-aged man with HA and fever refuses to be examined or cared for by a female doctor	Discuss the rights and responsibilities of a doctor and a patient when the patient is refusing care by a doctor of a certain gender.	Short written reflection on diversity element, Group quiz on CNS infection
Disease and Therapeutics II (IDM MDC 752)	Nervous	Norton	Case Study Small group	Muslim university student with headache, fever, presents with her brother as a chaperone. Both are reluctant for the patient to be examined.	Discuss sensitive and appropriate ways to physically examine a Muslim patient while still maintaining the patient's dignity and modesty.	Short written reflection on diversity element, Group quiz on CNS infection
Disease and Therapeutics II (IDM MDC 752)	Nervous	Norton	Case Study Small group	Sex worker with headache, fever, rash	Discuss diseases for which a sex worker is at increased risk. Acknowledge personal feelings about caring for this patient.	Short written reflection on diversity element, individual pre-quiz and group post-quiz on CNS infection

<b>Course/Clerkship</b>	<b>System</b>	<b>Author</b>	<b>Educational Activity/ Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Disease and Therapeutics II (IDM MDC 752)	Nervous	Norton	Case Study Small group	Undocumented woman with altered mental status, fever, seizures – doesn't speak English, presents with adult son, also undocumented	Discuss issues related to using a translator to obtain medical history, a relative vs. a non-relative. Discuss ways of gaining a patient's trust.	Short written reflection on diversity element, Group quiz on CNS infection
Disease and Therapeutics II (IDM MDC 752)	Nervous	Egleton	Didactic	Age and Pharmacology	Demonstrate an understanding of how patients of various ages response to drug therapy	MCQs
Disease and Therapeutics II (IDM MDC 752)	Nervous	Egleton/Chaffin	Didactic	Pregnancy and Pharmacology	Demonstrate an understanding of how pregnant patients respond to drug therapy, which drugs are contraindicated and indicated in pregnancy	MCQs
Disease and Therapeutics II (IDM MDC 752)	Nervous	Egleton	Homework	Native American church, Peyote, cultural bound syndrome	Demonstrate an understanding of how different races and religious beliefs can affect psychiatric disorders and treatment	Homework

<b>Course/Clerkship</b>	<b>System</b>	<b>Author</b>	<b>Educational Activity/ Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Disease and Therapeutics II (IDM MDC 752)	Nervous	LeGrow	Independent Learning	Multiple cultures	Demonstrate an understanding of how culture influences understanding and treatment of psychiatric disorders	
Structure and Function II (MDC 712)	Ophthalmology	Laura Richardson	Team-Based Learning	Age	Demonstrate understanding of normal histology and pathological changes in histology that impair vision; demonstrate understanding of the impact of vision impairment on daily activities in the elderly	IRAT/GRAT quiz
Structure and Function II (MDC 712)	Ophthalmology	Larry Grover	Lecture	Age	Demonstrate understanding of how lens function changes with age leading to impairment of near vision and how corrective lenses can compensate for this impairment	Exam (Institutionally Developed)



<b>Course/Clerkship</b>	<b>System</b>	<b>Author</b>	<b>Educational Activity/ Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Structure and Function II (MDC 712)	Ophthalmology	Larry Grover	Lecture	Ethnicity	Demonstrate understanding of how ethnicity affects incidence of dyschromatopsia (color blindness)	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Jeanette Norden	Lecture	Age	Demonstrate understanding of aging as a risk factor for neurological diseases, including subdural hematoma, Alzheimer's disease	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Jeanette Norden, Mitzi Payne	Lecture	Age	Demonstrate understanding of pre- and neo-natal stages in development of central nervous system	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Jeanette Norden	Lecture	Age	Demonstrate understanding of age-related hearing loss and its impact on ability to understand speech	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Jeanette Norden	Lecture	Age	Demonstrate understanding of the neurological and psychiatric consequences of child abuse	Exam (Institutionally Developed)

<b>Course/Clerkship</b>	<b>System</b>	<b>Author</b>	<b>Educational Activity/ Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Structure and Function II (MDC 712)	Nervous System	Jeanette Norden	Lecture	Age	Demonstrate understanding of the neurological basis and cognitive and behavioral consequences of Alzheimer's disease and other dementias	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Occupation	Demonstrate understanding of the cost in the workplace for missed workdays due to chronic pain and higher impact on blue collar workers	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Disease States	Demonstrate understanding of the importance of treating comorbid psychiatric disorders when working with patients with chronic pain.	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Disabilities	Demonstrate understanding that disabilities such as learning and intellectual disabilities are often first diagnosed in school age children	Exam (Institutionally Developed)

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Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Culture	Demonstrate understanding that cultural expectations influence self-esteem in children	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Gender	Identify gender differences in rates of risk behaviors in adolescents	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Age	Demonstrate understanding of unique health care needs of the elderly	Exam (Institutionally Developed)
Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Socioeconomic Status	Demonstrate understanding of the role that low SES plays in the development and expression of stress	Exam (Institutionally Developed)
Disease & Therapeutics I MDC 751	Hematology	Fenger Carpenter Allman Lopez-Marti	Case Presentation	HIV/AIDS Module: The Patient	List the physical, mental, emotional, financial, and social impacts of HIV/AIDS on a patient.	Course exam with MCQs
Disease & Therapeutics I MDC 751	Dermatology	Lopez-Marti	Bacterial Zoonoses (leptospirosis, brucellosis, tularemia and plague) and infections after	Discussion of risk factors for zoonoses	Identify increased risk of infection with exposure to unpasteurized milk and local traditions that increase risk of infection	Blackboard quiz Course exam with MCQs

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Disease & Therapeutics I MDC 751	Dermatology	Lopez-Marti	Viral exanthems	Identify regions of the world with low vaccination rates	Recognize population at risk of viral exanthems due to no vaccination	Course exam with MCQs
Disease & Therapeutics I MDC 751	Hematology	McGuffin	Anemia Small Group Cases	African American Jehovah Witness Age	List special diagnostic considerations for an African American with anemia. Discuss ways to approach the topic of how a patient's faith affects their medical care through effective and sensitive history taking. Describe the physician's duty to treat minors when there are no parents available and the physician feels a procedure is medically necessary to sustain the patient's life. Describe the Jehovah Witness perspective on receiving blood transfusions.	Course exam with MCQs

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Structure and Function II (MDC 712)	Nervous System	Tracy LeGrow	Lecture	Culture	Demonstrate understanding that cultural expectations/values influence the way in which the end of life is managed	Exam (Institutionally Developed)
Diseases & Therapeutics III (MDC 753)	CV	Touchon	Independent Learning	Age, Gender, Race, Ethnicity, Disease States	Roles of diversity in incidence, presentation & mortality of CVD	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Touchon/Wehner	Lecture	Age, Gender, Race, Ethnicity, Disease States, Geography, Habits, Occupation	Roles of diversity in incidence, presentation & mortality of CVD	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Shapiro	Independent Learning Lecture	Age, Body habitus, Gender, Race, Ethnicity, Disease States	Roles of diversity in incidence and treatment of hypertension,	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Valentovic	Lecture	Age, Disease States	Roles of age and disease states in drug treatment of dyslipidemias	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Touchon	Independent Learning	Age, Disease States	Roles of age and disease states in treatment of dyslipidemias	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Norton	Lecture	Age, Body Habitus, Gender, Disease States, Habits	Roles of diversity in incidence of atherosclerosis	MCQs Quizzes MCQs in Exam

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Diseases & Therapeutics III (MDC 753)	CV	Norton	Lecture	C, Habits	Roles of diversity in incidence of aneurysms	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Research Ethics	Cordle	Lecture	Race, Ethnicity, National Origin	Importance of non-discrimination on research studies	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Valentovic	Lecture	Gender, Race, Ethnicity, National Origin, Habits, Disease States	Roles of diversity in the use of anticoagulants	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Norton	Lecture	Age, Gender, Habits	Roles of diversity in incidence of vasculitis	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	El-Bash	Independent Learning	Age, Gender, Disease States	Roles of diversity in treatment of DVT	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Norton	Lecture	Age, Gender, Disease States	Roles of diversity in incidence of valvular diseases	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Waqas	Independent Learning	Age, Gender, Disease States, Habits	Roles of diversity in incidence of myocardial ischemia	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Waqas	Sm & Lg Group Discussions	Age, Gender, Disease States, Habits	Roles of diversity in incidence of myocardial ischemia	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Hayat	Independent Learning	Age, Disease States	Roles of diversity in incidence, diagnosis and treatment of heart failure	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Hayat	Sm & Lg Group Discussions	Age, Disease States	Roles of diversity in incidence, diagnosis and treatment of heart failure	MCQs Quizzes MCQs in Exam

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Diseases & Therapeutics III (MDC 753)	CV	Stines	Case Based Learning	Age	Role of age in presentation of congenital CV disorders	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	CV	Norton	Lecture	Age, Disease States	Roles of diversity in incidence of CV malignancies	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	McGuffin	Case Based Learning	Age	Role of age in presentation of congenital respiratory disorders	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Durst	Lecture	Age, Habits, Disease States, Occupation	Roles of diversity in incidence of pulmonary diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Meadows	Lecture	Age	Role of age in incidence of pulmonary infections	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Shah	Lecture	Disease States, Geography, Occupation	Roles of diversity in incidence of pulmonary fungal infections	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Yu	Lecture	Race	Role of race in incidence of Cystic Fibrosis	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Allman	Lecture	Age, Race, Ethnicity, National Origin	Roles of diversity in the use of anti-TB drugs	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Durst	Lecture	Age, Gender, Race, Geography, Habits, Occupation	Roles of diversity in incidence of interstitial lung diseases	MCQs Quizzes MCQs in Exam

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Diseases & Therapeutics III (MDC 753)	Respiratory	McGuffin	Case Based Learning	Age	Role of age in incidence & presentation of pulmonary diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Fenger	Lecture	Age, Occupation	Roles of diversity in incidence of pulmonary viral infections	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Meadows	Sm & Lg Group Discussions	Race, National Origin, Occupation	Roles of diversity in incidence of pneumonias	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Gusack	Lecture	Age, Gender, Disease States, Geography, Occupation, Habits	Roles of diversity in incidence of head & neck neoplasms	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Gusack	Case Based Learning	Age, Gender, Disease States, Geography, Occupation, Habits	Roles of diversity in incidence of head & neck neoplasms	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Meadows	Independent Learning	Age, Habits, Occupation	Roles of diversity in incidence of chronic lung diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Meadows	Sm & Lg Group Discussions	Age, Habits	Roles of diversity in incidence of chronic lung diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	Sigdel	Lecture	Age, Gender, Geography, Habits, Occupation	Roles of diversity in incidence of lung tumors & carcinomas	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Respiratory	McGuffin	Case Based Learning	Age	Role of age in neck masses	MCQs in Exam



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Diseases & Therapeutics III (MDC 753)	Respiratory	Sigdel	Case Based Learning	Habits, Occupation	Roles of diversity in incidence of pulmonary neoplasms	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Lecture	Disease States, Habits	Roles of diversity in electrolyte disorders	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Norton	Lecture	Age, Disease States, Gender	Roles of diversity in cystic & glomerular diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Sigdel	Lecture	Disease States	Roles of disease states in the etiology of interstitial & tubular kidney diseases	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Sigdel	Lecture	Age, Body Habitus, Disease States, Gender, Habits	Roles of diversity in obstructive disorders and renal tumors	MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Norton	Lecture	Age, Disease States, Gender, Race	Roles of diversity in renal vascular disorders	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Case Based Learning	Disease States, Habits	Roles of diversity in acute renal failure	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Case Based Learning	Age, Disease States, Gender	Roles of diversity in chronic kidney disease	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Sm & Lg Group Discussions	Age, Disease States, Gender	Roles of diversity in acute & chronic kidney disease	MCQs Quizzes MCQs in Exam
Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Lecture	Disease States, Habits	Roles of diversity in acid/base disorders	MCQs Quizzes MCQs in Exam

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Diseases & Therapeutics III (MDC 753)	Renal	Meadows	Sm & Lg Group Discussions	Disease States	Roles of diversity in acid/base disorders	MCQs Quizzes MCQs in Exam
Elements of Medicine MDC 710	GI	Hardman	Independent Learning	Socioeconomic	Determine best diet, menus, and social resources for sample patients and families with eight conditions requiring dietary management on a budget with limited access to urban centers.	Work in groups, in-class presentation of findings (graded)
Elements of Medicine MDC 710	GI	Delidow	Case-based instruction	Culture Ethnicity Socioeconomic	Determine the nutritional deficiency in a woman of Haitian descent.	Group work with class discussion with facilitator
Elements of Medicine MDC 710	Nervous	Delidow	Case-based instruction	Socioeconomic, Disabilities, Personality	Diagnose a combative patient with Huntington's disease determine its impact based on two different scenarios: One in which he has a stable family and finances, and one where the patient is single with unstable finances.	Group work with class discussion with facilitator
Elements of Medicine MDC 710	Hematology	Delidow	Large Group Discussion	Socioeconomic, sexual orientation, disabilities	Consider ethics, treatment, development of AIDS in hemophiliac patients	In-class discussion, written answers to questions about acceptable risk

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Elements of Medicine MDC 710	GI	Delidow	Large group discussion	Culture, age, diet	Treatment of elderly vegetarian woman for PEM after trauma	Group work with facilitation
Structure and Function I/MDC711	Neuro	Egleton	IL and Lg Group Discussion	Age	Understand impact of drugs for treatment of Parkinson's disease in elderly patient	Written assignment and post-quiz
Structure and Function I/MDC711	Neuro	Grover	IL and Lg Group Discussion	Geography	Understand distribution of pathogens and role of environment in disease etiology (Paralytic shellfish poisoning)	Written assignment
Structure and Function I/MDC711	Neuro	Grover	IL and Lg Group Discussion	Hobbies, diet and culture	Understand impact of diabetic neuropathy on lifestyle and role of diet and culture in etiology of disease	Written assignment
Structure and Function III / MDC713	Cardiovascular	McCumbee/Green	Large Group Discussion	Diet	Understand the impact of obesity on the cardiovascular system	Written assignment
Structure and Function III / MDC713	Renal	Norton	Large Group Discussion	Age, Religion	Diagnosis and treatment of a boy whose mother is a Jehovah's witness	In-class quiz
Structure and Function III / MDC713	Renal	Norton	Large Group Discussion	Age	Diagnosis and treatment of a girl with "Minimal Change Disease"	In-class quiz

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Structure and Function III / MDC713	Renal	Norton	Large Group Discussion	Age, Ethnicity	Diagnosis and treatment of an elderly Hispanic man	In-class quiz
Structure and Function III / MDC713	Respiratory	Dasgupta	Small Group Discussion	Ethnicity, Habits	Understand how ethnicity and smoking habits contribute to COPD	Written exam
Structure and Function III / MDC713	Respiratory	Dasgupta	Small Group Discussion	Gender, Color, Habits, Occupation	Understand the risk associated with gender, color, habits, and occupation with the pathology of pulmonary embolism	Written exam
Structure and Function III / MDC713	Respiratory	Dasgupta	Small Group Discussion	Body Habitus, Gender, Habits	Know about the effects of body height, gender, and smoking habits on the development of pneumothorax	Written exam
Structure and Function III / MDC713	Respiratory	Dasgupta	Independent Learning	Color, Socioeconomic Status, Geography, Housing, Habits	Understand the reasons why inner-city populations are more susceptible to COPD	Written assignment
Structure and Function III / MDC713	Cardiovascular	Gruetter	Large Group Discussion	Age	Understand the importance of age as a major factor related to the incidence of CHF	Written Assignment

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Advanced Clinical Skills (MED 755)	Cardiovascular	Mays	Assessment	Chest pain in a cocaine abuser	Recognize that cocaine abuse can lead to coronary vasospasm and include this in the differential diagnosis	Standardized Patient Evaluation Student Note
Advanced Clinical Skills (MED 755)	Hematology	Mays	Assessment	Anemia in Jehovah Witness	Identify a barrier to standard of care based on religious beliefs in an anemic patient and demonstrate a respect of patient autonomy	Standardized Patient Evaluation
Advanced Clinical Skills (MED 755)	Respiratory	Mays	Assessment	Cough in a Missionary	Obtain a history, perform a physical examination and create an appropriate differential diagnosis and determine which diseases based on the patient's exposure are more likely to be included	Standardized Patient Evaluation Evaluation of Note including Differential Diagnosis
Advanced Clinical Skills (MED 755)	Respiratory	Mays	Assessment	Uninsured patient with lung cancer	Demonstrate appropriate communication with a patient who indicates that they are reluctant to seek treatment because they are uninsured.	Standardized Patient Evaluation Evaluation of response to SP trigger question

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IDM 715-ICS	Abdomen	Mays	Assessment-CCE	Habits	To identify how a patients habits may affect a chronic medical condition.	Participation/Identify habit and counsel.
IDM 715-ICS	Cardiovascular	Mays	Assessment-CCE	Diet, Habits, Motivation	To identify how a patients habits may affect a chronic medical condition.	Participation/Identify habit and counsel.
IDM 715-ICS	HENT	Mays	Assessment-CCE	Socioeconomic Status	To identify how a patients socioeconomic situation (no insurance) may affect his/her treatment plan.	Participation and identify different options available for the uninsured patient.
IDM 715-ICS	Neurology-Peripheral	Ferguson/Mays	Assessment-CCE	Personality	To identify how anxiety can affect a patients history and physical exam.	Participation and counseling.
IDM 715-ICS	Pulmonary	Mays	Assessment-CCE	Habits, Occupation	To identify smoking as a risk factor for chronic lung disease leading to disability.	Participation and Counseling.
IDM 715-ICS	Advance Directives	Mays	CBL	Housing Situation	To identify ways to obtain medical information from a patient living in a nursing home.	

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IDM 715-ICS	Abdomen/CV	Mays	Assessment-CCE-Final	Housing Situation, Socioeconomic Status, Habits, Diet	To identify how a patients living situation and habits (substance abuse) interfere with their ability to seek health care, comply with recommendations, and control chronic disease states.	Participation/Identify habit and counsel. Identify barriers to seeking health care and being compliant with previous treatment plan.
MDC 754 D & T IV	Genitourinary	Petrany	Case presentations	Age	Describe the different presentations of upper and lower urinary tract infections in persons of different ages from infant to elderly	Block exam, MCQ
MDC 754 D & T IV	Genitourinary	Norton	Team-Based Learning	Religion	Recognize how attitudes toward pre-marital sex are influenced by religion	Group Application Exercise
MDC 754 D & T IV	Gastrointestinal	Shah	Independent Study	Socioeconomic status Education Disease states, Habits	Understand the influence of poverty, lack of information and substance abuse on nutritional status	Block exam, MCQ
MDC 754 D & T IV	Toxicology	Dougherty	Independent Study	Socioeconomic status Occupation Geography Habits	Recognize and understand the influence of poverty, housing location, occupation and substance abuse on exposures to toxic materials	Block exam, MCQ

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MDC 714 S & F IV	GI system	Green	Lecture	Body habitus: obesity	Explain the regulation of food intake, the control of appetite, and the relationship between leptin and body fat content.	Exam questions
MDC 714 S & F IV	GI system	Serrat	Lecture	Body habitus: variation in position of abdominal viscera	Understand normal anatomical variations in position of abdominal viscera as it relates to body habitus (see example on slide 7 of abdominal viscera PowerPoint)	Exam questions
MDC 714 S & F IV	GI system	Green	Lecture	Age	Determine the effects of age on GI function and understand the consequences of these changes on patient wellbeing.	Exam questions
MDC 714 S & F IV	Endocrine system	McCumbee	Small group discussion	Obesity, ethnicity, diet and life-style	Identify risk factors for type 2 diabetes mellitus and explain the importance of life-style changes in treating diabetes.	Written exercise
MDC 714 S & F IV	Endocrine system	McCumbee	Small group discussions	Gender	Identify specific endocrine disorders (ex: Graves Disease) whose incidence is affected by gender.	Written exercise



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MDC 714 S & F IV	Reproductive system	LeGrow	lecture	Gender identity	Explain the difference between gender identity disorder, transvestitism, and sexual orientation. Be able to discuss the development of gender identity. Describe the psychological difficulties often associated with homosexuality.	Exam Questions
MDC 714 S & F IV	Reproductive system	McCumbee	Lecture; small group discussion	Gender issues associated with disorders of sexual differentiation	Describe the development of the reproductive system in males and females. Explain how the process of sexual differentiation is regulated and identify the consequences of specific defects in these developmental pathways.	
MDC 714 S & F IV	Reproductive system	McCumbee	Lecture; small group discussions	Age	Determine the effects of age on reproductive function	Exam questions and written exercise

### Third Year Clerkships

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Cardiovascular (OB)	Keblawi	X	X	Lecture	Age Advanced Maternal age and pregnancy	The student understands the association between hypertension advanced maternal age and risk of developing pre eclampsia	Classroom interactive discussions
Endocrine (S)	Canterbury		X	Lecture	Ambiguous genitalia	Student will understand the different aspects of ambiguous genitalia Student will begin to understand impact of ambiguous genitalia on the patient and the family	Discussion with instructor Exam questions on departmental Final Written Exam
Endocrine (OB)	Keblawi	X	X	Lecture	Obesity And gestational diabetes	The student understands that the obesity increases the risk of gestational diabetes	Classroom interactive discussions
Gastrointestinal (PSY)	Melvin	X	X	Attendance at AA meeting	Adults with alcoholism	Understand the treatment milieu provided by 12 step programs	Reflective writing

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Gastrointestinal System (P)	Loudin	X	X	CLIPP Case	7-year-old Latino female with vomiting and abdominal pain who only speaks Spanish, using an interpreter	Discuss three normative cultural health beliefs in the Latino culture and their impact on medical care Understand the challenges in caring for a child of an immigrant family presenting with a chronic disease	CLIPP Test
Gastrointestinal System (P)	Loudin	X	X	CLIPP Case	8-year-old female with abdominal pain, mother recently divorced and unemployed	Recognize critical findings that differentiate functional from pathological abdominal pain Understand the pathophysiology of anemias	CLIPP Test
Gastrointestinal System (P)	Loudin	X	X	CLIPP Case	9-week-old male who is failure to thrive with a single mother who is a high school dropout, father of baby uninvolved	Define failure to thrive in infancy and discuss its causes	CLIPP Test

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Gastrointestinal System, Hematologic System (P)	Loudin	X	X	CLIPP Case	6-day-old female of Mediterranean decent who is jaundiced	<p>Compare and contrast the important findings and laboratory data helpful in evaluating a newborn with jaundice with the following diagnoses:</p> <ul style="list-style-type: none"> <li>• Physiologic jaundice</li> <li>• Hemolytic (Rh or ABO incompatibility, red cell membrane or enzyme defects)</li> <li>• Hematomas and bruising</li> <li>• Breastfeeding-associated</li> <li>• Liver disease (biliary atresia, hepatitis)</li> </ul> <p>Metabolic disease (galactosemia, hypoglycemia, hypothyroidism)</p>	CLIPP Test

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Gastrointestinal System, Nervous System (P)	Loudin	X	X	CLIPP Case	8-year-old African American male who is obese, has ADHD and is in a lower socioeconomic class	Understand the factors that contribute to childhood obesity Recognize the typical presentation of ADHD in children Understand the initial evaluation of childhood hypertension	CLIPP Test
General Principles (OB)	Keblawi	X	X	Case Presentation	Religion Jehovah Witness with placenta Previa	The student understand the religious believe and its impact on patient's care	Classroom interactive discussions
General Principles (P)	Loudin	X	X	CLIPP Case	African American female 6-month-old well child visit	Use the Parent's Evaluation of Developmental Status (PEDS) or other screening test to evaluate the developmental milestones of an infant	CLIPP Test

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
General Principles (P)	Loudin	X	X	CLIPP Case	African American female infant 2-month-old well child visit	Know the nutritional requirements for appropriate growth for infants, including caloric requirements, differences between formula and breast milk, and how and when to add solid foods to the diet	CLIPP Test
General Principles (PSY)	Melvin	X	X	PBL Case	Spanish only speaking married Hispanic woman	Recognize the importance of using a qualified interpreter in gathering accurate history Recognize cultural beliefs that may impact diagnostic labels	Quiz and class discussion

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Genetics (P)	Loudin	X	X	CLIPP Case	4-day-old male with Trisomy 21	Identify the common complications of Down syndrome Recognize appropriate anticipatory guidance in the management of children with Down syndrome	CLIPP Test
Genetics (PSY/NEURO)	Melvin Ferguson	X	X	Multidisciplinary Case Conference	Single white man diagnosed with Huntington's and MR	Recognize the complex bio-psycho-social issues related to the diagnosis and management of genetic conditions Recognize the legal/ethical issues regarding sharing information and capacity to give informed consent	Faculty presentation and class discussion
Genetics(PSY)	Melvin	X	X	Video	Adult male with Down's Syndrome	Understand the functional limitations and care needs of individuals with Down's Syndrome/Mental Retardation	Written responses to questions

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Genetics (PSY)	Melvin	X	X	Video	Rett's Syndrome	Recognize the symptoms of Rett's syndrome	Written responses to questions
Hematologic System (P)	Loudin	X	X	CLIPP Case	2-year-old African American boy with sickle cell disease	Discuss appropriate communication with the child, the family, and the health care team, especially regarding issues of chronic disease Describe health maintenance and expected course for children with sickle cell disease	CLIPP Test
Integumentary (OB)	Keblawi	X	X	Case Presentation	Ethnicity and Facial Hair	The student understands the association between the ethnicity and Idiopathic Hirsutism	Classroom interactive discussions
Integumentary System (FM)	O'Hanlon	X	X	Cryosurgery and Electrocautery/Radiofrequency Orientation Small Group Discussion	Fitzpatrick Skin Typing; potential complications in dark-toned skin	Understand the effects of destructive removal of benign skin lesions	Family Medicine Departmental Exam



<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Integumentary System (FM)	O'Hanlon	X	X	Small group discussion on 14 dermatology topics	Patients with dark skin	Understand the variation in presentation of common skin conditions	Family Medicine Departmental Exam
Nervous system (P)	Loudin	X	X	CLIPP Case	2-week-old Latino female with lethargy	Construct a diagnostic approach to a newborn with lethargy Develop a list of factors in the maternal and newborn history that may put a newborn at risk for medical problems	CLIPP Test
Nervous System (P)	Loudin	X	X	CLIPP Case	African American female 9-month-old well child visit at which neuroblastoma is discovered	Develop a differential diagnosis for an asymptomatic abdominal mass and formulate a plan for evaluation	CLIPP Test

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Nervous (PSY)	Melvin	X	X	Lecture	Geriatric patients with psychiatric issues	Recognize the difference between normal age related changes and diagnosable psychiatric conditions in geriatric population Recognize the unique treatment issues in geriatric population	Faculty presentation and class discussion
Nervous (PSY)	Melvin	X	X	Presentation	Veterans	<ul style="list-style-type: none"> <li>Recognize the unique psychiatric needs of veterans and the barriers to seeking treatment</li> </ul>	Community presentation and class discussion
Nervous (PSY)	Melvin	X	X	Standardized Patient	47-year-old, married African American woman with Generalized Anxiety Disorder	Recognize the importance of weighing information related to diversity and assessing to what extent it is relevant to diagnosis and treatment	Direct observation of behavior in SP encounter and faculty review and rating of written note

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Obstetrics and Gynecology (OB)	Keblawi	X	X	Lecture	Ethnicity and Race Tay Sachs, Sickle Cell Thalassemia	The student understands the association between race and ethnicity and some diseases may impact the pregnant woman and /or the fetus.	Classroom interactive discussions
Obstetrics and Gynecology (OB)	Keblawi	X	X	Lecture Cases	Ethnicity and Race Asian women	The student understands that there is racial variations in the incidence of Gestational Trophoblastic Disease	Classroom interactive discussions
Obstetrics and Gynecology (OB)	Keblawi	X	X	Lecture Cases Power Point Presentation	Age Disease Status Oral Contraceptive Pills	The student understands the indications and contraindications of various contraceptive methods related to these diversity elements	Classroom interactive discussions
Obstetrics and Gynecology (OB)	Keblawi	X	X	Lecture Case Scenarios Power Point presentation	Socioeconomic Ethnicity Pregnancy with HIV, Hepatitis, Syphilis	The student understands the association between socioeconomic status and ethnicity with certain infections	Classroom interactive discussions

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Obstetrics and Gynecology (OB)	Keblawi	X	X	Lecture Case Scenarios Power Point Presentation	Socioeconomic Placental abruption and cocaine use	The student understands the association between socioeconomic status and substance abuse and Placental abruption	Classroom interactive discussions
Reproductive System (P)	Loudin	X	X	CLIPP Case	17-year-old that is 38-weeks pregnant	Understand the important elements of a prenatal history as they relate to the health of the unborn child, including the importance of maternal age Recognize factors in the perinatal and newborn history that may put a neonate at risk for medical problems	CLIPP Test

<b>System (Clerkship)</b>	<b>Author</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>Educational Activity</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment Method</b>
Respiratory (P)	Loudin	X	X	CLIPP Case	2-month old infant with a ALTE, unmarried parents, Lower socioeconomic status	Obtain an appropriate history, including social history, for an infant with suspected shaken baby syndrome. Discuss the ethical and legal responsibility of health care workers to report suspected child abuse	CLIPP Test
Respiratory (P)	Loudin	X	X	CLIPP Case	6-year-old female born in Pakistan with a chronic cough and has a paternal grandmother who lives at home	Discuss the relevant differential diagnosis for chronic cough in a school-aged child Review the relevant work-up for a patient suspected of having asthma	CLIPP Test
Respiratory (FM)	O'Hanlon	X	X	Spirometry small group discussion on chronic lung disease	Ethnic populations	Review the basis for population-based normalization	Family Medicine Departmental Exam

## APPENDIX 3: ED-21 ASSESSEMENT OF CULTURAL DIVERSITY

### EXAMPLE 1

#### Medical Humanities MS-1 Assignment 1

Case: The Patient History

Ethics-Truthfulness and Informed Consent

Interprofessional Education-School of Pharmacy

Mrs. Jones asked you if she should continue taking St. Johns Wart. Please investigate this medication. Use the principles that you were taught during your ethics lecture and come up with a written response for Mrs. Jones. You will need to discuss your findings with the pharmacy student that you have been assigned.

Research-Evidence Based Medicine

While coming up with a response to Mrs. Jones question you will find it helpful to know the Evidence Based Medicine that exists regarding the treatment of Depression. Please include this information in your response to Mrs. Jones.

Cultural Competency

Please include your thoughts on alternative medicine prior to this exercise. Do you feel differently about it now? Were you surprised that Mrs. Jones husband did not believe in mental illness? Have you had any personal/professional experiences with alternative medicines?

Professionalism-A Reflection

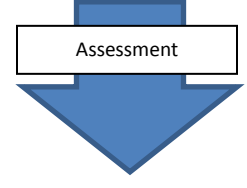
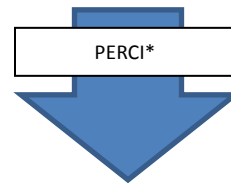
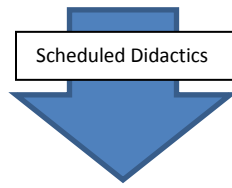
The professionalism component of this assignment will be a self-reflection. You will need to read *Medical Professionalism in the New Millenium: A Physician Charter*, initially published in 2002 in the Annals of Internal Medicine. You will need to write a short reflection on how you demonstrated professionalism while seeing Mrs. Jones

**Assignment Outline:** Please submit the following within one week of seeing Mrs. Jones. These responses can be submitted via email to Amy Smith. You will receive points as outlined in your medical humanities syllabus.

- 1-Provide a written response to Mrs. Jones giving her instructions regarding continuing St. Johns wart. This should include an explanation of Evidence Based Medication available to treat Depression.
- 2-Provide a written response regarding cultural competency involved in this case.
- 3-Read article assigned above regarding professionalism and submit a short self-reflection.

Medical Humanities

MSI-Block 1-Elements of Medicine



Professionalism	<ul style="list-style-type: none"> <li>One Book Program</li> <li>Ethics/Truthfulness and Informed Consent</li> </ul>	Read article <i>Medical Professionalism in the New Millenium: A Physician Charter</i>	Self-reflection regarding elements of professionalism and how they relate to this case. Participation.
Ethics	<ul style="list-style-type: none"> <li>Introduction to Ethics                             <ul style="list-style-type: none"> <li>J Gerlach/C Keaton</li> <li>No materials posted</li> </ul> </li> <li>Everyday Ethics                             <ul style="list-style-type: none"> <li>S. Petranly</li> <li>No materials posted</li> </ul> </li> <li>Truthfulness and Informed Consent-Gallagher</li> </ul>	Students will have to give informed consent regarding alternative medication – St Johns Wart	Written response to patient regarding continuing St. Johns Wart.
Research	<ul style="list-style-type: none"> <li>Introduction to Evidence-Based Medicine (DL) 2 hrs                             <ul style="list-style-type: none"> <li>T Gress</li> <li>Materials-ppt printed</li> </ul> </li> <li>Study Design: Case Control (DL,SG, LG) 2 hrs</li> </ul>	Students will research EBM for treatment of Depression. Submit sources used and type of literature reviewed.	Explanation of the EBM regarding treatment of Depression.
Cultural Competency	<ul style="list-style-type: none"> <li>Cultural Awareness                             <ul style="list-style-type: none"> <li>ICS-Materials Posted 10/8/2013</li> </ul> </li> </ul>	Alternative Medication and cultural belief regarding “mental illness”	Reflection regarding self-bias.
IPE	<ul style="list-style-type: none"> <li>N/A</li> </ul>	Consultation with pharmacy student via phone/email	Participation.

\*PERCI is professionalism, ethics, research, cultural competency and inter-professional education.

Additional Lectures that may be pertinent

Culture and Belief – Dr LeGrow- Large Group Discussion- Materials on curriculum Map 9/20/2013

Clinical Correlate Clinical Cancer Research-Lecture-P Claudio-9/19/2014-no materials (not integrated)

CCE I-The Patient History

PERCI-Follow up Assignment

-After the student has completed the CCE-I they will be emailed the PERCI project to test the elements above.

## Case Scenario

Patient is here to establish care. She is changing doctors because the “other doctor” prescribed her that crazy pill and didn’t tell her it would make her kill herself....If she wanted to get worse she wouldn’t have gone to a doctor anyway. She has no complaints today. Meds: St Johns Wart (bring the box)

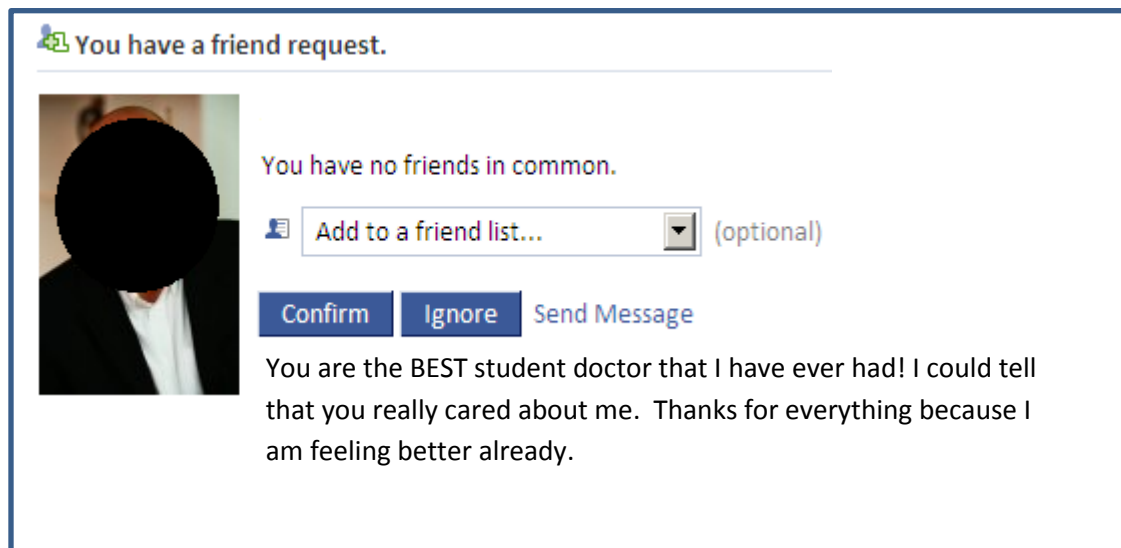
## EXAMPLE 2:

### Medical Humanities MS-2 Assignment 1

Case: The Peripheral Neurological Exam

Professionalism-A Challenge

1-You have logged on to Facebook and see the following



How are you going to respond?

Ethics-Confidentiality

2-You had the patient sign a records release before they left the office, so you could learn more about them and any previous testing that had been done. You receive a denial for this request. Why did this happen? You request records all of the time. Please investigate confidentiality regarding psych records and submit what you learn.



## Research-Evidence Based Medicine

3-Directly under this document in your mailbox is the patients MRI report. See below

Impression: Multiple abnormal foci in the brain particularly seen with T2 weighting, compatible with multiple sclerosis.

You want to have an article to review with your supervisor regarding a previous trial of Multiple Sclerosis and treatments. Please submit this article.

## Inter-professional Education-School of Nursing

Once you have notified the Psychiatric facility of the new diagnosis the nurse asks you to explain the physical exam abnormalities that you found so she can monitor them and let you know if there are any changes. Please submit your response to her request.

## Cultural Competency-Participation in CCE

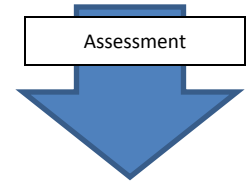
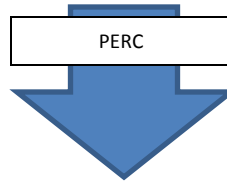
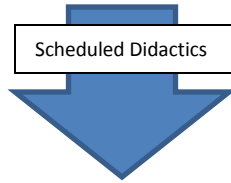
**Assignment Outline:** Please submit the following within one week of receiving these instructions. These responses can be submitted via email to Amy Smith. You will receive points as outlined in your medical humanities syllabus.

- 1-Submit your response to the patients Facebook request.
- 2-Submit what you discovered regarding confidentiality and psychiatric records.
- 3-Submit the study that you found about Multiple Sclerosis.
- 4-Submit your response to the nurse's request regarding the description of the physical exam.

Medical Humanities

MS2-Block 2-D & T I

CCE II-Neurology-Peripheral



Professionalism	<ul style="list-style-type: none"> <li>Conflicts of Obligation and Confidentiality- CCE II             <ul style="list-style-type: none"> <li>Clements</li> <li>No Materials Posted</li> </ul> </li> <li>Behavioral Med Lecture</li> </ul>	Professionalism in Patient Care: Patient confidentiality and commitment to maintain appropriate relationships with patients.	Response to facebook request from patient with explanation of reasoning.
Ethics	<ul style="list-style-type: none"> <li>Conflicts of Obligation and Confidentiality</li> </ul>	Notified that Psych records were not received.	Submit facts regarding psych records and why they were not released as requested.
Research	<ul style="list-style-type: none"> <li>Study Design 1: Case Control             <ul style="list-style-type: none"> <li>T Gress</li> <li>PPT on Map</li> </ul> </li> <li>Study Design 2: Prospective Cohort (not given)</li> </ul>	Lecture not given yet. Will ask students to submit one study about Multiple Sclerosis and treatments.	Submission of article.
Cultural Competency	<ul style="list-style-type: none"> <li>Mentally Ill patient with caseworker             <ul style="list-style-type: none"> <li>CCE II</li> </ul> </li> </ul>	CCE Participation	CCE Participation
IPE	<ul style="list-style-type: none"> <li>N/A</li> </ul>	Prepare written educational materials for nursing at patient's healthcare facility. Focus: Physical Exam Monitoring	Submission of instructions.

Additional Lectures that may be pertinent-None

-Mentally Ill with Case Worker-Confidential Records (Psych History)

CCE III-MSK-Sports Physical

Professionalism	<ul style="list-style-type: none"> <li>• Conflicts of Obligation and Confidentiality- CCE II               <ul style="list-style-type: none"> <li>○ Clements</li> <li>○ No Materials Posted</li> </ul> </li> <li>• Behavioral Med Lecture</li> </ul>		
Ethics	<ul style="list-style-type: none"> <li>• Conflicts of Obligation and Confidentiality</li> </ul>		
Research	<ul style="list-style-type: none"> <li>• Study Design 1: Case Control               <ul style="list-style-type: none"> <li>○ T Gress</li> <li>○ PPT on Map</li> </ul> </li> <li>• Study Design 2: Prospective Cohort (not given)</li> </ul>		
Cultural Competency	<ul style="list-style-type: none"> <li>• Professional Athlete Using Steroids               <ul style="list-style-type: none"> <li>○ CCE III</li> </ul> </li> </ul>		
IPE	<ul style="list-style-type: none"> <li>• N/A</li> </ul>		

CCE III-MSK-Sports Physical

-Professional athlete using steroids.

## Examples of Student Responses

### Example #1

#### Medical Humanities Assignment 1

Item 1:

Informed Consent

Date: October 1, 2014

Patient name:

Mrs. Snodgrass complains of depression, which seems to be rather severe. Without treatment, her depression will likely persist or even worsen. Thus, it is highly recommended that some sort of treatment begin immediately.

Clinical guidelines from American Society of Internal Medicine suggest that St. John's wort can be considered an option along with antidepressant medications for short-term treatment of mild depression. According to the available literature, taking St. John's wort extract has demonstrated the ability to improve mood, and decrease anxiety and insomnia related to depression. Moreover, it seems to be about as effective in treating depression as many prescription drugs.

However, since St. John's wort does not appear to be any more effective or significantly better tolerated than antidepressant medications, and since St. John's wort often develops interactions with other drugs, the guidelines suggest it might not be an appropriate choice for many people.

Because Mrs. Snodgrass is already on other medication for diabetes, and because St. John's wort might not be as effective for more severe cases of depression, it is my recommendation that she no longer take it and instead use a safer alternative. Some alternatives to St. John's wort are psychotherapy, to help combat depression-associated behaviors that may worsen syndromes, and a SSRI (selective serotonin reuptake inhibitor) antidepressant such as Prozac or Paxil.

These are shown to be the most effective treatments according to the literature, and thus the most likely to be effective. It is my belief that with a comprehensive plan for treatment to address the psychological and physiological symptoms of Mrs. Snodgrass and alleviate her depression once and for all. I will schedule her for bimonthly follow-up visits for the next 3 months and then evaluate her progress at that time.

References:

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/329.html>

<http://www.webmd.com/depression/understanding-depression-treatment>

Item 2:

I was rather surprised by the fact that Mrs. Snodgrass’ ex-husband did not believe in mental illness. In this day and age, one expects such things to be common knowledge. Psychological illness does have the rather unique feature that it cannot always be directly measured quantifiably, leading some to believe that it is simply an excuse for lethargy or similar.

Additionally, despite the fact that I recommended she no longer continue St. John’s wort, I am well-aware that alternative medicines and herbal remedies are very often just as effective as their pharmaceutical counterparts. One interesting example of this is the fact that ancient Egyptians used moldy bread as a component of poultices for infected wounds; penicillin is derived from a compound present in bread molds.

My senior thesis in college was focused on documenting the physiological benefits of a treatment in Russian folk medicine, tea made from the Chaga mushroom. Further clinical studies I cited in that research project demonstrated that the Chaga mushroom is effective as an antibiotic, an anti-inflammatory and antioxidant, among other potential uses. In fact, it has even demonstrated anti-tumor properties. Thus, I was already aware that alternative medicines are often quite effective, despite the fact that they are often not taken seriously.

Dealing with patients while maintaining professionalism and composure is often a challenge. One instance of this is when Mrs. Snodgrass complained about her previous physician; maintaining one’s respect for other physicians is essential, but so is recognizing patient concerns. Additionally, respecting a patient’s beliefs, including their opinions with regards to folk remedies, is a necessity. At the same time however, a physician is obligated to be honest and to advance the patient’s physical well-being.

I approached these challenges to the best of my ability; I acknowledged her dislike for her previous physician but used that as an opportunity to establish her expectations. I also informed her that I would look into the literature regarding her continued use of St. John’s wort, and that I would inform of her of my findings. Thus, I believe I maintained appropriate professionalism and cultural competency in dealing with Mrs. Snodgrass.

Student Name

**Feedback Received by the student:**

Assignment: Medical Humanities MS-1 Assignment (Snodgrass)

COMPONENT	Pts.
Ethics-Truthfulness/IC (2)	2
Research Evidence (1)	1
Cultural Competency (1)	1
Professionalism (1)	1
Total: (5)	5

Comments:

1. Ethics-Truthfulness/IC: Good job on explaining the evidence based medicine references and noting the plan of care with other medications. Remember to include specific side effects to the patient when providing instructions. According to the assignment, you were to provide a response to Ms. Snodgrass. The reasons for that were to accustom you to speaking to a patient in terms they need to understand. Your format focused on providing the instructor the information. For this assignment, use this as feedback. Future assignments, this may mean a deduction in points.
2. Research Evidence: Good job on providing two references.
3. Cultural Competency: What an interesting background on your senior thesis in college. Alternative medicine certainly has become more and more popular
4. Professionalism: Great reflection on your professionalism. Always is challenging when a patient is unhappy.

Any questions please let me know!

Example # 2

Date: 9/26/2014

Patient's name: Gweneviere Snodgrass

Date of birth: 6/13/1971

I have been made aware by \_\_\_\_\_ of the following:

During my recent visit to our office, I was informed that my previous diagnosis of depression was the same found by my physician. I informed my physician that I did not wish to take prescription medications. My physician agreed to allow me to continue taking 300 mg of St. John's wort three times a day in conjunction with psychotherapy. I have been made aware that St. John's wort has been shown to be as effective as tricyclic antidepressants for mild depression. I was also told that if my depression symptoms do not improve or become worse within six weeks, the need for prescription medications or other treatments may be necessary. I was made aware that if my depression symptoms get acutely worse or if I begin having suicidal thoughts, I am to contact my physician immediately.

I have been made aware of the side effects of St. John's wort: nausea, dizziness, confusion, fatigue, dry mouth, and rarely skin sensitivity to light. I have been told that if these symptoms interfere with my day to day life I am to contact my physician. I have been made aware of the fact that St. John's wort is known to interfere with the effectiveness of other medications including hormonal methods of birth control, HIV drugs, and cancer medications and I have agreed to stop taking the St. John wort if the need arises for me to have to take any of these medications. I have also agreed to contact my physician if I am prescribed a new medication by another physician or if I wish to begin any new over the counter medications to discuss possible interactions with the St. John's wort.

I have had the opportunity to have all my questions about depression and my prescribed therapy answered to my satisfaction.

Signature of patient or guardian: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of witness: \_\_\_\_\_

Date: \_\_\_\_\_

For more information and for where the information in said document was obtained from see:

Keaton, Wayne & Paul Ciechanowski; *Patient information: Depression treatment options for adults (Beyond the Basics)*; UpToDate; Jul 2, 2013; <http://www.uptodate.com/contents/depression-treatment-options-for-adults-beyond-the-basics>

Reflection on CCE1

9/29/2014

I must say that I did not expect the first CCE to be as in-depth as it was. With that said, I am glad it was, as I was made uncomfortable with two subjects in particular: dealing with psychiatric care and the use of alternative medicines. Only two years ago I had a roommate who had depression. Looking back on it now, I do not think I responded appropriately. I was not as vicious as Ms. Snodgrass's ex husband, but there were times when I did ask, "why do not just get up and make yourself happy?". Since then I have become more educated on the matter (with much more room to grow still) and know that depression is not a choice. I understand taking care of the welfare of my patients like Ms. Snodgrass or my former roommate takes significant patience and persistence.

Like Ms. Snodgrass, my roommate's first physician tried to put him on heavy antidepressants to begin with. Unfortunately, they did not work and led to some poor side effects, which ended up worsening his depression. Psychotherapy has helped him quite a bit, and it was encouraging to read on UpToDate that medication and psychotherapy in conjunction is highly recommended. In regards to the St. John's wort, I was surprised at how effective studies have shown it to be. I honestly at first assumed it was no more potent than a placebo, because I seem to have a negative bias towards supplements, herbs, and other nontraditional medicines. This CCE was a great learning experience for me to keep my biases in perspective and to always maintain my intellectual curiosity, especially in regards to my patient's welfare. It was also a great example where a patient's autonomy may result in better results than if she had listened to her first physician, and had taken the Prozac without question, as most studies showed the St. John's wort had fewer negative side effects compared to most antidepressants.

**Feedback Received by student:**

Student Name

Assignment: Medical Humanities MS-1 Assignment (Snodgrass)

COMPONENT	Pts.
Ethics-Truthfulness/IC (2)	2
Research Evidence (1)	1
Cultural Competency (1)	1
Professionalism (1)	1
Total: (5)	5

Comments:

1. Ethics-Truthfulness/IC: All elements of an informed consent were included: diagnosis, recommended treatment, alternative treatments and probability of success (that one is slightly difficult) especially with connection of other medications.
2. Research Evidence: Good job with the citing of references!!
3. Cultural Competency: Thank you for your honesty and note of professional growth on the topic. It is difficult to understand something you can't "see or touch" but rather "feel" such as psychiatric.
4. Professionalism: Dr. Mays suggested a reading with the assignment and self-reflection. I hope you take a moment to read it on your own as I understand from classmates that it was helpful in tough situations like this.

Any questions please let me know!



# APPENDIX 4: CURRICULUM COMMITTEE REPORTS

## Curriculum Committee Meeting

September 12, 2013

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**Present:** Richard Egleton, Ph.D., Jonathan Seibert, MSIII, Nancy Norton, M.D., Laura Richardson, Ph.D., Susan Jackman, Ph.D., Carl Gruetter, Ph.D. (Chair), Becca Hayes, MSIV, Paul Viscuse, MSII, Diane Dawley, MSI, Hisham Keblawi, M.D., Brian Dzwonek, Ed.D., Piyali Dasgupta, Ph.D., William McCumbee, Ph.D., Kelly Melvin, M.D., Farid Mozaffari, M.D., Sean Loudin, M.D, Tigran Garabekyan, M.D., Dilip Nair, M.D., Christine Gilkerson, M.D., Laura Cummings

**Absent:** Elaine Hardman, Ph.D., Piyali Dasgupta, PhD., Paul Ferguson, M.D., Bobby Miller, M.D., Amy Smith, BSN, M.Ed.

**Guests:** Sasha Zill, Ph.D.

Meeting called to order at 4:30pm, adjourned at 5:50pm.

AGENDA ITEM	DISCUSSION	PLAN/ACTION
I. Review/approval of August 15, 2013 Curriculum Committee Meeting Minutes (Gruetter)		August 15, 2013 Minutes approved.
II. Subcommittee Reports <ul style="list-style-type: none"> <li>• MSI Subcommittee (Will McCumbee)</li> <li>• MSII Subcommittee (Susan Jackman)</li> <li>• MSIII Subcommittee (Sean Loudin)</li> <li>• MSIV Subcommittee (Chuck Clements)</li> <li>• Integration Subcommittee (Bob Miller)</li> </ul>	<p><b>MSI</b> – Things are going well so far. The scores are good. A Liaison Committee is being formed so we should start getting some student feedback.</p> <p><b>MSII</b> – The subcommittee hasn’t met this month yet. The students did well on their first exam.</p> <p><b>MSIII</b> – After the first rotation, we are reminding the students that Radiology is there as a part of the curriculum.</p> <p><b>MSIV</b> – No Report</p> <p><b>Integration</b> – The meeting was held on 9/12. The integration documents emailed to the Curriculum Committee came from this meeting. The Lifelong Learning theme will be Brian Dzwonek’s responsibility.</p>	No action taken.

III. Discussion and possible vote on Disease Objectives – Attachments A1-A6 (Gruetter)	Disease Objectives – 6 of them – Anxiety Disorder; Chest Pain; Dysuria; Pneumothorax; Urinary Disorders; Urinary Tract Infection.	Motion to approve the 6 Disease Objects passed.
IV. Discussion of new LCME standard ED-19A and Interprofessional Theme (Amy Smith)		Tabled.
V. Revision of SOPs – Attachments B1-B2 (Richard Egleton, Jonathan Seibert)	The documents sent out were the basic format. The CC will begin to cover 2 of the 7 sections each meeting. Sections 1 (Mission) & 2 (Composition of the Committee) will be covered at the next meeting. Anyone with comments or suggestions should email Dr. Egleton and Jonathan.	No action taken.
VI. Theme Leader Expectations – Attachment C (Richardson)	<p>There are currently 8 themes. There has been trouble finding replacements for Theme Leaders who wish to step away. It would be a good idea to have a set of simple expectations for the leaders. We need Theme Leaders:</p> <ul style="list-style-type: none"> <li>• who can review content</li> <li>• who will interact with the Block Leaders</li> <li>• who will identify lecturers</li> <li>• who will measure outcomes</li> <li>• who will make sure there are no gaps and redundancies</li> </ul> <p>Dr. Richardson is seeking feedback.</p>	No action taken.
VII. Updates to CC Database (Dzwonek)	Work is ongoing on the Curriculum Query Form. Themes are part of the reporting structure. Diseases are now listed. Security of the Question Bank was discussed.	No action taken.
VIII. Course & Faculty Evaluations (Becca Hayes & Brian Dzwonek)	The “one-size-fits-all” evaluation is not working. What is the role of the Evaluation Committee? A Workgroup dedicated to these evaluations was suggested which would deal	Motion to form a working group to look at evaluations was approved.

	<p>with:</p> <ul style="list-style-type: none"> <li>• Seeing what departments do with the evaluation results</li> <li>• Seeing how changes will be implemented.</li> <li>• Check for patterns</li> <li>• Other duties</li> </ul> <p>Discussion regarding the composition of the workgroup ensued.</p>	
IX. Announcements		
X. Other Business		
XI. Next Meeting October 10, 2013		

## Anxiety Disorders

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Describe the structure and function of the limbic system.</li> <li>2. Describe the GABA receptor and its role in inhibitory signaling.</li> <li>3. Discuss the basic methods for observing and describing human behavior.</li> <li>4. Understand the nature of stress and strategies for its management.</li> </ol>	<b>S &amp; F I</b> <b>S &amp; F II</b>	<b>IC1A1</b> <b>MK1A1</b> <b>MK1B1</b> <b>MK1F1</b> <b>MK1F2</b> <b>PR1A1</b>	<b>Block Exam, Small Group, assignments, quizzes</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Define anxiety and the differences between endogenous and exogenous anxiety.</li> <li>2. Recognize the clinical manifestations of anxiety and their biological basis.</li> <li>3. Know the differential diagnosis for various anxiety disorders.</li> <li>4. Describe the pharmacological and behavioral approaches to anxiety treatment.</li> <li>5. Know the side effects and abuse potential of the various anxiolytics.</li> <li>6. Describe</li> </ol>	<b>D &amp; T II</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2F1</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>MK2H3</b> <b>PC2A1</b> <b>PC2A2</b> <b>PC2B2</b> <b>PC2C1</b> <b>PC2D1</b> <b>PC2D2</b> <b>PC2E1</b> <b>PC2E2</b> <b>PC2F1</b> <b>PC2F2</b> <b>PC2F3</b>	<b>Block Exam, Small Group assignments, homework, quizzes, clinical skills</b>
<b>MS III</b>			
<ol style="list-style-type: none"> <li>1. Distinguish between developmentally appropriate fears and the pathological anxiety associated with an anxiety disorder.</li> <li>2. Discuss the differential diagnosis of anxiety to include both primary anxiety disorders and those secondary to other conditions (e.g., substances, general medical conditions, etc.)</li> <li>3. Describe the clinical manifestations of anxiety disorders as they present across the span of development (e.g., pediatric, adult, geriatric)</li> <li>4. Elicit and accurately document a complete history from a patient with an anxiety disorder.</li> <li>5. Demonstrate a physical examination to</li> </ol>	<b>FM</b> <b>IM</b> <b>Peds</b> <b>Psych/Neuro</b>	<b>IC3A1</b> <b>MK3E2</b> <b>MK3E3</b> <b>MK3F1</b> <b>MK3F2</b> <b>MK3G1</b> <b>MK3H1</b> <b>MK3H2</b> <b>MK2H3</b> <b>PC3F1</b> <b>PC3F2</b>	<b>Subject Miniboard, Faculty observation, Clerkship exams, Patient logger, Standardized Patient Exam</b>

<p>include performance of a comprehensive mental status examination with a patient who has an anxiety disorder.</p> <p>6. Recommend management of patients with primary or secondary anxiety disorders to include relevant psychotherapies and pharmacotherapy.</p>			
<b>MS IV (if participating in these rotations)</b>			
<ol style="list-style-type: none"> <li>1. Elicit and document a history as well as perform a comprehensive physical and mental status examination on patients with anxiety disorders taking into account variations in presentation according to age, developmental level, gender, and cultural background.</li> <li>2. Provide education to patients and families about etiology, short and long-term treatment, and prognosis of anxiety disorders as well as complicating effects of co-morbid illnesses.</li> <li>3. Develop a comprehensive treatment program for a patient with an anxiety disorder complicated by co-morbid substance use disorder.</li> <li>4. Develop a comprehensive treatment program for a patient with an anxiety disorder complicated by pregnancy.</li> <li>5. Demonstrate an understanding of systems-base care as it applies to treatment planning with patients who have an anxiety disorder.</li> </ol>	<p><b>FM</b> <b>IM</b> <b>Peds</b> <b>Psych/Neuro</b></p>	<p><b>IC4A1</b> <b>1C4A3</b> <b>MK4C1</b> <b>MK4F1</b> <b>MK4G1</b> <b>MK4H1</b> <b>MK4H2</b> <b>PC4A2</b> <b>PC4B1</b> <b>PC4F1</b> <b>PC4F2</b> <b>PC4G1</b> <b>PC4G3</b> <b>SB4B1</b></p>	<p><b>Faculty Observation, Sub-Internship exams, Standardized patient exam</b></p>

## Chest Pain

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the gross anatomy of the thorax and its contents.</li> <li>2. Demonstrate understanding of the histology of thoracic structures.</li> <li>3. Demonstrate the proper technique for the physical exam as it pertains to the chest.</li> </ol>	<b>S &amp; F III</b> <b>ICS</b>	<b>MK1A1</b> <b>MK1C1</b> <b>MK1D1</b> <b>MK1E1</b> <b>MK1E2</b> <b>PR1A1</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Discuss the differential diagnosis of chest pain.</li> <li>2. Discuss how hereditary variants may predispose an individual to certain causes of chest pain.</li> <li>3. Describe certain comorbidities that increase the likelihood a patient could develop a condition leading to chest pain.</li> <li>4. Describe how medications can be used to treat causes of chest pain.</li> <li>5. Identify diminished or unequal breath sounds, cardiac changes, and musculoskeletal changes on physical exam.</li> <li>6. Identify pharmacologic agents that may cause chest pain as a side effect.</li> <li>7. Demonstrate an understanding of the use of biochemical markers for determining the cause of chest pain.</li> </ol>	<b>D &amp; T III</b> <b>ACS</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2E4</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>PC2B2</b> <b>PC2D1</b> <b>PC2E1</b> <b>PB2A1</b> <b>PB2B1</b> <b>PR2A1</b> <b>SB2A1</b> <b>SB2A2</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS III</b>			
<ol style="list-style-type: none"> <li>1. Describe the clinical findings typical of specific causes of chest pain.</li> <li>2. Interpret radiographic studies related to causes of chest pain.</li> <li>3. Discuss the clinical</li> </ol>	<b>Surg</b> <b>Peds</b> <b>IM</b> <b>FP</b>	<b>IC3A1</b> <b>IC3A2</b> <b>IC3A3</b> <b>IC3A4</b> <b>IC3A5</b> <b>IC3B1</b>	<b>Test Questions</b> <b>Direct observation by</b> <b>faculty member</b> <b>Standardized Patient</b> <b>Patient log</b>

<p>management of patients with chest pain.</p> <p>4. List conditions associated with an increased incidence of chest pain.</p> <p>5. Describe how chest pain differs between men and women.</p>		<p>MK3B1 MK3C1 MK3D1 MK3D2 MK3E1 MK3E2 MK3E3 MK3F2 MK3G1 MK3H1 MK3H2 PC3A1 PC3A2 PC3A3 PC3B1 PC3D1 PC3D2 PC3E1 PC3E3 PC3F1 PC3F2 PB3A1 PR3A1 PR3H1 PR3H2 PR3I3 SB3A1 SB3B1 SB3B3 SB3B5 SB3D1 SB3E1 SB3E2</p>	
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**MS IV (if participating in these rotations)**

<p>1. Discuss a comprehensive and cost effective approach to managing a patient presenting with chest pain.</p> <p>2. Counsel patients on lifestyle modifications that can reduce the likelihood of developing certain conditions associated with chest pain.</p>	<p><b>IM Sub-I</b> <b>FM Sub-I</b> <b>Peds Sub-I</b> <b>ER</b> <b>Ob-Gyn</b> <b>MICU</b></p>	<p>IC4A1 IC4A2 IC4A3 IC4B1 MK4B1 MK4C1 MK4D1 MK4D2 MK4E1 MK4H2 PB4A1 PB4B1 PB4B2</p>	<p><b>Test Questions</b> <b>Direct observation by faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations to faculty</b> <b>Patient log</b></p>
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		<b>PB4C1</b> <b>PB4C2</b> <b>PR4A1</b> <b>PR4H1</b> <b>PR4I1</b> <b>SB4A1</b> <b>SB4B1</b> <b>SB4B4</b> <b>SB4C1</b> <b>SB4D1</b> <b>SB4E1</b>	
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## Dysuria

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the gross anatomy of the kidneys, ureters, bladder, and urethra.</li> <li>2. Describe the physiology and function of the renal system including the production of urine.</li> <li>3. Demonstrate understanding of the histology of the kidneys, ureters, bladder, and urethra.</li> <li>4. Demonstrate the proper technique for the physical exam as it pertains to the lower abdominal organs.</li> </ol>	<b>S &amp; F III</b> <b>S &amp; F IV</b> <b>ICS</b>	<b>MK1A1</b> <b>MK1C1</b> <b>MK1D1</b> <b>MK1E1</b> <b>MK1E2</b> <b>PR1A1</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Describe the most common causes of dysuria.</li> <li>2. Describe anatomic variations that predispose patients to conditions associated with dysuria.</li> <li>3. Describe pharmacologic management of conditions associated with dysuria.</li> <li>4. Identify abnormalities on physical exam that may help differentiate the causes of dysuria.</li> <li>5. Describe microbial and pharmacologic causes of dysuria.</li> </ol>	<b>D &amp; T III</b> <b>D &amp; T IV</b> <b>ACS</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2E4</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>PC2B2</b> <b>PC2D1</b> <b>PC2E1</b> <b>PB2A1</b> <b>PB2B1</b> <b>PR2A1</b> <b>SB2A1</b> <b>SB2A2</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS III</b>			
<ol style="list-style-type: none"> <li>1. Describe the clinical findings typical of conditions causing dysuria.</li> <li>2. Discuss the differential diagnosis for dysuria.</li> <li>3. Discuss the clinical management</li> </ol>	<b>IM</b> <b>FP</b> <b>Peds</b> <b>Surg</b> <b>Ob/Gyn</b>	<b>IC3A1</b> <b>IC3A2</b> <b>IC3A3</b> <b>IC3A4</b> <b>IC3A5</b> <b>IC3B1</b>	<b>Test Questions</b> <b>Direct observation by</b> <b>faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations to</b> <b>faculty</b>

<p>of specific causes of dysuria.</p> <p>4. List conditions associated with an increased incidence of conditions causing dysuria.</p> <p>5. Identify laboratory tests that help identify specific causes of dysuria.</p>		<p>MK3B1 MK3C1 MK3D1 MK3D2 MK3E1 MK3E2 MK3E3 MK3F2 MK3G1 MK3H1 MK3H2 PC3A1 PC3A2 PC3A3 PC3B1 PC3D1 PC3D2 PC3E1 PC3E3 PC3F1 PC3F2 PB3A1 PR3A1 PR3H1 PR3H2 PR3I3 SB3A1 SB3B1 SB3B3 SB3B5 SB3D1 SB3E1 SB3E2</p>	<p>Patient log</p>
<p><b>MS IV (if participating in these rotations)</b></p>			
<p>1. Discuss effective comprehensive management plans for patients with certain causes of dysuria.</p> <p>2. Describe the implications of reportable diseases for population health.</p>	<p><b>IM</b> <b>PEDS</b> <b>FP</b> <b>Ob/Gyn</b></p>	<p>IC4A1 IC4A2 IC4A3 IC4B1 MK4B1 MK4C1 MK4D1 MK4D2 MK4E1 MK4H2 PB4A1 PB4B1 PB4B2</p>	<p><b>Test Questions</b> <b>Direct observation by faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations to faculty</b> <b>Patient log</b></p>

		<b>PB4C1</b> <b>PB4C2</b> <b>PR4A1</b> <b>PR4H1</b> <b>PR4I1</b> <b>SB4A1</b> <b>SB4B1</b> <b>SB4B4</b> <b>SB4C1</b> <b>SB4D1</b> <b>SB4E1</b>	
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## Pneumothorax

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the gross anatomy of the lung and thorax.</li> <li>2. Demonstrate understanding of the histology of the lung.</li> <li>3. Demonstrate the proper technique for the physical exam as it pertains to the lung.</li> </ol>	<b>S &amp; F III</b> <b>ICS</b>	<b>MK1A1</b> <b>MK1C1</b> <b>MK1D1</b> <b>MK1E1</b> <b>MK1E2</b> <b>PR1A1</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Describe factors that may predispose an individual to developing a pneumothorax.</li> <li>2. Discuss the differential diagnosis of respiratory distress.</li> <li>3. Identify diminished or unequal breath sounds on physical exam.</li> </ol>	<b>S &amp; F III</b> <b>ACS</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2E4</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>PC2B2</b> <b>PC2D1</b> <b>PC2E1</b> <b>PB2A1</b> <b>PB2B1</b> <b>PR2A1</b> <b>SB2A1</b> <b>SB2A2</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS III</b>			
<ol style="list-style-type: none"> <li>1. Describe the clinical findings typical of pneumothorax.</li> <li>2. Interpret radiographs consistent with the diagnosis of pneumothorax.</li> <li>3. Discuss the clinical management of pneumothorax.</li> <li>4. List conditions associated with an increased incidence of pneumothorax.</li> </ol>	<b>Surg</b> <b>Peds</b> <b>IM</b> <b>Peds</b>	<b>IC3A1</b> <b>IC3A2</b> <b>IC3A3</b> <b>IC3A4</b> <b>IC3A5</b> <b>IC3B1</b> <b>MK3B1</b> <b>MK3C1</b> <b>MK3D1</b> <b>MK3D2</b> <b>MK3E1</b> <b>MK3E2</b> <b>MK3E3</b> <b>MK3F2</b> <b>MK3G1</b> <b>MK3H1</b>	<b>Test Questions</b> <b>Direct observation by</b> <b>faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations</b> <b>to faculty</b> <b>Patient log</b>

		<b>MK3H2</b> <b>PC3A1</b> <b>PC3A2</b> <b>PC3A3</b> <b>PC3B1</b> <b>PC3D1</b> <b>PC3D2</b> <b>PC3E1</b> <b>PC3E3</b> <b>PC3F1</b> <b>PC3F2</b> <b>PB3A1</b> <b>PR3A1</b> <b>PR3H1</b> <b>PR3H2</b> <b>PR3I3</b> <b>SB3A1</b> <b>SB3B1</b> <b>SB3B3</b> <b>SB3B5</b> <b>SB3D1</b> <b>SB3E1</b> <b>SB3E2</b>	
1. Discuss ways to decrease the likelihood of developing a pneumothorax when providing positive pressure ventilation 2. Describe how a pneumothorax will effect a patient on mechanical ventilation	<b>Peds</b> <b>IM Sub-I</b> <b>FM Sub-I</b> <b>ICU</b> <b>ER</b>	<b>IC4A1</b> <b>IC4A2</b> <b>IC4A3</b> <b>IC4B1</b> <b>MK4B1</b> <b>MK4C1</b> <b>MK4D1</b> <b>MK4D2</b> <b>MK4E1</b> <b>MK4H2</b> <b>PB4A1</b> <b>PB4B1</b> <b>PB4B2</b> <b>PB4C1</b> <b>PB4C2</b> <b>PR4A1</b> <b>PR4H1</b> <b>PR4I1</b> <b>SB4A1</b> <b>SB4B1</b> <b>SB4B4</b> <b>SB4C1</b> <b>SB4D1</b> <b>SB4E1</b>	<b>Test Questions</b> <b>Direct observation by faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations to faculty</b> <b>Patient log</b>

## Urinary Disorders

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the gross anatomy of the kidneys, ureters, bladder, and urethra.</li> <li>2. Describe the physiology of the renal system including the production of urine.</li> <li>3. Demonstrate understanding of the histology of the kidneys, ureters, bladder, and urethra.</li> <li>4. Demonstrate the proper technique for the physical exam as it pertains to the lower abdominal organs.</li> </ol>	<b>S &amp; F III</b> <b>S &amp; F IV</b> <b>ICS</b>	<b>MK1A1</b> <b>MK1C1</b> <b>MK1D1</b> <b>MK1E1</b> <b>MK1E2</b> <b>PR1A1</b>	<b>Test Questions</b> <b>Standardized Patients</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Describe how immune-mediated injury can affect the renal system.</li> <li>2. Describe genetic predispositions to certain urinary disorders.</li> <li>3. Describe how pharmacology can treat or exacerbate certain urinary disorders.</li> <li>4. Describe how hematuria is related to various urinary disorders.</li> <li>5. Identify abnormalities on physical exam that may help differentiate urinary disorders.</li> </ol>	<b>D &amp; T III</b> <b>D &amp; T IV</b> <b>ACS</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2E4</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>PC2B2</b> <b>PC2D1</b> <b>PC2E1</b> <b>PB2A1</b> <b>PB2B1</b> <b>PR2A1</b> <b>SB2A1</b> <b>SB2A2</b>	<b>Test Questions</b> <b>Clinical Skills Lab</b>
<ol style="list-style-type: none"> <li>1. Describe the clinical findings typical of a variety of urinary disorders.</li> <li>2. Discuss the differential diagnosis for urinary disorders.</li> <li>3. Discuss the clinical management of various urinary disorders.</li> <li>4. List conditions associated with an increased incidence of urinary disorders.</li> <li>5. Identify laboratory tests that</li> </ol>	<b>IM</b> <b>Peds</b> <b>FM</b>	<b>IC3A1</b> <b>IC3A2</b> <b>IC3A3</b> <b>IC3A4</b> <b>IC3A5</b> <b>IC3B1</b> <b>MK3B1</b> <b>MK3C1</b> <b>MK3D1</b> <b>MK3D2</b> <b>MK3E1</b>	<b>Test Questions</b> <b>Direct observation by</b> <b>faculty member</b> <b>Standardized Patient</b> <b>Patient Presentations to</b> <b>faculty</b> <b>Patient log</b>

<p>help identify specific urinary disorders.</p> <p>6. Describe laboratory or radiologic testing that may be used to diagnose urinary disorders such as reflux or fistulas.</p> <p>7. Describe the indications for prophylactic pharmacologic intervention for urinary disorders.</p>		<p><b>MK3E2</b>  <b>MK3E3</b>  <b>MK3F2</b>  <b>MK3G1</b>  <b>MK3H1</b>  <b>MK3H2</b>  <b>PC3A1</b>  <b>PC3A2</b>  <b>PC3A3</b>  <b>PC3B1</b>  <b>PC3D1</b>  <b>PC3D2</b>  <b>PC3E1</b>  <b>PC3E3</b>  <b>PC3F1</b>  <b>PC3F2</b>  <b>PB3A1</b>  <b>PR3A1</b>  <b>PR3H1</b>  <b>PR3H2</b>  <b>PR3I3</b>  <b>SB3A1</b>  <b>SB3B1</b>  <b>SB3B3</b>  <b>SB3B5</b>  <b>SB3D1</b>  <b>SB3E1</b>  <b>SB3E2</b></p>	
<b>MS IV (if participating in these rotations)</b>			
<p>1. Discuss effective comprehensive management plans for patients with a variety of urinary disorders.</p> <p>2. Counsel patients with a variety of urinary disorders on how to manage their care.</p>	<p><b>FM Sub-I</b>  <b>Peds Sub-I</b>  <b>Surg Sub-I</b>  <b>Ob/Gyn Sub-I</b></p>	<p><b>IC4A1</b>  <b>IC4A2</b>  <b>IC4A3</b>  <b>IC4B1</b>  <b>MK4B1</b>  <b>MK4C1</b>  <b>MK4D1</b>  <b>MK4D2</b>  <b>MK4E1</b>  <b>MK4H2</b>  <b>PB4A1</b>  <b>PB4B1</b>  <b>PB4B2</b>  <b>PB4C1</b>  <b>PB4C2</b>  <b>PR4A1</b>  <b>PR4H1</b>  <b>PR4I1</b></p>	<p><b>Test Questions</b>  <b>Direct observation by faculty member</b>  <b>Standardized Patient</b>  <b>Patient Presentations to faculty</b>  <b>Patient log</b></p>

		<b>SB4A1</b> <b>SB4B1</b> <b>SB4B4</b> <b>SB4C1</b> <b>SB4D1</b> <b>SB4E1</b>	
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## Urinary Tract Infection

Objectives	Block	Competency	Assessment Method
<b>MS I</b>			
<ol style="list-style-type: none"> <li>1. Demonstrate understanding of the gross anatomy of the kidneys, ureters, bladder, and urethra.</li> <li>2. Demonstrate understanding of the histology of the kidneys, ureters, bladder, and urethra.</li> <li>3. Demonstrate the proper technique for the physical exam as it pertains to the lower abdominal organs.</li> </ol>	<b>S &amp; F III</b> <b>S &amp; F IV</b> <b>ICS</b>	<b>MK1A1</b> <b>MK1C1</b> <b>MK1D1</b> <b>MK1E1</b> <b>MK1E2</b> <b>PR1A1</b>	<b>Test Questions</b> <b>Clinical Skills</b>
<b>MS II</b>			
<ol style="list-style-type: none"> <li>1. Describe the most common microbes associated with urinary tract infections.</li> <li>2. Describe anatomic variations that predispose patients to urinary tract infections.</li> <li>3. Describe pharmacologic management of urinary tract infections.</li> <li>4. Recognize the differences in cystitis vs pyelonephritis.</li> <li>5. Identify abnormalities on physical exam that may help differentiate urinary tract infections.</li> <li>6. Describe laboratory tests used to diagnose UTI.</li> <li>7. Describe situations in which further laboratory or radiologic workup would be indicated.</li> <li>8. Describe reasons for variations in the length of treatment.</li> <li>9. Describe consequences of UTI in an elderly patient.</li> <li>10. Demonstrate the ability to select appropriate antimicrobial agents based on identification and sensitivities.</li> </ol>	<b>D &amp; T III</b> <b>D &amp; T IV</b> <b>ACS</b>	<b>MK2A1</b> <b>MK2B1</b> <b>MK2C1</b> <b>MK2E2</b> <b>MK2E3</b> <b>MK2E4</b> <b>MK2G1</b> <b>MK2H1</b> <b>MK2H2</b> <b>PC2B2</b> <b>PC2D1</b> <b>PC2E1</b> <b>PB2A1</b> <b>PB2B1</b> <b>PR2A1</b> <b>SB2A1</b> <b>SB2A2</b>	<b>Test Questions</b> <b>Clinical Skills Lab</b>

<b>MS III</b>			
<ol style="list-style-type: none"> <li>1. Describe the clinical findings typical of a variety of urinary tract infections.</li> <li>2. Discuss the differential diagnosis for urinary tract infections.</li> <li>3. Discuss the clinical management of urinary tract infections.</li> <li>4. List conditions associated with an increased incidence of urinary tract infections.</li> <li>5. Identify laboratory tests that help identify specific urinary tract infections.</li> <li>6. Describe situations in which further laboratory or radiologic workup would be indicated.</li> <li>7. Describe reasons for variations in the length of treatment.</li> <li>8. Describe consequences of UTI in an elderly patient.</li> <li>9. Demonstrate the ability to select appropriate antimicrobial agents based on identification and sensitivities.</li> </ol>	<b>IM</b> <b>Peds</b> <b>FM</b> <b>Surg</b> <b>Neuro</b>	<b>IC3A1</b> <b>IC3A2</b> <b>IC3A3</b> <b>IC3A4</b> <b>IC3A5</b> <b>IC3B1</b> <b>MK3B1</b> <b>MK3C1</b> <b>MK3D1</b> <b>MK3D2</b> <b>MK3E1</b> <b>MK3E2</b> <b>MK3E3</b> <b>MK3F2</b> <b>MK3G1</b> <b>MK3H1</b> <b>MK3H2</b> <b>PC3A1</b> <b>PC3A2</b> <b>PC3A3</b> <b>PC3B1</b> <b>PC3D1</b> <b>PC3D2</b> <b>PC3E1</b> <b>PC3E3</b> <b>PC3F1</b> <b>PC3F2</b> <b>PB3A1</b> <b>PR3A1</b> <b>PR3H1</b> <b>PR3H2</b> <b>PR3I3</b> <b>SB3A1</b> <b>SB3B1</b> <b>SB3B3</b> <b>SB3B5</b> <b>SB3D1</b> <b>SB3E1</b> <b>SB3E2</b>	<b>Test Questions</b> Direct observation by faculty member Standardized Patient Patient Presentations to faculty Patient log
<b>MS IV (if participating in these rotations)</b>			
<ol style="list-style-type: none"> <li>1. Discuss effective comprehensive management plans for patients with a urinary tract infection.</li> <li>2. Counsel patients on how to manage and prevent urinary</li> </ol>	<b>ICU</b> <b>IM Sub-I</b> <b>Peds Sub-I</b> <b>FM Sub-I</b> <b>NICU</b> <b>PICU</b>	<b>IC4A1</b> <b>IC4A2</b> <b>IC4A3</b> <b>IC4B1</b> <b>MK4B1</b> <b>MK4C1</b>	<b>Test Questions</b> Direct observation by faculty member Standardized Patient Patient Presentations to faculty

<p>tract infections.</p> <p>3. Recognize the importance of being culturally sensitive when providing counseling and prevention advice.</p>	<p><b>Ob/Gyn Sub-I</b></p>	<p><b>MK4D1</b>  <b>MK4D2</b>  <b>MK4E1</b>  <b>MK4H2</b>  <b>PB4A1</b>  <b>PB4B1</b>  <b>PB4B2</b>  <b>PB4C1</b>  <b>PB4C2</b>  <b>PR4A1</b>  <b>PR4H1</b>  <b>PR4I1</b>  <b>SB4A1</b>  <b>SB4B1</b>  <b>SB4B4</b>  <b>SB4C1</b>  <b>SB4D1</b>  <b>SB4E1</b></p>	<p><b>Patient log</b></p>
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## Curriculum Committee Meeting

October 10, 2013

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**Present:** Richard Egleton, Ph.D., Jonathan Seibert, MSIII, Nancy Norton, M.D., Laura Richardson, Ph.D., Susan Jackman, Ph.D., Elaine Hardman, Ph.D., Carl Gruetter, Ph.D. (Chair), Piyali Dasgupta, PhD., Paul Viscuse, MSII, Diane Dawley, MSI, Hisham Keblawi, M.D., Brian Dzwonek, Ed.D. (via Skype), Piyali Dasgupta, Ph.D., William McCumbee, Ph.D., Christine Gilkerson, M.D., Paul Ferguson, M.D., Bobby Miller, M.D., Amy Smith, BSN, M.Ed. Laura Cummings

**Absent:** Becca Hayes MSIV, Tigran Garabekyan, M.D., Kelly Melvin, M.D., Farid Mozaffari, M.D., Dilip Nair, M.D., Sean Loudin, M.D.

**Guests:** Sasha Zill, Ph.D.

Meeting called to order at 4:35pm, adjourned at 6:24pm.

AGENDA ITEM	DISCUSSION	PLAN/ACTION
I. Review/approval of September 12, 2013 Curriculum Committee Meeting Minutes (Gruetter)		September 12, 2013 Minutes approved.
II. LCME Update (Miller)	Probationary status has been lifted. There will probably be a couple of items for which we will be monitored. We will have the letter by mid next week.	No action taken.
III. Update on completed/ongoing MS1 & MS2 courses (McCumbee & Jackman)	McCumbee – Things are moving right along. All repeaters are doing well. The issues with the question bank still need to be resolved. Jackman – MS2 courses, no grades yet but no anticipated failures. The Liaison Committee students had suggestions for some small group activities.	No action taken.
IV. Subcommittee Reports <ul style="list-style-type: none"> <li>• MSI Subcommittee (Will McCumbee)</li> <li>• MSII Subcommittee (Susan Jackman)</li> <li>• MSIII Subcommittee (Sean Loudin)</li> <li>• MSIV Subcommittee (Chuck Clements)</li> </ul>	<b>MSI</b> – The sub-committee met on Sept. 19 <sup>th</sup> . Dr. Richardson spoke of her new appointment roles and responsibilities. Chris Rowe attended the meeting. Dr. Delidow presented a course report. It was suggested that faculty	No action taken.

<ul style="list-style-type: none"> <li>Integration Subcommittee (Bob Miller)</li> </ul>	<p>begin meeting on the 3<sup>rd</sup> Friday of every month at noon to review block integration.</p> <p><b>MSII</b> – The students had concerns that medical students with a graduate background have an advantage on exams. It was determined that this advantage was expected and could not be controlled. There was a recommendation that faculty write new questions for the exam question test bank. There was a recommendation that a course faculty FAQ website be created, to better disseminate the expectations of course faculty.</p> <p><b>MSIII</b> – No report</p> <p><b>MSIV</b> – No report</p> <p><b>Integration</b> – The final four disease integration forms have been completed and will be presented for review as part of the final nine documents that will complete the disease integration forms for the 115 diseases.</p>	
<p>V. Evaluation and Assessment Report (Brian Dzwonek)</p>	<p>Defer this discussion until later in the meeting.</p>	<p>No action taken.</p>
<p>VI. Discussion of new LCME Standard ED-19A and Interprofessional Theme (Amy Smith)</p>	<p>Amy gave a presentation on Interprofessional education (IPE) as a curricular component. Ms. Smith provided an overview of the LCME standard on IPE and the relationship to clinical responsibilities and patient safety. The Definition from the World Health Organization (2010) defines IPE as when students from two or more professions learn about, from, and with each other in order to enable effective collaboration. IPE must occur in a deliberate manner and not just by chance. The LCME initiated standard ED-19A on July 1, 2013. At</p>	<p>Amy will write and present the theme.</p>

	<p>the JCESOM IPE has been initiated with health care teams made up of MD students and other health care professionals and students. We need to identify and tag what we are already doing in the curriculum map. Currently we do not have IPE scheduled for the first two years of our curriculum. Ms. Smith showed the committee the Josie King video, which highlights risks to patient safety and the importance communication between care teams and patients. We need to avoid a lack of compassion and a lack of understanding. Proposal – Amy requested that Interprofessional Education become a curricular “Theme”. We need to identify a leader, create a 4 year curriculum and measure achievement through objectives. We have the opportunity partner with Johns Hopkins to create and use their 4<sup>th</sup> year curriculum on IPE. Amy has a student who will volunteer to be the leader. This student will present this to the committee in November.</p>	
VII. Discussion of Elective Policy update (Miller)	<p>There have been several requests for affiliation agreements. The Dean asked Dr. Miller to find out what are other schools doing. For another LCME school, there is no agreement needed. We will need one for non-LCME facilities (schools, hospitals, etc.)</p>	Motion to move forward – approved.
VII. Course & Faculty Evaluations Update (Dzwonek & Hayes)	<p>So far the Course and Faculty Evaluation working group has held two meetings. They have compared the current JCESOM assessment and evaluation forms with those of UK and Georgetown. The working group is</p>	No action taken.

	<p>investigating how to make the forms more applicable to the pre-clinical and clinical courses, which currently use the same form. The current forms are not as effective as they could be. In the meetings, the group talked about a core set of questions needed to for LCME compliancy and the need to provide feedback to the faculty. The group has reviewed different models and examples. The courses will be assessed twice a year at a minimum. Students who are asked to complete the evaluations will be selected via grade distribution to assure a distributed sample. The details are still being worked out but the forms will provide feedback using a Likert scale and written comments.</p>	
<p>IX. Revision of SOPs – Discussion of Draft Sections I-III (Egleton &amp; Seibert)</p>	<p>Dr. Egleton provided an overview of the current committee SOPs. I. Mission –no change is needed. II. Composition – membership taken from the faculty bylaws. We would have to change those bylaws to change the composition. It was recommended that this be kept as simple as possible while being consistent with the bylaws. Possible edits noted by Dr. Egleton. Term limits need to be clarified. Only ex officio members have no term limits. Redundant language – ex officio means at the pleasure of the Dean. Ex officio members have no term limits and do not vote. For this to change, the faculty bylaws need to be changed. We need to state who will be responsible for tracking conflict of interests, i.e. the chair.</p>	<p>Laura Cummings will take the minutes and provide them to Brian Dzwonek for approval.</p> <p>III. is tabled.</p>

X. Chair election at November meeting	The committee was asked to think about electing a new Chair. Dr. Miller proposed that Dr. Gruetter stay on as Chair until January.	No action taken.
X. Other Business	Dr. Miller suggested that the committee's regular meetings be changed from one Thursday evening per month to one day every other week at noon. Start the new schedule in January.	The committee was asked to come back with suggestions.
XI. Next Meeting November 14, 2013		



# Curriculum Integration Subcommittee Meeting

## February 4, 2014

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**Present:** Bob Miller, Sean Loudin, Nancy Norton, Richard Egleton, Brian Dzwonek, Don Primerano, Will McCumbee

**Absent:** Don Bertolotti, Rebecca Hayes, Elaine Hardman, Tigran Garabekyan

Meeting called to order 4:02 PM adjourned 4:50 PM

Agenda Item	Discussion	Action
I. Progress and updates	Dr. Miller reviewed the progress so far regarding the themes that are in place and plans moving forward to continue to add themes when felt to be necessary. There was a discussion amongst the group regarding the reporting of both themes and diseases as we approach the end of the academic year.	
II. Nutrition Theme	Dr. Miller reviewed his meeting with Joy Dalton of Huntington's Kitchen and her thoughts about having medical students come to Huntington's Kitchen as part of a nutrition theme. Classes would be taught in conjunction with the dietetics department on campus.	Recommendation to add nutrition theme approved. Dr. Miller to touch base with Dr. Shaw about possibly being a theme leader.
III. Smiles for Life	Dr. Loudin reviewed the Smiles for Life Modules. The committee agreed it would be worth investigating as a possible third year requirement.	Dr. Loudin to touch base with Dr. Hanlon regard price etc.
IV. Genetics Theme	Dr. Primerano presented the Medical School Core Curriculum in Genetics from the Association of Professors of Human and Medical Genetics. After discussion, the group decided we would distribute the document to block leaders/clerkship directors asking them to identify any areas that are covered including the pedagogies and the assessments.	Dr. Primerano to update form and distribute.
V. Committee's Role moving forward	Would focus on data collection and report generated for the curriculum committee to review and provide suggestions as it attempts to measure and improve outcomes.	

## Curriculum Committee Meeting

June 5, 2014

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**Present:** Jonathan Seibert, MSIII, Laura Richardson, Ph.D., Elaine Hardman, Ph.D., Piyali Dasgupta, PhD., William McCumbee, Ph.D., Richard Egleton Ph.D., Tigran Garabekyan, M.D., Sean Loudin, M.D. (Chair), Bobby Miller, M.D., Amy Smith, BSN, M.Ed., Laura Cummings, Hongwei Yu, Ph.D.

**Absent:** Paul Viscuse, MSII, Diane Dawley, MSI, Nancy Norton, M.D., Susan Jackman, Ph.D., Carl Gruetter, Ph.D., Kelly Melvin, M.D., Hisham Keblawi, M.D., Farid Mozaffari, M.D., Christine Gilkerson, M. D., Paul Ferguson, M.D., Dilip Nair, M.D., Charles Clements, M.D., Brian Dzwonek, Ed.D., Michelle Ruppert, M. A.

The meeting was called to order at 12:14. No Quorum.

AGENDA ITEM	DISCUSSION	PLAN/ACTION
I. Review/Approval of May 15, 2014 Curriculum Committee Meeting Minutes		Tabled.
II. Subcommittee Reports	<p><b>MS1</b> – The MS1 subcommittee met on May 23<sup>rd</sup>. They agreed on the list of block leaders for next year. They spent a portion of the meeting doing the last minute details for the final. They had a lot of help and it went very smoothly. They also spoke about ExamSoft and worked on categories. Dr. Richardson passed that on to the MS2 committee. There was an additional meeting of the MS1 block leaders.</p> <p><b>MS2</b> – The MS2 subcommittee met and approved the list of block leaders for next year. They also looked at the ExamSoft recommendation from the MS1 subcommittee. They will think about it and discuss it at their next meeting. They talked of the MS2 mini-boards, specifically, how useful they are. They will each go back to</p>	No action taken.

	<p>their departments to discuss whether to keep them or to switch to some other type of exams. This year it was useful so that they could see that the info wasn't lost. They have spoken to a number of the students. It's a mixed bag of opinions amongst the students.</p> <p><b>MS3</b> - No report.  <b>MS4</b> – No report.</p> <p><b>Integration</b> – The Integration Committee met on Tuesday evening. They all brought in reports on 9 or 10 diseases. They discussed how to present that info to the Curriculum Committee. The issues with tagging the 1<sup>st</sup> and 2<sup>nd</sup> years was discussed. They will be meeting about this on the 24<sup>th</sup>. Dr. Richardson asked Dr. Miller if the students could have a syllabi for the themes and could the integration committee create them? Radiology and Genetics should at least have one.</p>	
III. Approval of Block Leaders for MSII		Tabled.
IV. Focus Groups Proposal	<p>Focus Groups – Dr. Miller reported that the group got together to determine how students will be evaluated. An idea is that each student would have to show up for one block feedback meeting. At the end we'll have feedback from each student and each block. Monika on main campus has experience with focus groups and will help. If the incoming students see that we have made changes based on the ms2's comments, then they will be more likely to give constructive criticism. There will be a Focus Group Leader. This will not replace the</p>	No action taken.

	written evaluations but maybe replace the Liaison Committee meetings. The facilitator's report can be sent out to all of the students. The Liaison committees were more geared to changes that the block leader could change immediately. The focus group will focus more on the big picture.	
V. Standardizing Preparation Time for Class/Independent Study Activities	Dr. Loudin presented an article that Dr. Jackman sent to him regarding how much reading is too much for medical students. He thinks it is worth reading through. So that we can all be consistent.	No action taken.
VI. Tool for Assessing Cultural Competency	Dr. Miller presented a tool from the AAMC for Assessing Cultural Competency. Maybe this could be handed out to the block leaders and clerkship directors so we can have a snapshot of where we're at. This would be a one-time thing. It could be useful to use in the report to the LCME. It was suggested that we do this every other year to show that we are regularly checking up on this. It will help us identify our gaps and redundancies.	No action taken.
VIII. Other Business	Update on MS3 CCEs – Loudin. There were six cases and it was run exactly like it will be on the CS. They have received good feedback from the students about the process. Key faculty members have taken on the role of giving one on one feedback to the students. We also have extra practice and other means of helping those who are in danger of failing the CS. Mike McCarthy has set up a system that allows the faculty and students to review their videos online.	No action taken.

	<p>There will be a special meeting next Monday, June 9<sup>th</sup> in the Peds Conference room at 4:30. Doug Danforth from OSU will be coming to speak about the proposed ISP. Dr. Loudin will be moderating the meeting. Dr. Egleton would like to hear from someone in OSU's Med Ed as to the real reason they no longer have the program. Dr. Richardson would like some kind of written materials like a syllabus or a website we could see or even a brochure. Dr. Loudin will email Dr. McGuffin and ask.</p>	
IX. Next Meeting	June 19, 2014.	

## Curriculum Committee Meeting

September 4, 2014

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**Present:** Laura Cummings, Diane Dawley, MSII, Christine Gilkerson, M. D., Lawrence Grover, Ph.D., Elaine Hardman, Ph.D., Maureen Joyce (MSIV), Hisham Keblawi, M.D., Sean Loudin, M.D. (Chair), Michael McCarthy, William McCumbee, Ph.D., Kelly Melvin, M.D., Bobby Miller, M.D., Nancy Norton, M.D., Laura Richardson, Ph.D., Jonathan Seibert, MSIV, Maria Serrat, Ph.D., Raj Singh, MSI, Sasha Zill, Ph.D.

**Absent:** Bonnie Beaver, M.D., Charles Clements, M.D., Piyali Dasgupta, PhD., Paul Ferguson, M.D., Tigran Garabekyan, M.D., Adrienne Mays M.D., Michelle Ruppert, M.A., Nalini Santanam, Ph.D., Amy Smith, BSN, M.Ed., Paul Viscuse, MSIII, Hongwei Yu, Ph.D.,.

Meeting called to order at 11:57 am, adjourned at 12:59 pm.

AGENDA ITEM	DISCUSSION	PLAN/ACTION
Introduction of new member	Raj Singh was introduced as the new MSI representative.	
I. Review/Approval of August 21, 2014 meeting minutes		Approved.
II. Subcommittee Reports	<p><b>MSI</b> – This subcommittee has not met since the last curriculum committee meeting. However the course directors met due to a comment from the Liaison committee meeting. The students thought that their exam review process was a little crowded. The group will consider using Exam Soft for future reviews. ExamSoft testing went well for MS1 and 2. Dr. Richardson was praised for her work with ExamSoft.</p> <p><b>MSII</b> – They have not met yet. The MS2s have had their 1<sup>st</sup> exam and exam review. They also held a Liaison Committee meeting. The students have been given a bit more time for questions on exams. Some students during the Liaison meeting asked for a more</p>	No action taken.

	<p>gradual drop from 1.5 to 1.2 minutes per questions. The next exam is on Monday.</p> <p><b>MSIII</b> – While there was no report, Dr. Loudin did inform the committee of some issues with the mini-boards last Friday.</p> <p><b>MSIV</b> – No report.</p> <p><b>Integration Steering Committee</b> – The group is waiting on two subcommittee members to integrate and then they will meet again.</p>	
III. MSI and MSII exam policies	<p>The MSI policy is the same as the computerized exam policy for the MSIIIs. A question was raised with regards to MS3s and reasonable accommodation allowing for time and a half. Dr. Miller suggested that Dr. Keblawi ask Tracy why we allow that.</p>	Approved.
IV. Interdisciplinary Medicine	<p>Fourth year Maureen Joyce presented a proposed elective. The purpose would be to provide med students the opportunity to learn about the day to day functions of a variety of non-physician health care providers by shadowing a member of a different discipline each day. The idea was thought up by a med student. If approved, the elective here will be set up like a similar elective at Johns Hopkins. There will be a pre- and post-course survey. Currently, work is underway to get preceptors. We must have motivated preceptors and students for this elective. It would not be a non-patient contact course. Dr. Zill proposed some additional reading materials as part of the objectives. The students will most likely all have the same RNs etc. so that each student has a similar experience. Including a job description of</p>	The elective was approved with the addition of job descriptions and reading materials.

	<p>each preceptor was a suggestion. Either Dr. Browning or Dr. Gilkerson would be the Course Director and Brandy Holley would be the coordinator.</p>	
<p>V. Psychiatry (PSI 742) Annual Course Review</p>	<p>Dr. Melvin. Presented the annual course report for the MS3 Psych clerkship. This clerkship is different than any of the others. It is 8 weeks long where 4 weeks find the students in Neuro. The two are integrated. For example, if a student is on Neuro, he or she will still attend Psych lectures. We reviewed how many hours students spend doing what, independent learning (CC stands for Case Conference) and non-didactic activities. Dr. Melvin mentioned how difficult it is to estimate student prep time for some activities. It is also difficult to give feedback at the mid-point because they barely see half of the students during the first half of the clerkship. Having a mid-point evaluation for each half was discussed. Dr. Loudin noted that the mid-points are to identify students with academic or professionalism issues. He brought up the fact that any such students will be on the director's radar from week one. Dr. Melvin went over cultural diversity elements in his clerkship. The objectives were copied and pasted from the syllabus. He went on to show how grades were computed from the last academic year. No Step 2 gaps were identified. And there were no redundancies. He went over grade gaps, i.e. many more A's than any other grade. The score on their shelf exams came up</p>	<p>Approved.</p>



	<p>significantly from the prior year. Student Feedback – the clerkship came up in every single category. Student comments were listed. The #1 problem is off-site rotations. Dr. Melvin completely agreed. Quizzes are now worth more and they went from 5 of them to 3. The text book is not great and he agrees. With regards to lecture scheduling, some students feel like it is hard to sit for 4 or 5 hour long lectures and others wish they were not spread out across the week. Case based lectures have been added. Dr. Melvin stated that he never used to have a problem with students having their computers and iPads during lectures. This last year during rotation 6 some students were not looking at the lecture on their PC but doing other things. Discussion ensued regarding this issue. Some other changes were made to the clerkship. Dr. Zill asked if it were possible for students to keep track of their prep time so that we have more data on the subject. The committee members in the 3<sup>rd</sup> and 4<sup>th</sup> years stated that this would be impractical and that the data would vary and not be scientific. CC recommendations: None.</p>	
VI. ISP Discussion	<p>Dr. Loudin informed the group that at our next meeting we will vote on the ISP. Dr. Grover emailed Dr. Loudin his questions which were shared with the group. Dr. Loudin encouraged the group to email him any questions they have. He reminded us that we can vote to hold off on this until the future with certain stipulations. Any</p>	No action taken.

	questions he receives will be sent to Dr. McGuffin on Monday. Dr. McGuffin will not attend the next meeting.	
VII. Dermatology 4 <sup>th</sup> Year Elective	Dr. Yarbrough is the chair of the new Dermatology Department. He is interested in creating a 4 <sup>th</sup> year elective. The info we've received so far is not up to the institutional standards so it needs some work. Please look over this. We will clean this up and add policies and objectives.	No action taken.
V. Next Meeting	September 18, 2014	

Family Medicine will be the annual course report presented at the next meeting.

Integration Subcommittee Meeting  
Minutes  
September 30<sup>th</sup>, 2014

- Distributed and discussed 6 integration reports (see attachments)
- Committee agreed this was an appropriate mechanism of demonstrating both horizontal and vertical integration.
- Several members of the committee requested access to the patient logger
- The mechanism for querying the question bank was discussed and consensus was reached that for this year we would look at the question bank for last year and not the question bank in ExamSoft
- The concept of building on a system of reporting was discussed and a plan to complete integration reports of all 115 diseases was agreed upon. After which the committee will review the list of diseases and make recommendations to the curriculum committee.
- Group felt that those completed by Dr. Hardman were the easiest to evaluate regarding gaps and redundancies in the curriculum.
- Members agreed to do the following diseases for the next meeting:
  - Depression – Egleton
  - Menopause – McCumbee
  - MI – Norton
  - Cancers x 3 – Hardman
  - GERD – Primerano

## Integration Committee

### Disease: Upper GI Bleeding

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Structure and Function IV	4/9/14	Stomach structure and motility; gastric secretion	Todd L Green (PMC)	Lecture	60
Structure and Function IV	4/9/14	GI Part 2 Esophagus and StomachGroup 2	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/9/14	GI Part 2 Esophagus and StomachGroup 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/10/14	Regulation of gastric secretion; emesis	Todd L Green (PMC)	Lecture	60
Structure and Function IV	4/16/14	GI Part 3 intestines and Part 4 Digestive GlandsGroup 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/18/14	Clinical correlations involving the gastrointestinal system	Nancy B Norton (PTH)	Discussion Large Group (>12)	60
Structure and Function IV	4/21/14	GI HistologyReview GROUP 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/14	GI HistologyReviewGROUP 2	Laura L Richardson (PTH)	Laboratory	120

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Disease and Therapeutics IV	3/24/14	Intro to GI SystemEsophagus- Congenital Anomalies Motor Dysfunc	Mark Gusack (PTH)	Lecture	180
Disease and Therapeutics IV	3/26/14	Small Intestine	Mark Gusack (PTH)	Lecture	60
Disease and Therapeutics IV	3/26/14	Stomach- Pyloric Stenosis Gastritis PUD	Mark Gusack (PTH)	Lecture	120
Disease and Therapeutics IV	3/27/14	Small Intestine (cont.)	Mark Gusack (PTH)	Lecture	60
Disease and Therapeutics IV	4/3/14	Team Based LearningAbdominal PainGroups 1 - 6	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	4/3/14	Team Based LearningAbdominal PainGroups 7 - 12	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
MS2 Examination	4/7/14	EXAMGI	Nancy B Norton (PTH)	Test	120
Disease and Therapeutics IV	4/17/14	Team Based LearningJaundiceGroups 7-12	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	4/17/14	Team Based LearningJaundiceGroups 1 - 6	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120

### Third Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medicine	N/A	GI Bleeding	W Shora	Lecture	60
Peds	N/A	Pediatric GI Bleeding	Y Elitsur	Lecture	60

### Fourth Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medicine	N/A	Gastrointestinal Hemorrhage	VA Faculty	Workshop	60
Peds	N/A	Necrotizing Enterocolitis	PREP Article	Independent Study	60
Family and Community Health	N/A	Acute upper and lower GI bleeding	Course Director	Case Presentation	60

### Patient Logger

Students in the Class of 2014 logged 70 encounters with patients having a diagnosis of Upper GI Bleeding

### Question Bank

Year	# of Questions
MS 1	12
MS 2	33

MS 3  
MS 4

4  
9

**Integration Committee Recommendations:**

1. Tagging in other blocks needs to be reviewed to insure horizontal integration
2. Tag 3rd and 4th year curriculums

## Integration Report

**Disease: Meningitis**

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Structure and Function II	12/2/13	Preview Independent Study of Prosections		Self-Directed Learning	60
Structure and Function II	12/3/13	Meninges	Sasha N Zill (PTH)	Lecture	60
Structure and Function II	12/11/13	Ventricles	Jeanette Norden (PTH)	Lecture	120
Structure and Function II	12/11/13	Blood Supply To Head	Sasha N Zill (PTH)	Lecture	60
Structure and Function II	12/13/13	Review of Prosections of Head and Neck	Sasha N Zill (PTH)	Discussion Large Group (>12)	120
Structure and Function II	1/16/14	Radiology - Head and CNS (Harless Auditorium)		Discussion Large Group (>12)	60
Structure and Function II	1/16/14	Review of Head and Neck Anatomy	Sasha N Zill (PTH)	Discussion Large Group (>12)	60

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	8/19/13	Staphylococcus aureus and other major staph	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	8/19/13	Streptococcus pneumonia Streptococcus pyogenes	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	8/21/13	Haemophilus influenzaeNeisseria meningitidis	April E Kilgore (PED)	Lecture	60
Principles of Disease	8/21/13	Haemophilus influenzaeNeisseria meningitidis	April E Kilgore (PED)	Lecture	60
Principles of Disease	8/22/13	Escherichia coli Salmonella Shigella Klebsiella pneumoniae	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	8/22/13	Bordetella pertussis Pseudomonas	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	8/26/13	Penicillins	James Allman ()	Lecture	60
Principles of Disease	8/26/13	General principles of anti-infective drugs	James Allman ()	Lecture	60
Principles of Disease	8/27/13	Cephalosporins	James Allman ()	Lecture	60
Principles of Disease	8/27/13	Bacteriology Lab 2BBSC LAB	Hongwei Yu (BIC)	Laboratory	120
Principles of Disease	8/28/13	Chloramphenicol macrolides and Clindamycin	James Allman ()	Lecture	60
Principles of Disease	8/30/13	Antibiotic Case Studies	James Allman ()	Case-Based Instruction/Learning	120
Principles of Disease	9/6/13	RNA virus replicationPositive polarity genomes	Picornavi Terry W Fenger (BIC)	Lecture	60
Principles of Disease	9/12/13	Protozoa (malaria babesia free-living amoeba)	John B Walden (FCH)	Lecture	60
Disease and Therapeutics I	10/14/13	HIV/AIDS ModuleImmunolgy and Pathology	A Betts Carpenter (PTH)	Lecture	60
Disease and Therapeutics II	11/13/13	Viral Infections of the Central Nervous System	Terry W Fenger (BIC)	Lecture	60
Disease and Therapeutics II	11/14/13	CNS Trauma	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics II	11/14/13	Central Nervous System Infections	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics II	11/18/13	Central Nervous System Infections	Nancy B Norton (PTH)	Case-Based Instruction/Learning	180
Disease and Therapeutics II	11/18/13	Delirium and Dementia	Guillermo Madero Garza (MEC)	Lecture	120
Disease and Therapeutics II	12/17/13	Neuro Jeopardy	Paul B Ferguson (NEU)	Games	60
Disease and Therapeutics III	1/31/14	Respiratory Viral Infections II	Terry W Fenger (BIC)	Lecture	60
Disease and Therapeutics IV	4/2/14	Bloody Diarrhea- E. coli Shigella Salmonella Yersinia C. diff	Hongwei Yu (BIC)	Lecture	60

### Third Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Peds	N/A	Antibiotics	M Lopez Marti	Lecture	60
Peds	N/A	2 week old with lethargy	CLIPP Case	Independent Learning	60
Peds	N/A	Clinical Problems in the PICU	E Pino	Lecture	60

### Fourth Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
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Emergency Medicine	N/A	Meningitis	P Charles	Small Group Discussion (<12)	60
Medical ICU	N/A	Meningitis	I Khawaja	Workshop	60
Peds ICU	N/A	Shock	PREP Article	Independent Study	60

## Patient Logger

Students in the Class of 2014 logged 54 encounters with patients having a diagnosis of Meningitis

## Question Bank

Year	# of Questions
MS 1	1
MS 2	17
MS 3	1
MS 4	2

## Integration Committee Recommendations:

1. Is this covered in S & F I?
2. Tag 3rd and 4th year curriculums

## Integration Report

**Disease:** Diabetes Mellitus

### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Elements of Medicine	8/20/13	Introduction to Nutrition	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	9/11/13	Signaling 3	William D McCumbee (PMC)	Lecture	60
Elements of Medicine	9/24/13	Overview of Metabolism	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/26/13	Electron Transport 2	John Wilkinson IV (PTH)	Lecture	60
Elements of Medicine	9/27/13	Glycogen Metabolism	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/27/13	Gluconeogenesis	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/30/13	Lipid Metabolism 2 Oxidation	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	9/30/13	Lipid Metabolism 1 Synthesis	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	10/1/13	Lipid Metab 3 Acylglycerols and Sphingolipids	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	10/2/13	Attend Obesity Conference Big Sandy Arena		Conference	270
Elements of Medicine	10/2/13	Nutrition Modules- Diabetes – Nutritional Mechanisr		Independent Learning	0
Elements of Medicine	10/3/13	Completion of cholesterol lectureNutrition- Introduct	Wanda Elaine Hardman (BIC)	Discussion Small Group (<=12)	60
Elements of Medicine	10/7/13	Clinical Correlate- Diabetic Ketoacidosis	Henry K Driscoll (MED)	Lecture	60
Elements of Medicine	10/7/13	Integration of Metabolism 1	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	10/8/13	Nutrition Project presentations	Wanda Elaine Hardman (BIC)	Peer Teaching	120
Structure and Function IV	4/18/14	Pancreatic hormones	William D McCumbee (PMC)	Lecture	60
Structure and Function IV	4/21/14	Diabetes\; hypoglycemia. GROUP 2	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
Structure and Function IV	4/21/14	GI HistologyReviewGROUP 2	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/14	Endocrine regulation of metabolism	William D McCumbee (PMC)	Lecture	60
Structure and Function IV	4/21/14	GI HistologyReview GROUP 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/14	1 Diabetes\hypoglycemiaGROUP 1	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
Structure and Function IV	5/1/14	Radiology		Lecture	60

### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	8/22/13	Bordetella pertussis Pseudomonas	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	9/9/13	Introduction to Medical Mycology	Darshana Shah (PTH)	Lecture	60
Principles of Disease	9/9/13	Candida albicans	Darshana Shah (PTH)	Lecture	60
Principles of Disease	9/20/13	Autoimmunity	Wei-ping Zeng (BIC)	Lecture	60
Principles of Disease	9/30/13	Autonomic Nervous System Pharmacology - Adrenerg	Carl A Gruetter (PMC)	Independent Learning	180
Disease and Therapeutics I	10/9/13	Red Blood Cell Disorders- The Anemias Part I	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics I	10/14/13	HIV/AIDS ModuleMedications	James Allman ()	Lecture	60
Disease and Therapeutics II	12/2/13	Peripheral Nerve Disorders	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	1/6/14	Overview of Incidence and Impact of CV Pulmonary a	Paulette S Wehner (CAR)	Lecture	30
Disease and Therapeutics III	1/6/14	Risk Factors for CV Pulmonary and Renal Diseases	Paulette S Wehner (CAR)	Discussion Small Group (<=12)	60
Disease and Therapeutics III	1/6/14	Review of Risk Factors for CV Pulmonary and Renal Di	Paulette S Wehner (CAR)	Discussion Large Group (>12)	60
Disease and Therapeutics III	1/8/14	Drugs to Treat Dyslipidemias	Monica Valentovic (PMC)	Lecture	60
Disease and Therapeutics III	1/9/14	Vascular Diseases IArteriosclerosis	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	1/30/14	Respiratory Infections I Cystic Fibrosis and Tuberculo	Hongwei Yu (BIC)	Lecture	60
Disease and Therapeutics III	2/11/14	Cystic and Glomerular Diseases	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	2/12/14	Glomerular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/13/14	Renal Vascular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/14/14	Chronic Renal Failure	Charles E Meadows III (MED)	Case-Based Instruction/Learning	60
Disease and Therapeutics III	2/17/14	Acid-Base Disorders	Charles E Meadows III (MED)	Lecture	60
Disease and Therapeutics III	2/18/14	Electrolyte and Acid-Base Disorder Cases	Charles E Meadows III (MED)	Discussion Small Group (<=12)	120
Disease and Therapeutics III	2/18/14	Discussion of Electrolyte and Acid-Base Disorder Case	Charles E Meadows III (MED)	Discussion Large Group (>12)	60
Disease and Therapeutics III	2/28/14	Gestational and Placental Disorders	A Betts Carpenter (PTH)	Lecture	120
Disease and Therapeutics IV	2/28/14	Drugs in Pregnancy and Lactation	Shannon L Browning (MED)	Lecture	120
Disease and Therapeutics IV	3/5/14	Introduction to Endocrine System- Pituitary and Adre	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/6/14	Endocrine Pancreas	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/7/14	Diabetic Drugs	Monica Valentovic (PMC)	Lecture	120
Disease and Therapeutics IV	3/10/14	Diabetes in Children	Eduardo Pino (PED)	Case-Based Instruction/Learning	60
Disease and Therapeutics IV	3/10/14	DiabetesGroups 7-12	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	3/10/14	DiabetesGroups 1- 6	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120



Disease and Therapeutics IV	3/11/14	Diabetes in Adults	Charles E Meadows III (MED)	Lecture	60
Disease and Therapeutics IV	3/13/14	Endocrine Homework Assignment	Monica Valentovic (PMC)	Independent Learning	60
Disease and Therapeutics IV	4/1/14	Nutrition/Vitamin Deficiency and Excess	Darshana Shah (PTH)	Independent Learning	0
Disease and Therapeutics IV	4/9/14	Drugs in Aging	Kevin W Yingling (MED)	Lecture	120

### Third Year Clerkships

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Family and Community Health	N/A	Headache/Diabetes/Obesity	Dilip Nair	Small group	60
Internal Medicine	N/A	Diabetes Mellitus	Henry Driscoll	Lecture	60
Ob/Gyn	N/A	Diabetes in Pregnancy	Ryan Stone	Lecture	60
Peds	N/A	Respiratory Distress Syndrome	Renee Domanico	Small group	60
Peds	N/A	Clinical Problems in Newborn	Renee Domanico	Small group	60

### Fourth Year Required Rotations

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medicine Sub-I	N/A	Diabetic Ketoacidosis and Hyperosmolar Coma	VAMC	Small Group Discussion (<12)	60
Ob/Gyn Sub-I	N/A	Pregestational Diabetes Mellitus	ACOG Practice Bulletins	Independent Learning	60
Peds ICU	N/A	Diabetic Ketoacidosis	PREP Article	Independent Learning	60
Neonatal ICU	N/A	RDS review article	Neo Review Article	Independent Learning	60
Emergency Medicine	N/A	Diabetic Ketoacidosis	Mitch Charles	Oral presentation	60

### Patient Logger

Students in the Class of 2014 logged 71 encounters with patients having a diagnosis of Diabetes Mellitus

### Question Bank

Year	# of Questions
MS 1	6
MS 2	55
MS 3	7
MS 4	39

### Integration Committee Recommendations:

1. Identify/Confirm absence of Diabetes in the other first year blocks
2. Review tagging of some of the sections

## Integration Report

**Disease:** Cystic Fibrosis

### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Elements of Medicine	8/12/13	Molecules of Life - Carbohydrates	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	8/19/13	Membranes 3- Transporters	Laura L Richardson (PTH)	Lecture	60
Elements of Medicine	9/13/13	Patterns of inheritance II	Vincent E Sollars (BIC)	Role Play/Dramatization	60
Elements of Medicine	9/16/13	Gene mapping	Vincent E Sollars (BIC)	Lecture	60
Elements of Medicine	9/17/13	Principles of Genetic Disease	Vincent E Sollars (BIC)	Lecture	60
Elements of Medicine	9/30/13	Lipid Metabolism 2 Oxidation	Wanda Elaine Hardman (BIC)	Lecture	60
Structure and Function III	3/5/14	Respiratory mechanics II	Piyali Dasgupta (PMC)	Lecture	60
Structure and Function III	3/13/14	VQ mismatch II	Piyali Dasgupta (PMC)	Lecture	60
Structure and Function IV	4/15/14	Small intestine and pancreas	Todd L Green (PMC)	Lecture	60

### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	8/15/13	Bacteriology Lab 1BBSC LAB	Hongwei Yu (BIC)	Laboratory	120
Principles of Disease	8/22/13	Bordetella pertussis Pseudomonas	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	8/27/13	Bacteriology Lab 2BBSC LAB	Hongwei Yu (BIC)	Laboratory	120
Principles of Disease	8/29/13	Fluoroquinolones/Tetracyclines	James Allman ()	Lecture	60
Disease and Therapeutics III	1/28/14	Pulmonary Exam and Assessment of Respiratory Function	Fadi W Alkhankan (MED)	Lecture	60
Disease and Therapeutics III	1/30/14	Respiratory Infections I Cystic Fibrosis and Tuberculosis	Hongwei Yu (BIC)	Lecture	60
Disease and Therapeutics III	1/31/14	Pediatric Respiratory Disease Presentations	Aaron M McGuffin (PED)	Case-Based Instruction/Learning	60
Disease and Therapeutics III	2/4/14	Respiratory Drugs OTC Medicines	Travis B Salisbury (PMC)	Lecture	60
Disease and Therapeutics IV	4/11/14	Complex Modes of Inheritance I + II	Don A Primerano (BIC)	Lecture	120

### Third Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Pediatrics	N/A	Genetics	M. Hummel	Lecture	60
Ob/Gyn	N/A	Antepartum Care: Prenatal Care and Genetic Evaluation	K. Conaway	Lecture	60
Pediatrics	N/A	CF Patient	CLIPP Case	Independent Study	60

### Fourth Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Respiratory Failure	N/A	Respiratory Failure	PREP Article	Independent Study	60

### Patient Logger

Students in the Class of 2014 logged 45 encounters with patients having a diagnosis of Cystic Fibrosis

### Question Bank

Year	# of Questions
MS 1	1
MS 2	13
MS 3	0
MS 4	1

### Integration Committee Recommendations:

1. Tag digestive complications/issues in 2nd year curriculum
2. Tag 3rd and 4th year curriculums

## Integration Report

**Disease:**                    **Biliary Tract Disease**

### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Structure and Function I	11/14/2013	Brachial Plexus	Marc R Spencer (PTH)	Lecture	60
Structure and Function IV	4/9/2014	Abdominal viscera	Maria A Serrat (PTH)	Lecture	60
Structure and Function IV	4/11/2014	Viscera peritoneum and celiac trunk	Maria A Serrat (PTH)	Laboratory	240
Structure and Function IV	4/15/2014	Bile secretion and large intestine	Todd L Green (PMC)	Lecture	60
Structure and Function IV	4/16/2014	GI Part 3 intestines and Part 4 Digestive GlandsGr	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/16/2014	GI Part 3 Intestines and Part 4 Digestive GlandsGr	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/18/2014	Abdomen review	Maria A Serrat (PTH)	Discussion Large Group (>12)	60
Structure and Function IV	4/18/2014	Clinical correlations involving the gastrointestinal :	Nancy B Norton (PTH)	Discussion Large Group (>12)	60
Structure and Function IV	4/21/2014	GI HistologyReview GROUP 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/2014	GI HistologyReviewGROUP 2	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/22/2014	Review of GI structureGROUP 1	Maria A Serrat (PTH)	Laboratory	90

### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Disease and Therapeutics IV	3/31/2014	ParagonimiasisClonorchiasis/OpisthorchiasisFascic	John B Walden (FCH)	Lecture	60
Disease and Therapeutics IV	3/31/2014	Intestinal ProtozoaAmebiasisGiardia lambliaTricho	John B Walden (FCH)	Lecture	60
Disease and Therapeutics IV	4/1/2014	Exocrine Pancreas	Krista L Denning (PTH)	Lecture	120
Disease and Therapeutics IV	4/8/2014	Introduction to Liver and Liver Diseases	Paul R Durst (PTH)	Lecture	120
Disease and Therapeutics IV	4/8/2014	Environmental Pathology	Thomas H Dougherty (PTH)	Self-Directed Learning	120
Disease and Therapeutics IV	4/10/2014	Hepatitis	Paul R Durst (PTH)	Lecture	120
Disease and Therapeutics IV	4/14/2014	Liver Diseases Continued- Hepatitis Alcoholic liver	Paul R Durst (PTH)	Lecture	120
Disease and Therapeutics IV	4/15/2014	Pregnancy Hepatic Tumors	Paul R Durst (PTH)	Lecture	60
Disease and Therapeutics IV	4/15/2014	Liver Diseases Continued- Hepatitis Alcoholic liver	Paul R Durst (PTH)	Lecture	60
Disease and Therapeutics IV	4/17/2014	Pregnancy Hepatic Tumors contd	Paul R Durst (PTH)	Lecture	60
Disease and Therapeutics IV	4/17/2014	Biliary Tract and Liver Review Session	Paul R Durst (PTH)	Lecture	60
Disease and Therapeutics IV	4/17/2014	Team Based LearningJaundiceGroups 7-12	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	4/17/2014	Team Based LearningJaundiceGroups 1 - 6	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
MS2 Examination	4/21/2014	Exam- Liver Genetics Toxicology		Test	180

### Third Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Ob/Gyn	N/A	Common Medical Problems in Pregnancy	B Edwards	Lecture	60
Surgery	N/A	Minimally Invasive Surgeries	G. McKinney	Lecture	60

## Fourth Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Family and Community Health	N/A	Acute Abdominal Pain	Dept of FCH	Small group discussion	60

## Patient Logger

Students in the Class of 2014 logged 75 encounters with patients having a diagnosis of Biliary Tract Disease

## Question Bank

Year	# of Questions
MS 1	3
MS 2	11
MS 3	6
MS 4	5

## Integration Committee Recommendations:

1. Fix tagging of brachial plexus in S & F I
2. Tagging in EOM and POD, specifically gallstone formation and medications
3. Tag 3rd and 4th year curriculums

## Integration Report

**Disease**

**Anemia Adult**

### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Elements of Medicine	8/14/13	Proteins- Myoglobin and Hemoglobin	Emine C Koc (BIC)	Lecture	60
Elements of Medicine	8/20/13	Vitamins and Minerals	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	8/20/13	Hematopoiesis	Laura L Richardson (PTH)	Lecture	60
Elements of Medicine	8/20/13	Peripheral Blood	Laura L Richardson (PTH)	Lecture	60
Elements of Medicine	8/21/13	Clinical Correlation- Hemoglobinopathies	Doreen C Griswold (PTH)	Lecture	60
Elements of Medicine	8/22/13	Session 2 histology lab - BloodGroup 2	Laura L Richardson (PTH)	Laboratory	60
Elements of Medicine	8/22/13	Histology of Blood	Laura L Richardson (PTH)	Team-Based Learning (TBL)	60
Elements of Medicine	8/22/13	Session 1 histology lab - BloodGroup 1	Laura L Richardson (PTH)	Laboratory	60
Elements of Medicine	8/22/13	Histology of Blood	Laura L Richardson (PTH)	Team-Based Learning (TBL)	60
Elements of Medicine	9/4/13	Homework Exercise	John Wilkinson IV (PTH)	Discussion Small Group (<=12)	120
Elements of Medicine	9/17/13	Stem Cells	Laura L Richardson (PTH)	Lecture	60
Elements of Medicine	9/20/13	Stem Cell Exercise	Laura L Richardson (PTH)	Discussion Small Group (<=12)	120
Elements of Medicine	9/27/13	Pentose Phosphate Shunt	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	10/1/13	Group Exercise-Causes of Anemia		Discussion Small Group (<=12)	120
Structure and Function III	2/21/14	Lymphoid organs	Laura L Richardson (PTH)	Lecture	60
Structure and Function III	2/24/14	Lymphoid organsGroup 2	Laura L Richardson (PTH)	Laboratory	60
Structure and Function III	2/24/14	Lymphoid organsGroup 1	Laura L Richardson (PTH)	Laboratory	60
Structure and Function III	2/24/14	Lymphoid OrgansGroup 1	Laura L Richardson (PTH)	Team-Based Learning (TBL)	60
Structure and Function III	2/24/14	Lymphoid OrgansGroup 2	Laura L Richardson (PTH)	Team-Based Learning (TBL)	60
Structure and Function III	2/26/14	Vessels and lymphoid organsReviewGroup2	Laura L Richardson (PTH)	Laboratory	90
Structure and Function III	2/26/14	Vessels and lymphoid organsReviewGroup 1	Laura L Richardson (PTH)	Laboratory	90
Structure and Function III	3/7/14	Oxygen and CO2 transport by blood I	Piyali Dasgupta (PMC)	Lecture	60
Structure and Function III	3/10/14	Oxygen and CO2 transport by blood II	Piyali Dasgupta (PMC)	Lecture	60
Structure and Function III	3/17/14	Glomerular filtration	Elsa I Mangiarua (PMC)	Lecture	60
Structure and Function III	3/20/14	Hormonal regulation of kidney function	Elsa I Mangiarua (PMC)	Lecture	60
Structure and Function III	3/21/14	Renal review	Elsa I Mangiarua (PMC)	Discussion Large Group (>12)	60
Structure and Function III	3/24/14	Respiratory review	Piyali Dasgupta (PMC)	Discussion Large Group (>12)	60

### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	9/12/13	Protozoa (malaria babesia free-living amoeba)	John B Walden (FCH)	Lecture	60
Disease and Therapeutics I	10/7/13	White Blood Cell Pathology- Overview and Reactive Condi	Doreen C Griswold (PTH)	Lecture	60
Disease and Therapeutics I	10/7/13	White Blood Cell Pathology- Precursor Lymphoid Neoplas	Doreen C Griswold (PTH)	Lecture	60
Disease and Therapeutics I	10/8/13	Bleeding Disorders and Shock	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics I	10/9/13	White Blood Cell Pathology- Myeloid Neoplasms Spleen a	Doreen C Griswold (PTH)	Lecture	120
Disease and Therapeutics I	10/9/13	Red Blood Cell Disorders- The Anemias Part I	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics I	10/10/13	Red Blood Cell Disorders- The Anemias Part II	Vincent A Graffeo (PTH)	Lecture	60
Disease and Therapeutics I	10/10/13	Red Blood Cell Disorders- The Anemias Part III	Vincent A Graffeo (PTH)	Lecture	60
Disease and Therapeutics I	10/10/13	White Blood Cell Pathology LaboratoryBBSC LAB	Doreen C Griswold (PTH)	Laboratory	180
Disease and Therapeutics I	10/11/13	Transfusion Medicine Cases	Thomas H Dougherty (PTH)	Case-Based Instruction/Learning	60
Disease and Therapeutics I	10/11/13	Transfusions and Complications Blood Types and Blood Cc	Thomas H Dougherty (PTH)	Independent Learning	60
Disease and Therapeutics I	10/15/13	Anemia Small Group Cases	Aaron M McGuffin (PED)	Discussion Small Group (<=12)	240
Disease and Therapeutics I	10/16/13	Review- WBC pathology	Doreen C Griswold (PTH)	Discussion Large Group (>12)	60
Disease and Therapeutics II	12/9/13	Anti-convulsants	Richard D Eggleton (PMC)	Lecture	60
Disease and Therapeutics III	2/12/14	Glomerular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/13/14	Renal Vascular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/14/14	Chronic Renal Failure	Charles E Meadows III (MED)	Case-Based Instruction/Learning	60
Disease and Therapeutics IV	2/28/14	Drugs in Pregnancy and Lactation	Shannon L Browning (MED)	Lecture	120

MS2 Examination	3/14/14	EXAMGU and Endocrine	Nancy B Norton (PTH)	Test	120
Disease and Therapeutics IV	3/26/14	Small Intestine	Mark Gusack (PTH)	Lecture	60
Disease and Therapeutics IV	3/26/14	Stomach- Pyloric Stenosis Gastritis PUD	Mark Gusack (PTH)	Lecture	120
Disease and Therapeutics IV	3/27/14	Large Intestine- Inflammatory Bowel Disease		Case-Based Instruction/Learning	60
Disease and Therapeutics IV	3/28/14	Free Living Amebic Infections Onchocerciasis (River Blindn	John B Walden (FCH)	Lecture	60
Disease and Therapeutics IV	3/28/14	Colon Neoplasms	Mark Gusack (PTH)	Lecture	120
Disease and Therapeutics IV	3/28/14	Schistosomiasis T. saginata T. solium Cysticercosis Diphylob	John B Walden (FCH)	Lecture	60
MS2 Examination	4/7/14	EXAMGI	Nancy B Norton (PTH)	Test	120
Disease and Therapeutics IV	4/8/14	Environmental Pathology	Thomas H Dougherty (PTH)	Self-Directed Learning	120
Disease and Therapeutics IV	4/11/14	Heavy Metals	Monica Valentovic (PMC)	Lecture	60
MS2 Examination	4/21/14	Exam- Liver Genetics Toxicology		Test	180

### Third Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medicine	N/A	Approach to Anemias	R Sehgal	Lecture	60
Pediatrics	N/A	Hem/Onc	M Mogul	Lecture	60

### Fourth Year Clerkships

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Emergency Medicine	N/A	Transfusion Reactions	M Charles	Small Group Discussion	60
Surgery Intensive Care	N/A	Management of Vascular Injuries	CHH	Small Group Discussion	60

### Patient Logger

Students in the Class of 2014 logged 80 encounters with patients having a diagnosis of Anemia

### Question Bank

Year	# of Questions
MS 1	16
MS 2	51
MS 3	1
MS 4	2

### Integration Committee Recommendations:

1. Tag clotting cascade/bleeding disorders
2. Tag 3rd and 4th year curriculum
3. Consider combining with Anemia-child

# APPENDIX 5: EXAMPLE OF INTEGRATION REPORT

## Integration Report

Disease: Diabetes Mellitus

### First Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Elements of Medicine	8/20/2013	Introduction to Nutrition	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	9/11/2013	Signaling 3	William D McCumbee (PMC)	Lecture	60
Elements of Medicine	9/24/2013	Overview of Metabolism	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/26/2013	Electron Transport 2	John Wilkinson IV (PTH)	Lecture	60
Elements of Medicine	9/27/2013	Glycogen Metabolism	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/27/2013	Gluconeogenesis	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	9/30/2013	Lipid Metabolism 2 Oxidation	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	9/30/2013	Lipid Metabolism 1 Synthesis	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	10/1/2013	Lipid Metab 3 Acylglycerols and Sphingolipids	Wanda Elaine Hardman (BIC)	Lecture	60
Elements of Medicine	10/2/2013	Attend Obesity Conference Big Sandy Arena		Conference	270
Elements of Medicine	10/2/2013	Nutrition Modules- Diabetes – Nutritional Mechan		Independent Learning	0
Elements of Medicine	10/3/2013	Completion of cholesterol lectureNutrition- Introd	Wanda Elaine Hardman (BIC)	Discussion Small Group (<=12)	60
Elements of Medicine	10/7/2013	Clinical Correlate- Diabetic Ketoacidosis	Henry K Driscoll (MED)	Lecture	60
Elements of Medicine	10/7/2013	Integration of Metabolism 1	Richard M Niles (BIC)	Lecture	60
Elements of Medicine	10/8/2013	Nutrition Project presentations	Wanda Elaine Hardman (BIC)	Peer Teaching	120
Structure and Function IV	4/18/2014	Pancreatic hormones	William D McCumbee (PMC)	Lecture	60
Structure and Function IV	4/21/2014	Diabetes\; hypoglycemia. GROUP 2	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
Structure and Function IV	4/21/2014	GI HistologyReviewGROUP 2	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/2014	Endocrine regulation of metabolism	William D McCumbee (PMC)	Lecture	60
Structure and Function IV	4/21/2014	GI HistologyReview GROUP 1	Laura L Richardson (PTH)	Laboratory	120
Structure and Function IV	4/21/2014	1 Diabetes\hypoglycemiaGROUP 1	William D McCumbee (PMC)	Discussion Small Group (<=12)	120
Structure and Function IV	5/1/2014	Radiology		Lecture	60

### Second Year Blocks

COURSE	DATE	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Principles of Disease	8/22/2013	Bordetella pertussis Pseudomonas	Hongwei Yu (BIC)	Lecture	60
Principles of Disease	9/9/2013	Introduction to Medical Mycology	Darshana Shah (PTH)	Lecture	60
Principles of Disease	9/9/2013	Candida albicans	Darshana Shah (PTH)	Lecture	60
Principles of Disease	9/20/2013	Autoimmunity	Wei-ping Zeng (BIC)	Lecture	60
Principles of Disease	9/30/2013	Autonomic Nervous System Pharmacology - Adren	Carl A Gruetter (PMC)	Independent Learning	180
Disease and Therapeutics I	10/9/2013	Red Blood Cell Disorders- The Anemias Part I	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics I	10/14/2013	HIV/AIDS ModuleMedications	James Allman (I)	Lecture	60
Disease and Therapeutics II	12/2/2013	Peripheral Nerve Disorders	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	1/6/2014	Overview of Incidence and Impact of CV Pulmonar	Paulette S Wehner (CAR)	Lecture	30
Disease and Therapeutics III	1/6/2014	Risk Factors for CV Pulmonary and Renal Diseases	Paulette S Wehner (CAR)	Discussion Small Group (<=12)	60
Disease and Therapeutics III	1/6/2014	Review of Risk Factors for CV Pulmonary and Rena	Paulette S Wehner (CAR)	Discussion Large Group (>12)	60
Disease and Therapeutics III	1/8/2014	Drugs to Treat Dyslipidemias	Monica Valentovic (PMC)	Lecture	60
Disease and Therapeutics III	1/9/2014	Vascular Diseases IArteriosclerosis	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	1/30/2014	Respiratory Infections I Cystic Fibrosis and Tuberc	Hongwei Yu (BIC)	Lecture	60
Disease and Therapeutics III	2/11/2014	Cystic and Glomerular Diseases	Nancy B Norton (PTH)	Lecture	120
Disease and Therapeutics III	2/12/2014	Glomerular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/13/2014	Renal Vascular Diseases	Nancy B Norton (PTH)	Lecture	60
Disease and Therapeutics III	2/14/2014	Chronic Renal Failure	Charles E Meadows III (MED)	Case-Based Instruction/Learning	60
Disease and Therapeutics III	2/17/2014	Acid-Base Disorders	Charles E Meadows III (MED)	Lecture	60
Disease and Therapeutics III	2/18/2014	Electrolyte and Acid-Base Disorder Cases	Charles E Meadows III (MED)	Discussion Small Group (<=12)	120
Disease and Therapeutics III	2/18/2014	Discussion of Electrolyte and Acid-Base Disorder C.	Charles E Meadows III (MED)	Discussion Large Group (>12)	60
Disease and Therapeutics III	2/28/2014	Gestational and Placental Disorders	A Betts Carpenter (PTH)	Lecture	120
Disease and Therapeutics IV	2/28/2014	Drugs in Pregnancy and Lactation	Shannon L Browning (MED)	Lecture	120
Disease and Therapeutics IV	3/5/2014	Introduction to Endocrine System- Pituitary and Ac	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/6/2014	Endocrine Pancreas	Vincent A Graffeo (PTH)	Lecture	120
Disease and Therapeutics IV	3/7/2014	Diabetic Drugs	Monica Valentovic (PMC)	Lecture	120
Disease and Therapeutics IV	3/10/2014	Diabetes in Children	Eduardo Pino (PED)	Case-Based Instruction/Learning	60

Disease and Therapeutics IV	3/10/2014	DiabetesGroups 7-12	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	3/10/2014	DiabetesGroups 1- 6	Nancy B Norton (PTH)	Team-Based Learning (TBL)	120
Disease and Therapeutics IV	3/11/2014	Diabetes in Adults	Charles E Meadows III (MED)	Lecture	60
Disease and Therapeutics IV	3/13/2014	Endocrine Homework Assignment	Monica Valentovic (PMC)	Independent Learning	60
Disease and Therapeutics IV	4/1/2014	NutritionVitamin Deficiency and Excess	Darshana Shah (PTH)	Independent Learning	0
Disease and Therapeutics IV	4/9/2014	Drugs in Aging	Kevin W Yingling (MED)	Lecture	120

### Third Year Clerkships

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Family and Community Health	N/A	Headache/Diabetes/Obesity	Dilip Nair	Small group	60
Internal Medicine	N/A	Diabetes Mellitus	Henry Driscoll	Lecture	60
Ob/Gyn	N/A	Diabetes in Pregnancy	Ryan Stone	Lecture	60
Peds	N/A	Respiratory Distress Syndrome	Renee Domanico	Small group	60
Peds	N/A	Clinical Problems in Newborn	Renee Domanico	Small group	60

### Fourth Year Required Rotations

COURSE	Date	SESSION TITLE	FACULTY	INSTRUCTIONAL METHOD	DURATION
Medicine Sub-I	N/A	Diabetic Ketoacidosis and Hyperosmolar Coma	VAMC	Small Group Discussion (<12)	60
Ob/Gyn Sub-I	N/A	Pregestational Diabetes Mellitus	ACOG Practice Bulletins	Independent Learning	60
Peds ICU	N/A	Diabetic Ketoacidosis	PREP Article	Independent Learning	60
Neonatal ICU	N/A	RDS review article	Neo Review Article	Independent Learning	60
Emergency Medicine	N/A	Diabetic Ketoacidosis	Mitch Charles	Oral presentation	60

### Patient Logger

Students in the Class of 2014 logged 71 encounters with patients having a diagnosis of Diabetes Mellitus

### Question Bank

Year	# of Questions
MS 1	6
MS 2	55
MS 3	7
MS 4	39

### Integration Committee Recommendations:

1. Identify/Confirm absence of Diabetes in the other first year blocks
2. Review tagging of some of the sections



# APPENDIX 6: EXAMPLE OF ANNUAL COURSE REPORT TO THE CURRICULUM COMMITTEE

## Joan C. Edwards School of Medicine Annual Course Review Report

**This report is to be completed annually by Block Leaders and Course Directors and submitted for review by the Curriculum Committee.**

This form must be returned to the Office of Medical Education no later than one week prior to the date scheduled for presentation of the report at the Curriculum Committee. The deadline is provided in the email accompanying this form.

Block/Clerkship (Course Number)	Diseases & Therapeutics III (MDC 753)		
Date Submitted: 05/12/2014		Block Leader:	Carl A Gruetter, PhD
Curriculum Committee Approval Date:	5/15/14	Curriculum Committee Chair:	Sean Loudin MD
For: 11	Against:	Abstain:1	

### LCME Standard ED5a:

**A medical education program must include instructional opportunities for active learning and independent study to foster the skills necessary for lifelong learning.**

- A. Provide a breakdown of the pedagogies used including the total number of contact hours for each. Use the accompanying curriculum query to obtain the data for this table. Definitions of pedagogies may be found on the Curriculum Committee webpage at:

<http://musom.marshall.edu/curriculum/documents/MedBiquitousCurriculumVocabulary.pdf>

Pedagogy	Total Hours	% Total Hours	Contact Hours	% Contact Hours
Lecture	48.5	36%	48.5	45%
Laboratory				
PBL				
TBL				
Independent learning	28	20.5%	0	0
Small group discussion	28	20.5%	28	26%
Large group discussion	15	11%	15	14%
Case-based instruction	16.5	12%	16.5	15%
Patient Care				
Other (Specify)				

- B. List each **non-didactic** activity and indicate whether the activity satisfies the definition of active learning (check all boxes that apply). Individual sessions should be listed, however, if there are several sessions using the same format these may be listed together with the number of sessions and contact hours and prep time per session indicated (e.g. 4 laboratory sessions using the same format could be listed together).

Session	Pedagogy	Contact Hours	Estimated Student Prep Time	Students assess their learning needs individually or in groups	Students identify and synthesize information relevant to their learning needs	Students assess the credibility of information sources	Students share the information with their peers and supervisors	Students receive feedback on their information retrieval and synthesis skills	Demonstration of lifelong learning skills is a criterion for a grade on this activity
Risk Factors for CV, Respiratory & Renal Diseases	Small Grp Discussion	1	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review of Risk Factors for CV, Respiratory & Renal Diseases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cardiovascular Exam	Ind Learn	1	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Hypertension Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dyslipidemia Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Dyslipidemia Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DVT and PE – Case Presentations	Cased Based Inst	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myocardial Ischemia – Case Presentations	Cased Based Inst	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Myocardial Ischemia Cases	Small Grp Discussion	2	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Myocardial Ischemia Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Heart Failure Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Heart Failure Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CV Congenital Disorders	Cased Based Inst	1.5	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research Theme - Evidence-Based Medicine "Point/Coounterpoint"	Small Grp Discussion	1	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research Theme - Evidence-Based Medicine "Point/Coounterpoint"	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dysrhythmia Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Dysrhythmia Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ethics Theme - Managed Care & Patient Advocacy	Small Grp Discussion	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethics Theme - Managed Care & Patient Advocacy	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pulmonary Embryology and Congenital and Newborn Respiratory Diseases	Cased Based Inst	2	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pediatric Respiratory Disease Presentations	Cased Based Inst	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acute Respiratory Failure	Cased Based Inst	2	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upper Respiratory Infection Cases	Small Grp Discussion	2	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Upper Respiratory Infection Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Histamine & Antihistamines	Ind Learn	0	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pneumonia Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Pneumonia Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pediatric & Adult Asthma Cases	Small Grp Discussion	2	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Pediatric & Adult Asthma Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COPD Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of COPD Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pediatric Neck Masses	Cased Based Inst	2	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head & Neck Neoplasms	Cased Based Inst	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adult Pulmonary Neoplasm Presentations	Cased Based Inst	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Renal Vascular & Glomerular Disease Cases	Small Grp Discussion	1	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Renal Vascular & Glomerular Disease Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Acute Renal Failure	Cased Based Inst	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chronic Renal Failure	Cased Based Inst	1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acute & Chronic Renal Failure Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Acute & Chronic Renal Failure Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Electrolyte & Acid Base Disorder Cases	Small Grp Discussion	2	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion of Electrolyte & Acid Base Disorder Cases	Large Grp Discussion	1	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- C. In designing your weekly schedule of student time commitments, describe how you included the time available for students to prepare for active learning.

Except for ACS course on Wednesday afternoons and an occasional 1-2 hour afternoon class, D&T III class meetings were limited to mornings. This course schedule was designed to provide students with substantial afternoon times free to prepare for the included active learning exercises.

- D. Describe where and how in the block there is **assessment** of students' skills needed for lifelong learning, including the ability to learn through self-directed, independent study. Indicate whether the assessment is **formative and/or summative**. (**Formative assessment** provides students ongoing feedback that helps students to improve their learning. **Summative assessment** evaluates student learning at the end of an instructional unit by comparing it against some standard or benchmark.)

Students were provided with formative feedback during numerous small and large group discussions from both peers and faculty members. The clinical cases which formed the basis for the group discussions provided students with opportunities to: 1) evaluate their learning needs; 2) identify, seek out, analyze and synthesize information; 3) assess credibility of obtained information; 4) share information with their peers and supervisors; and, 5) receive formative assessment of these activities.

Summative feedback was provided through quizzes following independent learning and case discussions and three examinations during the course.

**LCME Standard ED21:**

**The faculty and medical students of a medical education program must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments.**

Provide a breakdown of the educational opportunities related to cultural competence in health care. Indicate which of the following diversity elements are covered in each activity: Age, Body Habitus, Body Modification, Clothing, Color, Culture, Diet, Disabilities, Disease States, Education, Ethnicity, Gender, Gender Identity, Geography, Habits, Hobbies, Housing Situation, Language, Legal History, Marital Status, Motivation, National Origin, Occupation, Personality, Political Affiliation, Race, Religion, Sexual Orientation, and Socioeconomic Status

Use the list of session covering diversity from the previous year accompanying this form. Remove any that were deleted and add any new sessions for the current year.

<b>System</b>	<b>Author</b>	<b>Pedagogy</b>	<b>Diversity Element</b>	<b>Diversity Objective</b>	<b>Assessment</b>
CV	Touchon	Independent Learning	Age, Gender, Race, Ethnicity, Disease States	Roles of diversity in incidence, presentation & mortality of CVD	MCQs Quizzes MCQs in Exam
CV	Touchon/Wehner	Lecture	Age, Gender, Race, Ethnicity, Disease States, Geography, Habits, Occupation	Roles of diversity in incidence, presentation & mortality of CVD	MCQs Quizzes MCQs in Exam
CV	Shapiro	Independent Learning Lecture	Age, Body habitus, Gender, Race, Ethnicity, Disease States	Roles of diversity in incidence and treatment of hypertension,	MCQs Quizzes MCQs in Exam
CV	Valentovic	Lecture	Age, Disease States	Roles of age and disease states in drug treatment of dyslipidemias	MCQs Quizzes MCQs in Exam
CV	Touchon	Independent Learning	Age, Disease States	Roles of age and disease states in treatment of dyslipidemias	MCQs Quizzes MCQs in Exam

CV	Norton	Lecture	Age, Body Habitus, Gender, Disease States, Habits	Roles of diversity in incidence of atherosclerosis	MCQs Quizzes MCQs in Exam
CV	Norton	Lecture	C, Habits	Roles of diversity in incidence of aneurysms	MCQs in Exam
Research Ethics	Cordle	Lecture	Race, Ethnicity, National Origin	Importance of non-discrimination on research studies	MCQs in Exam
CV	Valentovic	Lecture	Gender, Race, Ethnicity, National Origin, Habits, Disease States	Roles of diversity in the use of anticoagulants	MCQs Quizzes MCQs in Exam
CV	Norton	Lecture	Age, Gender, Habits	Roles of diversity in incidence of vasculitis	MCQs in Exam
CV	El-Bash	Independent Learning	Age, Gender, Disease States	Roles of diversity in treatment of DVT	MCQs in Exam
CV	Norton	Lecture	Age, Gender, Disease States	Roles of diversity in incidence of valvular diseases	MCQs in Exam
CV	Waqas	Independent Learning	Age, Gender, Disease States, Habits	Roles of diversity in incidence of myocardial ischemia	MCQs Quizzes MCQs in Exam
CV	Waqas	Sm & Lg Group Discussions	Age, Gender, Disease States, Habits	Roles of diversity in incidence of myocardial ischemia	MCQs Quizzes MCQs in Exam
CV	Hayat	Independent Learning	Age, Disease States	Roles of diversity in incidence, diagnosis and treatment of heart failure	MCQs Quizzes MCQs in Exam
CV	Hayat	Sm & Lg Group Discussions	Age, Disease States	Roles of diversity in incidence, diagnosis and treatment of heart failure	MCQs Quizzes MCQs in Exam
CV	Stines	Case Based Learning	Age	Role of age in presentation of congenital CV disorders	MCQs Quizzes MCQs in Exam



CV	Norton	Lecture	Age, Disease States	Roles of diversity in incidence of CV malignancies	MCQs in Exam
Respiratory	McGuffin	Case Based Learning	Age	Role of age in presentation of congenital respiratory disorders	MCQs in Exam
Respiratory	Durst	Lecture	Age, Habits, Disease States, Occupation	Roles of diversity in incidence of pulmonary diseases	MCQs Quizzes MCQs in Exam
Respiratory	Meadows	Lecture	Age	Role of age in incidence of pulmonary infections	MCQs Quizzes MCQs in Exam
Respiratory	Shah	Lecture	Disease States, Geography, Occupation	Roles of diversity in incidence of pulmonary fungal infections	MCQs in Exam
Respiratory	Yu	Lecture	Race	Role of race in incidence of Cystic Fibrosis	MCQs in Exam
Respiratory	Allman	Lecture	Age, Race, Ethnicity, National Origin	Roles of diversity in the use of anti-TB drugs	MCQs in Exam
Respiratory	Durst	Lecture	Age, Gender, Race, Geography, Habits, Occupation	Roles of diversity in incidence of interstitial lung diseases	MCQs Quizzes MCQs in Exam
Respiratory	McGuffin	Case Based Learning	Age	Role of age in incidence & presentation of pulmonary diseases	MCQs Quizzes MCQs in Exam
Respiratory	Fenger	Lecture	Age, Occupation	Roles of diversity in incidence of pulmonary viral infections	MCQs in Exam
Respiratory	Meadows	Sm & Lg Group Discussions	Race, National Origin, Occupation	Roles of diversity in incidence of pneumonias	MCQs Quizzes MCQs in Exam

Respiratory	Gusack	Lecture	Age, Gender, Disease States, Geography, Occupation, Habits	Roles of diversity in incidence of head & neck neoplasms	MCQs in Exam
Respiratory	Gusack	Case Based Learning	Age, Gender, Disease States, Geography, Occupation, Habits	Roles of diversity in incidence of head & neck neoplasms	MCQs in Exam
Respiratory	Meadows	Independent Learning	Age, Habits, Occupation	Roles of diversity in incidence of chronic lung diseases	MCQs Quizzes MCQs in Exam
Respiratory	Meadows	Sm & Lg Group Discussions	Age, Habits	Roles of diversity in incidence of chronic lung diseases	MCQs Quizzes MCQs in Exam
Respiratory	Sigdel	Lecture	Age, Gender, Geography, Habits, Occupation	Roles of diversity in incidence of lung tumors & carcinomas	MCQs in Exam
Respiratory	McGuffin	Case Based Learning	Age	Role of age in neck masses	MCQs in Exam
Respiratory	Sigdel	Case Baed Learning	Habits, Occupation	Roles of diversity in incidence of pulmonary neoplasms	MCQs in Exam
Renal	Meadows	Lecture	Disease States, Habits	Roles of diversity in electrolyte disorders	MCQs Quizzes MCQs in Exam
Renal	Norton	Lecture	Age, Disease States, Gender	Roles of diversity in cystic & glomerular diseases	MCQs Quizzes MCQs in Exam
Renal	Sigdel	Lecture	Disease States	Roles of disease states in the etiology of interstitial & tubular kidney diseases	MCQs Quizzes MCQs in Exam
Renal	Sigdel	Lecture	Age, Body Habitus, Disease States, Gender, Habits	Roles of diversity in obstructive disorders and renal tumors	MCQs in Exam
Renal	Norton	Lecture	Age, Disease States, Gender, Race	Roles of diversity in renal vascular disorders	MCQs Quizzes MCQs in Exam
Renal	Meadows	Case Based Learning	Disease States, Habits	Roles of diversity in acute renal failure	MCQs Quizzes MCQs in Exam

Renal	Meadows	Case Based Learning	Age, Disease States, Gender	Roles of diversity in chronic kidney disease	MCQs Quizzes MCQs in Exam
Renal	Meadows	Sm & Lg Group Discussions	Age, Disease States, Gender	Roles of diversity in acute & chronic kidney disease	MCQs Quizzes MCQs in Exam
Renal	Meadows	Lecture	Disease States, Habits	Roles of diversity in acid/base disorders	MCQs Quizzes MCQs in Exam
Renal	Meadows	Sm & Lg Group Discussions	Disease States	Roles of diversity in acid/base disorders	MCQs Quizzes MCQs in Exam

### **LCME Standard ED33:**

**There must be integrated institutional responsibility in a medical education program for the overall design, management, and evaluation of a coherent and coordinated curriculum.**

- a. List the objectives for the block / clerkship:

#### **Institutional Objectives**

Disease and Therapeutics III addresses the following Institutional Objectives:

**Medical Knowledge** – At the end of the course students should be able to recognize and describe the disease processes and basic treatment principles for diseases of the cardiovascular, respiratory and renal systems. Students should be able to apply these basic principles to solve medical problems.

**Interpersonal and Communication Skills** – Students are expected to actively participate in class exercises and the small group clinical case discussions. Oral presentations within the group will promote the development of effective communication skills for exchange of information with patients and health professionals.

**Professionalism** – Students are expected to attend all class sessions and actively participate in discussion groups. Students are expected to behave in a manner consistent with a high standard of academic integrity and demonstrate respect for faculty and fellow students.

**Practice-based Learning and Improvement** – In preparing for the class exercises and clinical case discussions, students will begin to develop the skills necessary to investigate and evaluate the scientific evidence for disease mechanisms and evaluation of effective treatments.

**Patient Care**- Students will develop clinical skills associated with diagnosis of diseases of the cardiovascular, pulmonary and renal systems and will begin to integrate those with appropriate treatment options.

**Systems-based Practice**- Students will begin to develop understanding of importance of health care teams and interprofessional cooperation in treating disorders of the cardiovascular, pulmonary and renal systems.

#### **Course Objectives**

The goal of this course is to provide an integrated approach to the diagnosis and treatment of diseases of the cardiovascular, respiratory and renal systems. At the end of the course, students should be able to:

1. Identify the causes and mechanisms of the diseases of the cardiovascular, pulmonary and renal systems.
2. Develop skills of observation, interpretation and integration of data needed to analyze human disease. When provided with clinical history, anatomical lesions, laboratory data and clinical observation of behavior the student will be able to determine the most likely diagnosis and explain the appropriate etiology of the disease.
3. Understand specific laboratory tests and how to apply them appropriately in clinical situations.
4. Identify and apply the basic treatment modalities used in diseases of the cardiovascular, pulmonary and renal systems. This includes understanding of principles of drug actions and interactions as well as adverse reactions and side effects.
5. Identify and apply social, legal and ethical issues related to the disease treatment.

b. List the assessment methods for the block / clerkship:

- Block examinations
- Pre-discussion quizzes
- Post-discussion quizzes

c. List any gaps or redundancies identified during the block:

Gaps

Whereas diuretics, vasodilators & Inhibitors of the RAA system were covered from the perspective of hypertension, these drugs are used to treat a number of other cardiovascular and non-cardiovascular diseases. These drugs should be covered early in the course as drug classes used for various indications and then referred to specifically when discussing treatment of particular diseases. To address this issue at least in part, students were given handouts covering the pharmacology of diuretics from a broader perspective.

The pathology and pathophysiology of heart failure was not covered in sufficient detail during the relevant classes/case discussions. To address this, an independent learning session with an extra credit summative assessment was developed and available to students at the end of the CV portion of the course.

Redundancies

In both the respiratory and renal sections of the course, there appeared to be some excess repetition of the basic anatomy and physiology of the systems as some individual faculty introduced their topics. It is recommended that this be examined and appropriate measures be taken to reduce any unplanned and unnecessary redundancies in this introductory material.

d. Summary of student performances at the end of the block or clerkship (e.g. block / clerkship comparison to previous years, performance on national exams).

Course Letter Grade	2013-2014		2014-2015	
	Number	%	Number	%
A	46	72		
B	17	26		
C	1	2		
F				
Pass				

National Exams	Date	MU Mean	National Mean	Minimum Passing Score
Custom Exam				
Subject Exam (Specify)				

## Summary of Evaluations and Responses

- a. Provide evidence that previous curriculum committee recommendations have been carried out. Use summary of recommendations accompanying this form.

As this was the first offering a new course, no previous curriculum committee recommendations were available.

- b. Provide summary report of student liaison meetings and/or course evaluations (this may be a bulleted list). Summarize report here.

### Cardiovascular Section

Students found this section the most challenging and stressful. Some of the sessions taught by CV fellows and accompanying quizzes were felt to be well above the MS-2 level. It is suggested that the faculty receive better guidance on that issue as well as work on providing students with clearer objectives for each session. With the exception of some of the case group discussions, these sessions in D&TIII always had errors within the questions or presented information that had nothing to do with the already overzealous readings or the case discussions.

Whereas some pre-readings for cased-based group discussion sessions were appropriate, others were excessive. Examples: students were asked to read excessive assignments for independent learning for myocardial ischemia and asthma in two Up-to-Date to prepare quizzes and group case discussions. Students were not clear on which information in the readings they were expected to know since some contained overly detailed information for MS-2. Guided readings should be of reasonable length with clear objectives and/or study guides provided.

Students found it hard at times to figure out the important take away points from the lectures, case studies and group case discussions. Lectures were sometimes too dense and sometimes not dense enough.

Students would always like a didactic lectures or interactive PowerPoint to give them some background prior to case studies and group case discussions.

The students complained that the class on cardiovascular examination, which includes heart murmurs, was changed by Dr McGuffin at the last minute to an independent learning session (without notification and consent of Course Director). A web-based review of heart murmurs found by a student was subsequently reviewed by Dr Wehner and distributed to the class.

Dr. Wehner's CV sessions were good.

## **Respiratory Section**

Dr Khawaja had the best session and reading; however, his quiz questions were not covered in the reading.

Dr. Sigdel's respiratory cases were good and high-yield

## **Renal Section**

Short and smooth with better communication and objectives than previous sections

Some aspects of renal were covered on three exams: Upper urinary tract was covered on the renal exam in D & T III, lower urinary tract was covered on the first exam of D & T IV and GU radiology was covered on the second exam of D & T IV.

## **Overall**

The evaluations of the course were low-moderate (in the 3's on the 5 point Likert-scaled questions) due to the widespread opinions of the students (ratings from 1-5).

As were overall course ratings, comments were mixed regarding case based group discussions. Some students thought the small and large group discussions were very useful and informative; others found them confusing and inadequate with regard to the information covered.

The students felt that the faculty and Course Director were responsive in correcting issues as the course progressed.

### c. Indicate response to issues:

In response to discussions with students prior to and during the liaison meetings, attempts were made to have the guided readings reduced and/or objectives/study guides provided for the readings. Based on comments from the students, this major issue improved considerably as the course progressed.

Although the course appeared to suffer from some grade inflation and one student was under the impression that points were awarded inappropriately, this resulted from adjustments to quiz and exam grades almost totally by decision of the individual faculty in response to legitimate challenges. In addition, a bonus study module with an accompanying quiz on heart failure was introduced in response to comments at the first liaison meeting that the questions on ethics, research and medical law were overly difficult and overly represented on the first exam. The quiz "bonus" points were available to compensate for the number of points represented by those questions. This was done as a result of faculty discussion following the liaison meeting. In retrospect, this may have been too generous given the other adjustments which occurred because of ambiguous questions on quizzes and exams. A bonus section on heart failure will not be needed with the restoration of a didactic class on heart failure in the following year.

- d. Block leader recommendations for the next academic year including any resources needed to implement changes:

Diuretics, vasodilators & inhibitors of the RAA system should be covered early in the course as drug classes used for various indications and then referred to specifically when discussing treatment of particular diseases.

A didactic session on the pathology and pathophysiology of heart failure should be added.

Guided readings should be limited to 7 pages with clearly stated objectives and/or study guide which clearly identifies the information the students will be expected to know for pre-discussion quizzes.

Participating faculty need to be made more clearly aware of the level at which they are expected to teach and the material they are expected to cover and assess.

Greater care in preparing quiz and exam questions needs to be emphasized to participating faculty.

Some/all of the small/large group case discussions could be reduced to a 2 hour time slot as most of these sessions did not require the scheduled three hours. That would free up additional time for the restoration of some didactic sessions.

**Curriculum Committee Recommendations (to be filled out and approved by Curriculum Committee after reviewing above report):**

- 1- The CC appreciates the addition of the % contact hours in the first table and will likely adopt that format for next year's reports.
- 2- Adopt a consistent estimation of out of class prep time that will be recommended by the Curriculum Committee
- 3- Gap identified: lack of instruction for cardiac physical exam during the presentation of the material
- 4- Attempt additional oversight of the multiple faculty members who are not used to writing exam questions, remind lecture presenters the level of the students and adjust their expectations according to their level.



## APPENDIX 7: USMLE STEP 1 CURRICULUM SESSION TAGGING FOR 2013-2014

Level 1	Level 2	Level 3	Level 4	MS1 Sessions	MS2 Sessions
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange		0	0
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	DNA structure: single- & double-stranded DNA, stabilizing forces, supercoiling	6	0
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	DNA analysis: sequencing, restriction analysis, PCR amplification, hybridization	6	0
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	DNA replication, mutation, repair, degradation, & inactivation	14	1
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	gene structure & organization; chromosomes; centromere, telomere	8	0
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	recombination, insertion sequences, transposons	6	1
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	mechanisms of genetic exchange (transformation, transduction, conjugation) cross-over, recombination, linkage	6	1
General Principles	Biochemistry & molecular biology	gene expression: DNA structure, replication, & exchange	plasmids & bacteriophages	4	1
General Principles	Biochemistry & molecular biology	gene expression: transcription, including defects		0	0
General Principles	Biochemistry & molecular biology	gene expression: transcription, including defects	transcription of DNA into RNA, enzymatic reactions, RNA, RNA degradation	11	0
General Principles	Biochemistry & molecular biology	gene expression: transcription, including defects	regulation: cis-regulatory elements, transcription factors, enhancers, promoters, silencers, repressants, splicing	10	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects		0	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	the genetic code	9	1
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	structure and function of tRNA	4	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	structure and function of ribosomes	4	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	protein synthesis	6	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	regulation of translation	5	0

General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	post-translational modifications, including phosphorylation, addition of CHO units	11	0
General Principles	Biochemistry & molecular biology	gene expression: translation, including defects	protein degradation	6	0
General Principles	Biochemistry & molecular biology	structure and function of proteins		0	0
General Principles	Biochemistry & molecular biology	structure and function of proteins	principles of protein structure and folding	11	0
General Principles	Biochemistry & molecular biology	structure and function of proteins	enzymes: kinetics, reaction mechanisms	5	0
General Principles	Biochemistry & molecular biology	structure and function of proteins	structural and regulatory proteins: ligand binding, self-assembly	18	0
General Principles	Biochemistry & molecular biology	structure and function of proteins	regulatory properties	6	0
General Principles	Biochemistry & molecular biology	energy metabolism, including metabolic sequences and regulation		0	0
General Principles	Biochemistry & molecular biology	energy metabolism, including metabolic sequences and regulation	generation of energy from carbohydrates, fatty acids, and essential amino acids; glycolysis, pentose phosphate pathway, tricarboxylic acid cycle, ketogenesis, electron transport and oxidative phosphorylation, glycogenolysis	22	0
General Principles	Biochemistry & molecular biology	energy metabolism, including metabolic sequences and regulation	storage of energy: gluconeogenesis, glycogenesis, fatty acid and triglyceride synthesis	11	1
General Principles	Biochemistry & molecular biology	energy metabolism, including metabolic sequences and regulation	thermodynamics: free energy, chemical equilibria and group transfer potential, energetics of ATP and other high-energy compounds	6	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases		0	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	biosynthesis and degradation of amino acids (eg, homocystinuria, maple syrup urine disease)	2	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	biosynthesis and degradation of purine and pyrimidine nucleotides	2	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	biosynthesis and degradation of lipids (eg, dyslipidemias, carnitine deficiency)	14	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	biosynthesis and degradation of porphyrins	1	0
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	galactosemia and other small sugar disorders	2	1
General Principles	Biochemistry & molecular biology	metabolic pathways of small molecules and associated diseases	biosynthesis and degradation of alcohols and other small molecules	2	0

General Principles	Biochemistry & molecular biology	biosynthesis and degradation of other macromolecules and associated abnormalities, complex carbohydrates (eg, lysosomal storage disease), glycoproteins, and proteoglycans (eg, type II glycogen storage disease)		9	0
General Principles	Biology of cells	signal transduction: second messenger systems - voltage- & ligand-gated channels & receptors		15	0
General Principles	Biology of cells	cell components (endoplasmic reticulum, plasma membrane, nucleus)		25	0
General Principles	Biology of cells	cytoskeleton (including cell movement & intracellular transport)		4	0
General Principles	Biology of cells	secretion & exocytosis, endocytosis, transcytosis		2	0
General Principles	Biology of cells	cell cycle, mitosis, meiosis, structure & regulation of spindle apparatus, control points		9	0
General Principles	Biology of cells	epithelial cells (including surface specialization, intercellular junctions, gap junctions, & desmosomes)		12	0
General Principles	Biology of cells	fibroblasts, endothelial cells, & mesenchymal cells: basement membrane, extracellular matrix, proteoglycans, fibronectins, adhesion molecules, annexins		21	0
General Principles	Biology of cells	muscle cells (cardiac, smooth, skeletal): structure & regulation of contractile elements, excitation-contraction coupling		22	0
General Principles	Biology of cells	adaptive cell response to injury (hypertrophy, metaplasia)		2	2
General Principles	Biology of cells	mechanisms of cell injury & necrosis (including free radical mediated cell injury)		5	4
General Principles	Biology of cells	apoptosis (programmed cell death)		3	2
General Principles	Human Development & Genetics	embryogenesis: programmed gene expression, tissue differentiation & morphogenesis, homeotic genes		4	0
General Principles	Human Development & Genetics	congenital abnormalities: principles, patterns of anomalies, dysmorphogenesis		11	4
General Principles	Human Development & Genetics	principles of pedigree analysis (inheritance patterns, occurrence & recurrence risk)		7	3

General Principles	Human Development & Genetics	population genetics: Hardy-Weinberg law, founder effects, mutation-selection equilibrium		1	1
General Principles	Human Development & Genetics	genetic mechanisms: chromosomal abnormalities, mendelian inheritance, multifactorial diseases		15	6
General Principles	Human Development & Genetics	clinical genetics (including genetic testing, prenatal diagnosis, newborn screening, genetic counseling/ethics, gene therapy)		13	9
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)		0	0
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	acute inflammation & mediator systems	9	6
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	vascular response to injury (including mediators)	2	4
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	inflammatory cell recruitment (adherence & cell migration) & phagocytosis	1	5
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	bactericidal mechanisms & tissue injury	0	7
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	clinical manifestations (including pain, fever, leukocytosis, leukemoid reaction, & chills)	0	7
General Principles	Biology of Tissue Response to Disease	inflammation (cells & mediators)	chronic inflammation	8	6
General Principles	Biology of Tissue Response to Disease	reparative processes		0	0
General Principles	Biology of Tissue Response to Disease	reparative processes	wound healing, hemostasis, & repair: thrombosis, granulation tissue, angiogenesis, fibrosis, scar/keloid formation	2	2
General Principles	Biology of Tissue Response to Disease	reparative processes	regenerative processes	2	0
General Principles	Biology of Tissue Response to Disease	neoplasia		0	0
General Principles	Biology of Tissue Response to Disease	neoplasia	classification, histologic diagnosis	1	1
General Principles	Biology of Tissue Response to Disease	neoplasia	grading, & staging of neoplasms	2	1
General Principles	Biology of Tissue Response to Disease	neoplasia	cell biology, biochemistry, & molecular biology of neoplastic cells: transformation, oncogenes, altered cell differentiation, & proliferation	8	4
General Principles	Biology of Tissue Response to Disease	neoplasia	hereditary neoplastic disorders	1	4
General Principles	Biology of Tissue Response to Disease	neoplasia	invasion & metastasis	4	1
General Principles	Biology of Tissue Response to Disease	neoplasia	tumor immunology	0	1
General Principles	Biology of Tissue Response to Disease	neoplasia	paraneoplastic manifestations of cancer	2	1
General Principles	Biology of Tissue Response to Disease	neoplasia	cancer epidemiology & prevention	3	3

General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	progression through the life cycle (birth through senescence)		0	0
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	progression through the life cycle (birth through senescence)	cognitive, language, motor skills, social & interpersonal development (stranger anxiety)	7	2
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	progression through the life cycle (birth through senescence)	sexual development (puberty, menopause)	4	1
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	progression through the life cycle (birth through senescence)	influence of developmental stage on physician/patient interview	1	1
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior		0	0
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior	personality traits or coping style (coping mechanisms)	6	13
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior	psychodynamic & behavioral factors, related past experience	9	16
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior	family & cultural factors, including socioeconomic status, ethnicity, & gender	15	18
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior	adaptive & maladaptive behavioral responses to stress & illness (drug-seeking behavior, sleep deprivation)	8	10

General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	psychologic & social factors influencing patient behavior	interactions between the patient & the physician or the health care system (transference)	5	6
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family		0	0
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family	establishing, maintaining rapport, "difficult" interviews (anxious, angry patients)	10	24
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family	data gathering	8	35
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family	approaches to patient education, patient life-style changes, adherence	12	22
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family	communicating bad news	8	5
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	patient interviewing, consultation, & interactions with the family	multicultural ethnic characteristics	4	5
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior		0	0
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	consent & informed consent to treatment	4	8

General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	physician-patient relationships (ethical conduct, confidentiality)	20	27
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	death & dying	8	6
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	birth-related issues	2	2
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	patient participation in research	1	1
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	interactions with other health professionals (referral)	4	24
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	sexuality & the profession, other "boundary" issues	2	3
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	ethics of managed care	1	4
General Principles	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	medical ethics, jurisprudence, & professional behavior	organization & cost of health-care delivery	3	18
General Principles	Multisystem processes	nutrition		0	0
General Principles	Multisystem processes	nutrition	generation, expenditure, & storage of energy at the whole-body level	8	0

General Principles	Multisystem processes	nutrition	assessment of nutritional status across the life span (calories, protein, essential nutrients, hypoalimantation)	9	0
General Principles	Multisystem processes	nutrition	functions of nutrients (essential, transfatty acids, cholesterol)	10	0
General Principles	Multisystem processes	nutrition	protein-calorie malnutrition	2	1
General Principles	Multisystem processes	nutrition	vitamin & mineral deficiencies &/or toxicities	5	2
General Principles	Multisystem processes	nutrition	eating disorders (obesity, anorexia, bulimia)	5	1
General Principles	Multisystem processes	temperature regulation		5	0
General Principles	Multisystem processes	adaptation to environmental extremes (including occupational exposures)		0	0
General Principles	Multisystem processes	adaptation to environmental extremes (including occupational exposures)	physical disorders (temperature; radiation; burns; decreased atmospheric pressure; high altitude sickness; increased water pressure)	2	1
General Principles	Multisystem processes	adaptation to environmental extremes (including occupational exposures)	chemical (gases, vapors; smoke inhalation; agricultural hazards, volatile organic solvents, heavy metals; principles of poisoning & therapy)	0	1
General Principles	Multisystem processes	fluid, electrolyte, & acid-base balance & disorders (dehydration, acidosis, alkalosis)		6	2
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles		0	0
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	pharmacokinetics: absorption, distribution, metabolism, excretion, dosage intervals	0	30
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	mechanisms of drug action, structure-activity relationships, receptors, signal transduction	1	29
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	concentration- & dose-effect relationships (efficacy, potency), types of agonists & antagonists & their actions	0	10
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	individual factors altering pharmacokinetics & pharmacodynamics (age, gender, disease, tolerance, compliance, body weight, metabolic proficiency, pharmacogenetics)	0	16
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	drug side effects, overdose, toxicology	0	39



General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	drug interactions	0	33
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles	regulatory issues (drug development, approval, scheduling)	0	2
General Principles	Pharmacodynamic & pharmacokinetic processes	general properties of autacoids (including peptides & analogs, biogenic amines, prostanoids & their inhibitors, & smooth muscle/endothelial autacoids)		0	2
General Principles	Pharmacodynamic & pharmacokinetic processes	general principles of autonomic pharmacology		0	9
General Principles	Pharmacodynamic & pharmacokinetic processes	general properties of antimicrobials (including mechanisms of action & resistance)		0	13
General Principles	Pharmacodynamic & pharmacokinetic processes	general properties of antineoplastic agents & immunosuppressants, drug effects on rapidly dividing mammalian cells		0	2
General Principles	Microbial biology & infection	microbial classification & its basis		0	9
General Principles	Microbial biology & infection	bacteria & bacterial diseases		0	0
General Principles	Microbial biology & infection	bacteria & bacterial diseases	structure & composition	0	20
General Principles	Microbial biology & infection	bacteria & bacterial diseases	metabolism, physiology, & regulation	0	14
General Principles	Microbial biology & infection	bacteria & bacterial diseases	genetics	0	13
General Principles	Microbial biology & infection	bacteria & bacterial diseases	nature & mechanisms of action of virulence factors	0	22
General Principles	Microbial biology & infection	bacteria & bacterial diseases	pathophysiology of infection	0	24
General Principles	Microbial biology & infection	bacteria & bacterial diseases	epidemiology & ecology	0	19
General Principles	Microbial biology & infection	bacteria & bacterial diseases	principles of cultivation, assay, & laboratory diagnosis	0	22
General Principles	Microbial biology & infection	viruses & viral diseases		0	0
General Principles	Microbial biology & infection	viruses & viral diseases	physical & chemical properties	0	20
General Principles	Microbial biology & infection	viruses & viral diseases	replication	0	17
General Principles	Microbial biology & infection	viruses & viral diseases	genetics	0	10
General Principles	Microbial biology & infection	viruses & viral diseases	principles of cultivation, assay, & laboratory diagnosis	0	8
General Principles	Microbial biology & infection	viruses & viral diseases	molecular basis of pathogenesis	1	22
General Principles	Microbial biology & infection	viruses & viral diseases	pathophysiology of infection	1	28
General Principles	Microbial biology & infection	viruses & viral diseases	latent & persistent infections	1	13
General Principles	Microbial biology & infection	viruses & viral diseases	epidemiology	1	20
General Principles	Microbial biology & infection	viruses & viral diseases	oncogenic viruses	0	11
General Principles	Microbial biology & infection	fungi & fungal infections		0	0
General Principles	Microbial biology & infection	fungi & fungal infections	structure, physiology, cultivation, & laboratory diagnosis	0	6
General Principles	Microbial biology & infection	fungi & fungal infections	pathogenesis & epidemiology	0	6
General Principles	Microbial biology & infection	parasites & parasitic diseases		0	0

General Principles	Microbial biology & infection	parasites & parasitic diseases	structure, physiology, & laboratory diagnosis	0	11
General Principles	Microbial biology & infection	parasites & parasitic diseases	pathogenesis & epidemiology	0	14
General Principles	Microbial biology & infection	principles of sterilization & pure culture technique		0	2
General Principles	Immune responses	production & function of granulocytes, natural killer cells, macrophages		7	8
General Principles	Immune responses	production & function of T lymphocytes, T lymphocyte receptors		7	15
General Principles	Immune responses	production & function of B lymphocytes & plasma cells; immunoglobulin & antibodies: structure & biologic properties		7	11
General Principles	Immune responses	antigenicity & immunogenicity; antigen presentation; cell activation & regulation; tolerance & clonal deletion		1	8
General Principles	Immune responses	immunologic mediators: chemistry, function, molecular biology, classic & alternative complement pathways, cytokines, chemokines		0	10
General Principles	Immune responses	immunogenetics; MHC structure & function, class I, II molecules; erythrocyte antigens; transplantation		0	6
General Principles	Immune responses	immunizations: vaccines, protective immunity		0	13
General Principles	Immune responses	alterations in immunologic function		0	0
General Principles	Immune responses	alterations in immunologic function	T or B lymphocyte deficiencies	0	3
General Principles	Immune responses	alterations in immunologic function	deficiencies of phagocytic cells	0	2
General Principles	Immune responses	alterations in immunologic function	combined immunodeficiency disease	0	2
General Principles	Immune responses	alterations in immunologic function	HIV infection/AIDS & other acquired disorders of immune responsiveness	0	3
General Principles	Immune responses	alterations in immunologic function	drug-induced alterations in immune responses, immunopharmacology	0	3
General Principles	Immune responses	immunologically mediated disorders		0	0
General Principles	Immune responses	immunologically mediated disorders	hypersensitivity (types I-IV)	0	6
General Principles	Immune responses	immunologically mediated disorders	transplant rejection	0	3
General Principles	Immune responses	immunologically mediated disorders	autoimmune disorders	0	5
General Principles	Immune responses	immunologically mediated disorders	risks of transplantation, transfusion (graft-versus-host disease)	0	2
General Principles	Immune responses	immunologically mediated disorders	isoimmunization, hemolytic disease of the newborn	0	0
General Principles	Immune responses	immunologically mediated disorders	immunopathogenesis	0	4

General Principles	Immune responses	immunologic principles underlying diagnostic laboratory tests (ELISA, complement fixation, RIA, agglutination)		0	2
General Principles	Quantitative methods	fundamental concepts of measurement	scales of measurement	0	2
General Principles	Quantitative methods	fundamental concepts of measurement	distribution, central tendency, variability, probability	1	2
General Principles	Quantitative methods	fundamental concepts of measurement	disease prevalence & incidence	0	3
General Principles	Quantitative methods	fundamental concepts of measurement	disease outcomes (fatality rates)	0	3
General Principles	Quantitative methods	fundamental concepts of measurement	associations (correlation or covariance)	0	0
General Principles	Quantitative methods	fundamental concepts of measurement	health impact (risk differences & ratios)	0	0
General Principles	Quantitative methods	fundamental concepts of measurement	sensitivity, specificity, predictive values	0	3
General Principles	Quantitative methods	fundamental concepts of study design		0	0
General Principles	Quantitative methods	fundamental concepts of study design	types of experimental studies (clinical trials, community intervention trials)	2	2
General Principles	Quantitative methods	fundamental concepts of study design	types of observational studies (cohort, case-control, cross-sectional, case series, community surveys)	2	1
General Principles	Quantitative methods	fundamental concepts of study design	sampling & sample size	1	3
General Principles	Quantitative methods	fundamental concepts of study design	subject selection & exposure allocation (randomization, stratification, self-selection, systematic assignment)	1	1
General Principles	Quantitative methods	fundamental concepts of study design	outcome assessment	3	2
General Principles	Quantitative methods	fundamental concepts of study design	internal & external validity	2	3
General Principles	Quantitative methods	fundamental concepts of hypothesis testing & statistical inference		0	0
General Principles	Quantitative methods	fundamental concepts of hypothesis testing & statistical inference	confidence intervals	2	2
General Principles	Quantitative methods	fundamental concepts of hypothesis testing & statistical inference	statistical significance & type I error, statistical power & type II error	2	2
Hematopoietic & Lymphoreticular Systems	Normal processes	embryonic development, fetal maturation, & perinatal changes		2	0
Hematopoietic & Lymphoreticular Systems	Normal processes	organ structure & function		14	4
Hematopoietic & Lymphoreticular Systems	Normal processes	cell/tissue structure & function		0	0
Hematopoietic & Lymphoreticular Systems	Normal processes	cell/tissue structure & function	production & function of erythrocytes, hemoglobin, O <sub>2</sub> & CO <sub>2</sub> transport, transport proteins	13	5

Hematopoietic & Lymphoreticular Systems	Normal processes	cell/tissue structure & function	production & function of leukocytes & the lymphoreticular system	13	7
Hematopoietic & Lymphoreticular Systems	Normal processes	cell/tissue structure & function	production & function of platelets	6	5
Hematopoietic & Lymphoreticular Systems	Normal processes	cell/tissue structure & function	production & function of coagulation & fibrinolytic factors	4	5
Hematopoietic & Lymphoreticular Systems	Normal processes	repair, regeneration, & changes associated with stage of life		4	2
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders		0	0
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders	allergic & anaphylactic reactions & other immunopathologic mechanisms	0	3
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders	acquired disorders of immune deficiency	1	9
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders	autoimmunity & autoimmune diseases (Coombs' positive hemolytic anemia, pernicious anemia, cryoglobulinemias, ITP)	0	7
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders	anemia of chronic disease	0	6
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	infectious, inflammatory, & immunologic disorders	transfusion complications, transplant rejection	1	5
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	traumatic & mechanical injury (mechanical injury to erythrocytes, splenic rupture)		2	6
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	neoplastic disorders (lymphoma, leukemia, multiple myeloma)		0	13
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	metabolic & regulatory disorders (acquired & congenital)		0	0
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	metabolic & regulatory disorders (acquired & congenital)	anemias & cytopenias (iron deficiency anemia, hemoglobinopathies, hereditary spherocytosis)	2	11
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	metabolic & regulatory disorders (acquired & congenital)	cythemia	0	6
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	metabolic & regulatory disorders (acquired & congenital)	hemorrhagic & hemostatic disorders (coagulopathies, DIC)	4	3
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	metabolic & regulatory disorders (acquired & congenital)	bleeding secondary to platelet disorders (von Willebrand's)	0	4
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	vascular & endothelial disorders (effects & complications of splenectomy, hypersplenism, TTP, hemolytic-uremic syndrome)		0	7

Hematopoietic & Lymphoreticular Systems	Abnormal Processes	systemic disorders affecting the hematopoietic & lymphoreticular system (nutritional deficiencies, systemic lupus erythematosus)		0	9
Hematopoietic & Lymphoreticular Systems	Abnormal Processes	idiopathic disorders		0	10
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system		0	0
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	blood & blood products	0	10
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	treatment of anemia, drugs stimulating erythrocyte production (erythropoietin)	0	6
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	drugs stimulating leukocyte production (G-CSF, GM-CSF)	0	1
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	anticoagulants, thrombolytic drugs	2	6
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	antiplatelet drugs	2	1
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	antimicrobials (antimalarials, anti-HIV)	0	2
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	antineoplastic & immunosuppressive drugs	0	7
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the hematopoietic system	drugs used to treat acquired disorders of immune responsiveness	0	3
Hematopoietic & Lymphoreticular Systems	Principles of therapeutics	other therapeutic modalities (splenectomy, chelating agents, radiation therapy for lymphomas, plasmapheresis)		0	10
Hematopoietic & Lymphoreticular Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (diet, depression & immune responses, "blood doping" among athletes)		0	1

Hematopoietic & Lymphoreticular Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (childhood leukemia)		0	2
Hematopoietic & Lymphoreticular Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (heavy metals, hydrocarbons, lead)		0	2
Hematopoietic & Lymphoreticular Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (herbal treatments with bone marrow depression)		0	0
Central & peripheral nervous Systems	Normal processes	embryonic development, fetal maturation, & perinatal changes (eg. Neural tube derivatives, cerebral ventricles, neural crest derivatives)		8	1
Central & peripheral nervous Systems	Normal processes	organ structure & function		0	0
Central & peripheral nervous Systems	Normal processes	organ structure & function	spinal cord (gross anatomy, blood supply, & spinal reflexes)	25	4
Central & peripheral nervous Systems	Normal processes	organ structure & function	brain stem (cranial nerves & nuclei, reticular formation, gross anatomy, & blood supply)	56	3
Central & peripheral nervous Systems	Normal processes	organ structure & function	brain (including gross anatomy & blood supply; cognition, language, memory; hypothalamic function; limbic system & emotional behavior; circadian rhythms & sleep; & control of eye movement)	53	9
Central & peripheral nervous Systems	Normal processes	organ structure & function	sensory systems (including proprioception, pain, vision, hearing, balance, taste, & olfaction)	79	9
Central & peripheral nervous Systems	Normal processes	organ structure & function	motor systems (brain & spinal cord, basal ganglia & cerebellum)	38	4
Central & peripheral nervous Systems	Normal processes	organ structure & function	autonomic nervous system	33	9
Central & peripheral nervous Systems	Normal processes	organ structure & function	peripheral nerves	82	9
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function		0	0
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	axonal transport	5	0
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	excitable properties of neurons, axons & dendrites, including channels	27	3
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	synthesis, storage, release, reuptake, & degradation of neurotransmitters & neuromodulators	12	13

Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	pre- & postsynaptic receptor interactions, trophic & growth factors	18	16
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	brain metabolism	0	2
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	glia, myelin	1	0
Central & peripheral nervous Systems	Normal processes	cell/tissue structure & function	brain homeostasis: blood-brain barrier; cerebrospinal fluid formation & flow, choroid plexus	1	1
Central & peripheral nervous Systems	Normal processes	repair, regeneration & changes associated with stage of life		2	1
Central & peripheral nervous Systems	Abnormal processes	infectious, inflammatory, & immunologic disorders (meningitis, multiple sclerosis, myasthenia gravis, Bell's palsy)		5	23
Central & peripheral nervous Systems	Abnormal processes	traumatic & mechanical disorders (subdural & epidural hematomas, cord compression, peripheral nerve injury)		19	9
Central & peripheral nervous Systems	Abnormal processes	neoplastic disorders (primary & metastatic)		1	7
Central & peripheral nervous Systems	Abnormal processes	acquired metabolic & regulatory disorders (delirium, Reye's syndrome)		0	4
Central & peripheral nervous Systems	Abnormal processes	vascular disorders (cerebrovascular occlusion, venous sinus thrombosis, arterial aneurysms, hemorrhage)		17	10
Central & peripheral nervous Systems	Abnormal processes	systemic disorders affecting the nervous system (lupus, diabetic neuropathy)		0	2
Central & peripheral nervous Systems	Abnormal processes	idiopathic disorders affecting the nervous system		1	4
Central & peripheral nervous Systems	Abnormal processes	congenital disorders, including metabolic (neural tube defects, cerebral palsy, mental retardation, Down's syndrome)		5	3
Central & peripheral nervous Systems	Abnormal processes	degenerative disorders (peripheral neuropathy, Alzheimer's dementia, Parkinsons disease, Huntington's disease, amyotrophic lateral sclerosis)		11	9
Central & peripheral nervous Systems	Abnormal processes	paroxysmal disorders (epilepsy, headache, pain syndromes, & sleep disorders including narcolepsy, restless legs syndrome/periodic limb movement, circadian rhythm disorders, parasomnias)		6	7
Central & peripheral nervous Systems	Abnormal processes	disorders of special senses (glaucoma, cataracts, macular degeneration, blindness, deafness, Meniere's disease)		6	1

Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation		0	0
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	early-onset disorders (learning disorders)	0	0
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	disorders related to substance use	2	8
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	schizophrenia & other psychotic disorders	1	2
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	mood disorders	2	1
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	anxiety disorders	0	2
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	somatoform disorders (somatization, conversion disorder, pain disorder, hypochondriasis, body dysmorphic disorder)	0	1
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	personality disorders	0	0
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	physical & sexual abuse of children, adults, & elders	0	0
Central & peripheral nervous Systems	Abnormal processes	psychopathologic disorders, processes & their evaluation	other disorders (dissociative, impulse control, posttraumatic stress disorder)	3	0
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system		0	0
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	anesthetics	0	2
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	hypnotics	0	5
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	psychopharmacologic agents (anxiolytics, antidepressants, antipsychotic agents, mood-stabilizing agents)	3	9
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	anticonvulsants	1	6
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	analgesics	0	5
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	stimulants, amphetamines	0	6



Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	antiparkinsonian drugs	4	5
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	skeletal muscle relaxants, botulinum toxin	1	5
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	neuromuscular junction blocking agents	1	3
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	antiglaucoma drugs	0	2
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	drugs used to decrease intracranial pressure (mannitol, high-dose glucocorticoids)	0	3
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	antimigraine agents	0	3
Central & peripheral nervous Systems	Principles of Therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the nervous system	drugs affecting autonomic nervous system (anticholinesterases)	0	10
Central & peripheral nervous Systems	Principles of Therapeutics	other therapeutic modalities (radiation, CSF shunting, surgery)		0	7
Central & peripheral nervous Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (drug abuse, dementia, sleep deprivation, accident prevention, pets)		6	5
Central & peripheral nervous Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (developmental disabilities, dementia, generational reversal, nutrition, seizures, sleep disorders)		5	7
Central & peripheral nervous Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (boxing, carbon monoxide exposure)		1	6
Central & peripheral nervous Systems	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factor		1	3
Skin & Related connective Tissue	Normal processes	embryonic development, fetal maturation, & perinatal changes		5	0

Skin & Related connective Tissue	Normal processes	organ structure & function		6	1
Skin & Related connective Tissue	Normal processes	cell/tissue structure & function ( barrier functions, thermal regulation, eccrine function)		10	2
Skin & Related connective Tissue	Normal processes	repair, regeneration, & changes associated with stage of life or ethnicity (senile purpura, male pattern baldness, postmenopausal hair changes)		7	3
Skin & Related connective Tissue	Normal processes	skin defense mechanisms & normal flora		2	0
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders		0	0
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders	bacterial infections, (acne, cellulitis, carbuncle, abscess, necrotizing fasciitis, gangrene)	5	13
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders	viral infections (herpes infections, chickenpox, rubella, measles, roseola, verrucae)	5	8
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders	fungal infections, including mycoses, dermatophytosis (tinea)	2	6
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders	parasitic infections (scabies, lice)	0	5
Skin & Related connective Tissue	Abnormal processes	infectious, inflammatory, & immunologic disorders	immune & autoimmune disorders (discoid lupus erythematosus, scleroderma, dermatomyositis, alopecia, psoriasis, urticaria, allergic dermatosis, Reiter syndrome)	1	6
Skin & Related connective Tissue	Abnormal processes	traumatic & mechanical disorders (thermal injury, decubitus ulcers, effects of ultraviolet light & radiation)		3	2
Skin & Related connective Tissue	Abnormal processes	neoplastic disorders		0	0
Skin & Related connective Tissue	Abnormal processes	neoplastic disorders	keratinocytes (seborrheic keratosis, actinic keratosis, basal cell carcinoma, squamous cell carcinoma)	1	6
Skin & Related connective Tissue	Abnormal processes	neoplastic disorders	melanocytes (nevi, melanoma, ichthyosis)	1	3
Skin & Related connective Tissue	Abnormal processes	neoplastic disorders	vascular neoplasms (hemangiomas, Kaposi's sarcoma)	0	3
Skin & Related connective Tissue	Abnormal processes	neoplastic disorders	other (T-cell lymphoma, skin appendage tumors)	1	2
Skin & Related connective Tissue	Abnormal processes	metabolic, regulatory, & structural disorders (vitamin deficiencies, hypervitaminosis, hyperhidrosis)		1	0

Skin & Related connective Tissue	Abnormal processes	vascular disorders (vasculitis, Raynaud's disease, Behcet disease)		0	1
Skin & Related connective Tissue	Abnormal processes	systemic disorders affecting the skin (Ehlers-Danlos syndrome, Marfan's syndrome)		2	1
Skin & Related connective Tissue	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs used for disorders of skin & connective tissue (including anti-inflammatory agents (steroids, antihistamines), emollients, sunscreen, retin-A, antimicrobial agents, cytotoxic therapy (methotrexate, PUVA, keratinolytics)		1	10
Skin & Related connective Tissue	Principles of therapeutics	other therapeutic modalities (laser, tattoo removal, cryotherapy)		1	3
Skin & Related connective Tissue	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (sun exposure, acne)		2	1
Skin & Related connective Tissue	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (psoriasis)		2	1
Skin & Related connective Tissue	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors		3	4
Skin & Related connective Tissue	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (keloid)		2	3
Musculoskeletal System	Normal processes	embryonic development, fetal maturation, & perinatal changes		12	3
Musculoskeletal System	Normal processes	organ structure & function		80	16
Musculoskeletal System	Normal processes	cell/tissue structure & function		0	0
Musculoskeletal System	Normal processes	cell/tissue structure & function	biology of bones, joints, tendons, skeletal muscle	44	11
Musculoskeletal System	Normal processes	cell/tissue structure & function	exercise & physical conditioning	5	2
Musculoskeletal System	Normal processes	repair, regeneration, & changes associated with stage of life		12	19

Musculoskeletal System	Abnormal processes	infectious, inflammatory, & immunologic disorders		0	0
Musculoskeletal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	infectious disorders (septic arthritis, Lyme disease, osteomyelitis, reactive arthritis)	1	14
Musculoskeletal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	inflammatory disorders (fibrositis, synovitis, tenosynovitis)	2	14
Musculoskeletal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	immunologic disorders (rheumatoid arthritis, ankylosing spondylitis, polymyositis, systemic lupus erythematosus, dermatomyositis, polymyalgia rheumatica, Still disease)	2	13
Musculoskeletal System	Abnormal processes	traumatic & mechanical disorders (fractures, sprains, strains, dislocations, carpal tunnel syndrome)		29	18
Musculoskeletal System	Abnormal processes	neoplastic disorders (osteosarcoma, metastatic disease)		1	8
Musculoskeletal System	Abnormal processes	metabolic, regulatory, & structural disorders (dwarfism, osteogenesis imperfecta, osteomalacia, osteoporosis, osteodystrophy, gout, pseudogout)		13	9
Musculoskeletal System	Abnormal processes	vascular disorders (polyarteritis nodosa, bone infarcts)		1	6
Musculoskeletal System	Abnormal processes	systemic disorders affecting the musculoskeletal system (diabetes mellitus)		0	5
Musculoskeletal System	Abnormal processes	idiopathic disorders (Dupuytren's contracture, scoliosis, Paget's disease)		0	9
Musculoskeletal System	Abnormal processes	degenerative disorders (disc disease, osteoarthritis)		4	13
Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system		0	0
Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system	nonsteroidal anti-inflammatory drugs	1	8
Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system	muscle relaxants	0	3

Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system	antigout therapy (allopurinol, colchicine, uricosuric drugs)	0	3
Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system	immunosuppressive drugs (glucocorticoids, gold, methotrexate, cytotoxic agents)	0	4
Musculoskeletal System	Principles of theuapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the musculoskeletal system	drugs affecting bone mineralization (diphosphonates, calcitonin, estrogen analogs)	1	2
Musculoskeletal System	Principles of theuapeutics	other therapeutic modalities (radiation, surgery, casts, rehabilitation)		0	13
Musculoskeletal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (diet, exercise, seat belts, bicycle helmets)		1	6
Musculoskeletal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (osteoporosis, fractures in elderly, alcohol abuse, fractures)		0	9
Musculoskeletal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (athletes, musicians)		2	9
Musculoskeletal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (bone mass)		0	4
Respiratory System	Normal processes	embryonic development, fetal maturation, & perinatal changes		6	4
Respiratory System	Normal processes	organ structure & function		0	0
Respiratory System	Normal processes	organ structure & function	airways (mechanics & regulation of breathing)	16	6
Respiratory System	Normal processes	organ structure & function	lung parenchyma (ventilation, perfusion, gas exchange)	22	3
Respiratory System	Normal processes	organ structure & function	pleura	5	3

Respiratory System	Normal processes	cell/tissue structure & function (surfactant formation, alveolar structure)		23	3
Respiratory System	Normal processes	repair, regeneration, & changes associated with stage of life		0	2
Respiratory System	Normal processes	pulmonary defense mechanisms & normal flora		4	1
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders		0	0
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	infectious diseases upper & lower respiratory tract, pleura & complications (pneumonia, bronchiectasis, abscess, empyema, otitis media, otitis externa, sinusitis)	6	31
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	immunologic disorders	0	3
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	allergic & hypersensitivity disorders (Asthma)	1	17
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	autoimmune disorders (Wegener's granulomatosis, Goodpasture's syndrome)	3	1
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	inflammatory disorders	1	14
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	pneumoconioses	1	6
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	acute & chronic alveolar injury (adult respiratory distress syndrome, chlorine gas/smoke inhalation)	4	5
Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	obstructive pulmonary disease (emphysema, chronic bronchitis)	9	11

Respiratory System	Abnormal processes	infectious, inflammatory, & immunologic disorders infectious, inflammatory, & immunologic disorders	restrictive pulmonary disease (sarcoidosis, idiopathic fibrosis)	5	6
Respiratory System	Abnormal processes	traumatic & mechanical disorders (aspiration, pneumothorax, atelectasis, sleep apnea)		14	3
Respiratory System	Abnormal processes	neoplastic disorders (polyps, bronchogenic carcinoma, mesothelioma, metastatic tumors)		2	10
Respiratory System	Abnormal processes	metabolic, regulatory, & structural disorders (hypoventilation, disorders of gas exchange, ventilation-perfusion imbalance, neonatal respiratory distress syndrome)		19	6
Respiratory System	Abnormal processes	vascular & circulatory disorders (thromboembolic disease, pulmonary hypertension, pulmonary edema, pleural effusion)		13	2
Respiratory System	Abnormal processes	systemic disorders affecting the respiratory system		3	4
Respiratory System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the respiratory system (decongestants, cough suppressants, expectorants, mucolytics)		0	15
Respiratory System	Principles of therapeutics	bronchodilator drugs, anti-inflammatory & cytotoxic drugs, antimicrobial agents, antineoplastic agents)		0	27
Respiratory System	Principles of therapeutics	other therapeutic modalities (oxygen therapy, nasal CPAP, mechanical ventilation, physical therapy, surgical procedures, including transplantation)		1	16
Respiratory System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (smoking, substance abuse, pets, allergies)		3	10
Respiratory System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (tuberculosis, asthma, chronic obstructive pulmonary disease, school issues, protective parents, family smoking)		5	3

Respiratory System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors		6	13
Respiratory System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (sarcoidosis, lung cancer)		9	7
Cardiovascular System	Normal processes	embryonic development, fetal maturation, & perinatal changes		10	2
Cardiovascular System	Normal processes	organ structure & function		0	0
Cardiovascular System	Normal processes	organ structure & function	chambers, valves	10	2
Cardiovascular System	Normal processes	organ structure & function	cardiac cycle, mechanics, heart sounds, cardiac output	13	3
Cardiovascular System	Normal processes	organ structure & function	hemodynamics (systemic, pulmonary, coronary) & blood volume	6	5
Cardiovascular System	Normal processes	organ structure & function	circulation in specific vascular beds	17	3
Cardiovascular System	Normal processes	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)		0	0
Cardiovascular System	Normal processes	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)	6	2
Cardiovascular System	Normal processes	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)	endothelium & secretory function, vascular smooth muscle, microcirculation, & lymph flow	9	3
Cardiovascular System	Normal processes	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)	mechanisms of atherosclerosis	3	3
Cardiovascular System	Normal processes	heart muscle, metabolism, oxygen consumption, biochemistry, & secretory function (atrial natriuretic peptide)	neural & hormonal regulation of the heart, blood vessels, & blood volume, including responses to change in posture, exercise, & tissue metabolism	12	5
Cardiovascular System	Normal processes	repair, regeneration, & changes associated with stage of life		3	1
Cardiovascular System	Abnormal processes	infectious, inflammatory, & immunologic disorders		0	0
Cardiovascular System	Abnormal processes	infectious, inflammatory, & immunologic disorders	infectious disorders (endocarditis, myocarditis, pericarditis)	0	4



Cardiovascular System	Abnormal processes	infectious, inflammatory, & immunologic disorders	inflammatory & immunologic disorders (acute rheumatic fever, systemic lupus erythematosus, transplant rejection, vasculitis, temporal arteritis)	0	4
Cardiovascular System	Abnormal processes	traumatic & mechanical disorders (tamponade, valvular disease, subaortic stenosis)		8	3
Cardiovascular System	Abnormal processes	neoplastic disorders		2	2
Cardiovascular System	Abnormal processes	metabolic & regulatory disorders (dysrhythmias, systolic & diastolic dysfunction, low- & high-output heart failure, cor pulmonale, systemic hypertension, ischemic heart disease, myocardial infarction, systemic hypotension, shock)		15	30
Cardiovascular System	Abnormal processes	vascular disorders (aneurysms, occlusions, varicosities, atherosclerosis)		23	16
Cardiovascular System	Abnormal processes	systemic diseases affecting the cardiovascular system (amyloidosis, aortic dissection with Marfan syndrome, hemochromatosis, scleroderma)		4	3
Cardiovascular System	Abnormal processes	congenital disorders of the heart & central vessels		9	3
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system		0	0
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	coronary & peripheral vasodilators	1	10
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	antiarrhythmic drugs	0	4
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	antihypertensive drugs (ace inhibitors, diuretics, ARB, CCB, Beta Blockers)	1	13
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	measures used to combat hypotension & shock	0	2
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	drugs affecting cholesterol & lipid metabolism	2	8

Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	drugs affecting blood coagulation, thrombolytic agents	1	10
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	inotropic agents & treatment of heart failure	1	12
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	immunosuppressive & antimicrobial drugs	0	1
Cardiovascular System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the cardiovascular system	drugs to treat peripheral arterial disease	0	0
Cardiovascular System	Principles of therapeutics	other therapeutic modalities (pacemakers, angioplasty, valves, grafts, other surgical procedures)		3	5
Cardiovascular System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (smoking, alcohol, ischemic heart disease, obesity, exercise, diet)		5	15
Cardiovascular System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (altered lifestyle)		4	7
Cardiovascular System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (stress)		4	7
Cardiovascular System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (hypertension)		4	10
Gastrointestinal System	Normal Processes	embryonic development, fetal maturation, & perinatal changes		12	2
Gastrointestinal System	Normal Processes	organ structure & function (alimentary canal, liver & biliary system, salivary gl&s & exocrine pancreas, motility, digestion & absorption)		32	8
Gastrointestinal System	Normal Processes	cell/tissue structure & function		0	0
Gastrointestinal System	Normal Processes	cell/tissue structure & function	endocrine & neural regulatory functions, including GI hormones	11	0

Gastrointestinal System	Normal Processes	cell/tissue structure & function	salivary, gastrointestinal, pancreatic, hepatic secretory products (enzymes, proteins, bile salts) & processes	21	4
Gastrointestinal System	Normal Processes	cell/tissue structure & function	synthetic & metabolic functions of hepatocytes	5	0
Gastrointestinal System	Normal Processes	repair, regeneration, & changes associated with stage of life		2	5
Gastrointestinal System	Normal Processes	gastrointestinal defense mechanisms & normal flora		5	2
Gastrointestinal System	Abnormal processes	infectious, inflammatory, & immunologic disorders		0	0
Gastrointestinal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	infectious disorders (peritonitis, hepatitis, gingivostomatitis, peptic ulcer, gastritis, esophagitis, traveler's diarrhea, food poisoning)	12	41
Gastrointestinal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	inflammatory disorders (cholecystitis, pancreatitis)	9	18
Gastrointestinal System	Abnormal processes	infectious, inflammatory, & immunologic disorders	immunologic disorders (Crohns disease, ulcerative colitis)	4	16
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders		0	0
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders		0	0
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	malocclusion	0	1
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	gastroesophageal reflux disease, hiatal hernia	11	8
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	obstruction (volvulus, intussusception, esophageal atresia, annular pancreas, post-surgical obstruction)	12	13
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	perforation of hollow viscus & blunt trauma	4	9
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	inguinal, femoral, & abdominal wall hernias	5	2
Gastrointestinal System	Abnormal processes	traumatic & mechanical disorders	esophageal & colonic diverticula (Meckel's diverticulum)	5	9
Gastrointestinal System	Abnormal processes	neoplastic disorders (carcinoid syndrome, villous adenoma)		1	18
Gastrointestinal System	Abnormal processes	metabolic & regulatory disorders (motility disorders, malabsorption, hepatic failure, cholelithiasis)		7	17
Gastrointestinal System	Abnormal processes	vascular disorders (portal hypertension, hemorrhoids, ischemia, angiodysplasia)		9	14
Gastrointestinal System	Abnormal processes	systemic disorders affecting the gastrointestinal system (scleroderma)		2	1

Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system		0	0
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	treatment & prophylaxis of peptic ulcer disease & gastroesophageal reflux (antacids, antisecretory drugs, motility drugs, mucosal protective agents, antibiotics)	4	7
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	drugs to alter gastrointestinal motility (cathartics, antidiarrheal drugs, antiemetic drugs, prokinetic drugs)	0	4
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	fluid replacement (oral rehydration)	1	3
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	pancreatic replacement therapy & treatment of pancreatitis	1	1
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	drugs for treatment of hepatic failure (lactulose) & biliary disease (drugs to dissolve gallstones)	0	1
Gastrointestinal System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the gastrointestinal system	anti-inflammatory, immunosuppressive, antineoplastic, & antimicrobial drugs	0	9
Gastrointestinal System	Principles of therapeutics	other therapeutic modalities (surgical procedures, stents, feeding tubes)		1	1
Gastrointestinal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (peptic ulcer, encopresis, Monday morning stomach)		4	0
Gastrointestinal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (inflammatory bowel disease, irritable bowel disease, pancreatitis & alcohol, chronic laxative abuse)		4	2

Gastrointestinal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors		2	2
Gastrointestinal System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (diets)		1	3
Renal/Urinary System	Normal processes	embryonic development, fetal maturation, & perinatal changes		7	1
Renal/Urinary System	Normal processes	organ structure & function		0	0
Renal/Urinary System	Normal processes	organ structure & function	kidneys, ureters, bladder, urethra	18	1
Renal/Urinary System	Normal processes	organ structure & function	glomerular filtration & hemodynamics	5	3
Renal/Urinary System	Normal processes	organ structure & function	tubular reabsorption & secretion, including transport processes & proteins	5	4
Renal/Urinary System	Normal processes	organ structure & function	urinary concentration & dilution	4	0
Renal/Urinary System	Normal processes	organ structure & function	renal mechanisms in acid-base balance	6	2
Renal/Urinary System	Normal processes	organ structure & function	renal mechanisms in body fluid homeostasis	4	1
Renal/Urinary System	Normal processes	organ structure & function	micturition	3	0
Renal/Urinary System	Normal processes	cell/tissue structure & function (renal metabolism & oxygen consumption, hormones produced by or acting on the kidney)		12	2
Renal/Urinary System	Normal processes	repair, regeneration, & changes associated with stage of life		4	1
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders		0	0
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	infectious disorders	1	7
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	upper urinary tract (pyelonephritis, papillary necrosis)	1	5
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	lower urinary tract (cystitis, urethritis)	0	6
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	inflammatory & immunologic disorders	0	1
Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	glomerular disorders (glomerulonephritis, membranous nephropathy, minimal change disease, focal sclerosis, nephrotic syndrome)	3	5

Renal/Urinary System	Abnormal processes	infectious, inflammatory, & immunologic disorders	tubular interstitial disease (interstitial nephritis, transplant rejection, IgA nephropathy(Berger disease))	1	5
Renal/Urinary System	Abnormal processes	traumatic & mechanical disorders (obstructive uropathy, foley catheters)		6	6
Renal/Urinary System	Abnormal processes	neoplastic disorders (renal, urinary bladder & collecting system, metastases)		6	6
Renal/Urinary System	Abnormal processes	metabolic & regulatory disorders		0	0
Renal/Urinary System	Abnormal processes	metabolic & regulatory disorders	renal failure, acute & chronic (acute tubular necrosis)	1	8
Renal/Urinary System	Abnormal processes	metabolic & regulatory disorders	tubular & collecting duct disorders (Fanconi's syndrome, renal tubular acidosis, nephrogenic diabetes insipidus)	1	6
Renal/Urinary System	Abnormal processes	metabolic & regulatory disorders	renal calculi	5	7
Renal/Urinary System	Abnormal processes	vascular disorders (renal artery stenosis)		7	7
Renal/Urinary System	Abnormal processes	systemic diseases affecting the renal system (diabetes mellitus, hepatitis, amyloidosis, systemic lupus erythematosus, Wegener's granulomatosis, Alport syndrome, polycystic kidney disease)		3	15
Renal/Urinary System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the renal & urinary system		0	0
Renal/Urinary System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the renal & urinary system	diuretics, antidiuretic drugs	3	2
Renal/Urinary System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the renal & urinary system	drugs & fluids used to treat volume, electrolyte, & acid-base disorders	1	8
Renal/Urinary System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the renal & urinary system	drugs used to enhance renal perfusion (dopamine)	0	0
Renal/Urinary System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the renal & urinary system	anti-inflammatory, antimicrobial, immunosuppressive, & antineoplastic drugs	0	10
Renal/Urinary System	Principles of therapeutics	Therapies (Dialysis, renal transplantation)		1	6

Renal/Urinary System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (drug-induced interstitial nephritis, diet)		0	4
Renal/Urinary System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (hemodialysis, living related kidney donation, transplants)		0	1
Renal/Urinary System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (heavy metals)		0	4
Renal/Urinary System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors (disease progression, urinary tract infections)		1	6
Reproductive System	Normal processes	embryonic development, fetal maturation, & perinatal changes		21	0
Reproductive System	Normal processes	organ structure & function		0	0
Reproductive System	Normal processes	organ structure & function	female structure (including breast)	21	2
Reproductive System	Normal processes	organ structure & function	female function (menstrual cycle, puberty, menopause)	16	5
Reproductive System	Normal processes	organ structure & function	male structure	20	1
Reproductive System	Normal processes	organ structure & function	male function (spermatogenesis, puberty)	11	1
Reproductive System	Normal processes	organ structure & function	intercourse, orgasm (male & female)	4	0
Reproductive System	Normal processes	organ structure & function	pregnancy (including labor & delivery, the puerperium, lactation, gestational uterus, placenta)	15	1
Reproductive System	Normal processes	cell/tissue structure & function (including hypothalamic-pituitary-gonadal axis, sex steroids, & gestational hormones)		31	5
Reproductive System	Normal processes	reproductive system defense mechanisms & normal flora		0	1
Reproductive System	Abnormal processes	infectious, inflammatory, & immunologic disorders (toxic shock syndrome, breast abscess, orchitis, sexually transmitted diseases, autoimmune hypogonadism, cystic mastitis)		2	19

Reproductive System	Abnormal processes	traumatic & mechanical disorders (female incontinence, torsion of testis, varicocele)		9	4
Reproductive System	Abnormal processes	neoplastic disorders (female reproductive, male reproductive, breast [male & female, including fibrocystic disease], trophoblastic disease)		10	13
Reproductive System	Abnormal processes	metabolic & regulatory processes		0	0
Reproductive System	Abnormal processes	metabolic & regulatory processes	female (anovulation, infertility, polycystic ovaries, endometriosis, orgasmic dysfunction, delayed & premature puberty)	8	4
Reproductive System	Abnormal processes	metabolic & regulatory processes	menopausal syndrome	1	1
Reproductive System	Abnormal processes	metabolic & regulatory processes	male (infertility, impotence, gynecomastia, delayed & premature puberty)	2	2
Reproductive System	Abnormal processes	metabolic & regulatory processes	benign prostatic hyperplasia	1	2
Reproductive System	Abnormal processes	systemic disorders affecting reproductive function (obesity, myotonic dystrophy, cirrhosis, renal failure)		0	0
Reproductive System	Abnormal processes	disorders relating to pregnancy, the puerperium, & the postpartum period		0	0
Reproductive System	Abnormal processes	disorders relating to pregnancy, the puerperium, & the postpartum period	obstetric problems (ectopic pregnancy, third trimester bleeding)	0	1
Reproductive System	Abnormal processes	disorders relating to pregnancy, the puerperium, & the postpartum period	complications affecting other organ systems (eclampsia, gestational diabetes, thyroid disorders)	0	4
Reproductive System	Abnormal processes	disorders relating to pregnancy, the puerperium, & the postpartum period	disorders associated with the puerperium (postpartum hemorrhage, sepsis, depression)	0	1
Reproductive System	Abnormal processes	disorders relating to pregnancy, the puerperium, & the postpartum period	antepartum, intrapartum, postpartum disorders of the fetus (prematurity, postmaturity, cord compression, macrosomia)	0	0
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function		0	0



Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	female reproductive tract	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	fertility drugs	0	2
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	oral contraception, other methods of contraception (condoms)	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	estrogen, replacement	0	2
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	stimulants & inhibitors of labor	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	estrogen & progesterone antagonists, treatment of menopause	0	3
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	stimulators & inhibitors of lactation	0	0
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	male reproductive tract	0	0
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	fertility drugs	0	1

Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	androgen replacement & antagonists	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	gonadotropin-releasing hormone & gonadotropin replacement	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	abortifacients	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	antimicrobials	0	5
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	antineoplastics	0	1
Reproductive System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the reproductive system & management of normal reproductive function	restoration of potency	0	0
Reproductive System	Principles of therapeutics	other therapeutic modalities affecting the reproductive system (tampons, anabolic steroids)		0	3
Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (sexually transmitted diseases)		0	1
Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society (infertility)		0	0

Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (radiation)		0	1
Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	family planning & pregnancy (unwanted)		0	0
Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender identity, sexual orientation, sexuality, libido		0	1
Reproductive System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	effects of traumatic stress syndrome, violence, rape, child abuse		0	0
Endocrine System	Normal processes	embryonic development, fetal maturation, & perinatal changes		7	0
Endocrine System	Normal processes	organ structure & function		0	0
Endocrine System	Normal processes	organ structure & function	hypothalamus, posterior & anterior pituitary gland	17	4
Endocrine System	Normal processes	organ structure & function	thyroid gland	12	4
Endocrine System	Normal processes	organ structure & function	parathyroid glands	9	1
Endocrine System	Normal processes	organ structure & function	adrenal cortex, adrenal medulla	13	2
Endocrine System	Normal processes	organ structure & function	pancreatic islets	11	2
Endocrine System	Normal processes	organ structure & function	ovary & testis	28	1
Endocrine System	Normal processes	organ structure & function	adipose tissue	1	0
Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)		0	0
Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)	peptide hormones	37	2
Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)	steroid hormones, including vitamin D	36	3
Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)	thyroid hormones	12	3

Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)	catecholamine hormones	8	1
Endocrine System	Normal processes	cell/tissue structure & function (hormone synthesis, secretion, action, & metabolism)	renin-angiotensin system	0	0
Endocrine System	Normal processes	repair, regeneration, & changes associated with stage of life		7	1
Endocrine System	Abnormal processes	infectious, inflammatory, & immunologic disorders (subacute thyroiditis, Graves' disease, sarcoidosis)		4	5
Endocrine System	Abnormal processes	traumatic & mechanical disorders		2	1
Endocrine System	Abnormal processes	neoplastic disorders (pituitary, thyroid, parathyroid, adrenal cortex, pancreatic islets, neural crest, pheochromocytoma)		8	6
Endocrine System	Abnormal processes	metabolic & regulatory processes (diabetes mellitus, diabetes insipidus, pituitary, hypothalamus, thyroid, parathyroid, pancreatic islet disorders, adrenal disorders)		24	15
Endocrine System	Abnormal processes	vascular disorders (pituitary apoplexy)		1	1
Endocrine System	Abnormal processes	systemic disorders affecting the endocrine system (hemochromatosis)		0	0
Endocrine System	Abnormal processes	idiopathic disorders (hirsutism)		1	1
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system		0	0
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	hormones & hormone analogs	1	13
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	stimulators of hormone production (sulfonylureas)	0	8
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	inhibitors of hormone production (thiouracils)	0	4
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	hormone antagonists	0	3
Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	potentiators of hormone action (thiazolidinediones, demeclocycline)	0	1

Endocrine System	Principles of therapeutics	mechanisms of action, use, & adverse effects of drugs for treatment of disorders of the endocrine system	antiobesity agents (dexfenfluramine)	0	0
Endocrine System	Principles of therapeutics	other therapeutic modalities (surgery, radiation)		0	2
Endocrine System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	emotional & behavioral factors (compliance in diabetes mellitus, factitious use of insulin, psychogenic polydipsia)		0	1
Endocrine System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	influence on person, family, & society		0	1
Endocrine System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	occupational & other environmental risk factors (radiation exposure, iodine deficiency)		0	1
Endocrine System	Gender, ethnic, & behavioral considerations affecting disease treatment & prevention (including psychosocial, cultural, occupational, & environmental)	gender & ethnic factors		0	1

# APPENDIX 8: LCME PART I-B STUDENT FINANCIAL AID QUESTIONNAIRE



## 2013-2014 LCME Part I-B Student Financial Aid Questionnaire

Marshall-Edwards

[Return to Survey](#)

Welcome to the 2013-2014 Liaison Committee on Medical Education (LCME) Part I-B Student Financial Aid Questionnaire.

The data requested by this annual survey are classified as unrestricted and may be published with institutional identification. These data are used by the LCME as part of the medical school accreditation process, and are also entered into the AACMC's Medical School Profile System (MSPS) to provide schools with benchmarking reports. Additionally, the data from this survey are used in AACMC annual and ad hoc reports. By continuing, you acknowledge that you have read the above disclosure statement and agree to participate in the survey.

Please return your completed questionnaire by Friday, September 12, 2014.

If you have any questions involving technical aspects of the survey, contact Katriona Schulze at [kschulze@aacmc.org](mailto:kschulze@aacmc.org). If you have questions that relate to how to report your institution's data, contact Kristen Earle at [kearle@aacmc.org](mailto:kearle@aacmc.org).

### SECTION 1 - Financial Assistance Obtained by Students for Academic Year 2013-2014

Instructions:

**Column A)** Student counts, except for three-year track students, are extracted from your school's 2013-2014 LCME Part II Annual Medical School Questionnaire and pre-populated in the cells below. Because the student counts from the Part II questionnaire are collected in the middle of the academic year, there is a chance that these data may need to be adjusted to reflect the most recent student data available. Please provide the three-year track student counts and make any modifications to the pre-populated student counts as necessary.

**Column B)** Indicate the number of students who received financial assistance in the 2013-2014 academic year.

**Column C)** Indicate the total dollar amount of aid that students who are reported in column B received during the 2013-2014 academic year. Please note that, if the total dollar amount of aid reported below does not agree with the sum of the awards reported in Grants/Scholarships (Section 2), Loans (Section 3), and Work-Study (Section 4), an explanation for the discrepancy must be given in Section 5 of the questionnaire.

	A) Number of Students	B) Number of Students Receiving Aid	C) Total Dollar Amount of Aid
First-year students (All first-year students enrolled in the M.D. program, including those repeating the first year.)	81	72	3205327
Second-year students (All second-year students enrolled in the M.D. program, including those repeating the second year.)	64	60	2888122
Third-year students (All third-year students enrolled in the M.D. program, including those repeating the third year and/or enrolled in a three-year track program.)	72	64	3309221
Three-year track graduates (Three-year track graduates refer to those students completing a three-year track M.D. program at your institution.)	0	0	0
Fourth-year students (All students enrolled in the fourth-year M.D. program or beyond who did not graduate during the 2013-2014 academic year.)	3	3	119711
2014 Graduates (All enrolled students who graduated during the 2013-2014 academic year, including those in a three-year track M.D. program.)	67	61	2663955
Total	287	260	12186336

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aacmc.org](mailto:kschulze@aacmc.org).

### SECTION 2 - Grants/Scholarships

Instructions:

Please report the number of students who received grants/scholarships, the number of grants/scholarships awarded, and the dollar amount of grants/scholarships awarded to all students in the 2013-2014 academic year in each category below.

#### I. Grants/scholarships without a service commitment

	Total Number of Medical Students Receiving Grants/Scholarships <sup>1</sup>	Total Number of Grants/Scholarships <sup>2</sup>	Total Dollar Amount of Grants/Scholarships <sup>3</sup>
A. Scholarships for Disadvantaged Students (SDS)	0	0	0
B. Other grants and scholarships (school-funded) <sup>4</sup>			
1) Need-based	52	52	742245
2) Non-need-based			
M.D.-Ph.D. support	2	2	65610
Tuition remission for employees and/or staff	0	0	0
Other	175	175	1111433
C. Other grants and scholarships, including stipends (outside-funded) <sup>5</sup>			
1) Need-based	0	0	0
2) Non-need-based			
MSTP funding	0	0	0
Other	43	43	251917
Total dollar amount of grants/scholarships in Section 2. I			2171205
Total number of distinct students receiving grants/scholarships <sup>6</sup>	272		

#### II. Grants/scholarships with a service commitment

In reporting grants/scholarships with a service commitment, please include the dollar amount of tuition and other reimbursable expenses (e.g., books, health insurance, and supplies). It is recognized that exact amounts for reimbursable expenses may not be known; in such cases, provide estimates. Do not include funding other than tuition and other reimbursable expenses.

	Total Number of Medical Students Receiving Grants/Scholarships	Total Number of Grants/Scholarships	Total Dollar Amount of Grants/Scholarships
National Health Service Corps	1	1	34223
Armed Forces Health Professions	11	11	350300
State-funded	35	35	350000
Other	0	0	0
Total dollar amount of grants/scholarships in Section 2. II			734523
Total dollar amount of grants/scholarships in Sections 2. I and II			2905728

<sup>1</sup> Please include the number of medical students who received each grant/scholarship in the 2013-2014 academic year. Only count each student once per category, even if the student has received multiple grants/scholarships.

<sup>2</sup> Please include the number of grants/scholarships awarded per category in the 2013-2014 academic year. One student could have received multiple scholarships per category.

<sup>3</sup> Please include the total dollar amount of each grant/scholarship category in the 2013-2014 academic year.

<sup>4</sup> Please include the grants and scholarships (need-based, M.D.-Ph.D. support, tuition remission, and other) funded with institutional resources for the M.D. portion of the program.

<sup>5</sup> Please include the grants and scholarships (need-based, MSTP funding, and other) funded by individuals, agencies, foundations, or other external sources.

<sup>6</sup> Please count each student only one time, even if that student received multiple grants/scholarships.

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aacmc.org](mailto:kschulze@aacmc.org).

### SECTION 3 - Loans

Instructions:

Please report the number of loans and the dollar amount of loans awarded to all students in the 2013-2014 academic year in each category below.

	Total Number of Medical Students Receiving Loans <sup>1</sup>	Total Number of Loans <sup>2</sup>	Total Dollar Amount of Loans <sup>3</sup>
Federal Direct Subsidized Student Loan	0	0	0
Federal Direct Unsubsidized Student Loan	215	215	7311699
Grad PLUS Loan (direct)	100	100	1600909
Federal Perkins Loan	45	45	358000
Primary Care Loan (PCL) <sup>4</sup>	0	0	0
State-funded loans	0	0	0
Private/alternative loan programs <sup>5</sup>	1	1	10000
Loan for Disadvantaged Students (LDS)	0	0	0
Total other loans (outside-funded) <sup>6</sup>	0	0	0
Total other loans (school-funded) <sup>7</sup>	0	0	0
Total dollar amount of loans in Section 3			9280608

<sup>1</sup> Please include the number of medical students who received each loan in the 2013-2014 academic year. Only count each student once per category, even if the student has received multiple loans.

<sup>2</sup> Please include the number of loans awarded to all students in each category in the 2013-2014 academic year. One student could have received multiple loans in each category.

<sup>3</sup> Please include the total dollar amount of each loan awarded to all student in the 2013-2014 academic year.

<sup>4</sup> Super PCL loan data should not be included with PCL data; include the Super PCL loan data in Question 1 in the Supplemental Data Section of this questionnaire.

<sup>5</sup> Please include only those private and alternative loans that the financial aid office has certified.

<sup>6</sup> Please include external loans that individuals, agencies, foundations, or other external sources funded.

<sup>7</sup> Please include loans that institutional resources funded.

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aamc.org](mailto:kschulze@aamc.org).

#### SECTION 4 - Work-Study

##### Instructions:

Please report all college work-study payments in the "federally funded" category (include both federal and school contributions) awarded to all students in the 2013-2014 academic year. Enter "NA" if the program is not offered.

	Total Number of Students Receiving Payments	Total Dollar Amount of Work-Study Payments
Federally funded	NA	NA
Non-federally (e.g., school-only) funded	NA	NA
Total dollar amount of work-study payments		NA

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aamc.org](mailto:kschulze@aamc.org).

#### SECTION 5 - Grand Total Dollar Amount of Grants, Scholarships, Loans and Work-Study

##### Instructions:

Sections 1 through 4 must be completed before Section 5 can be completed. The Grand Total of Sections 2, 3, and 4 is a sum of the grand total dollar amounts as reported in Grants/Scholarships (Section 2), Loans (Section 3), and Work-Study (Section 4). The Total from Section 1, Column C, is the total dollar amount of aid as reported in Financial Assistance (Section 1). If the Grand Total of Sections 2, 3, and 4 does not equal the Total provided in Section 1, column C, an explanation for the discrepancy must be provided in the text box below.

	Total Dollar Amount of Awards
Grand total of Sections 2, 3, and 4	12186336
Total from Section 1, Column C	12186336
Difference	0

The grand total of Sections 2, 3, and 4 MUST agree with total dollar amount of assistance reported in the total from Section 1, Column C. If these totals do not agree, an explanation for the discrepancy must be provided in the text box below:

\_\_\_\_\_

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aamc.org](mailto:kschulze@aamc.org).

#### SECTION 6 - Educational Indebtedness

I. To the best of your knowledge, please report the total pre-medical educational indebtedness of all members of the 2013-2014 first-year class prior to their medical school matriculation. National Student Loan Data Systems (NSLDS) data are acceptable. If you are unable to report the number of students with pre-medical education debt or the amount of pre-medical education debt, please enter "NI" in the appropriate box and provide an explanation in the text box below.

Number of indebted students	37
Total amount of indebtedness	1207798

If you entered "NI" in the boxes above, please provide an explanation below:

\_\_\_\_\_

II. Please report the total cumulative medical school debt for each class of indebted students as of the 2013-2014 academic year end. The values for both "Percent of Graduates with Medical School Debt" and the "Average Graduate Debt" will be automatically calculated; you do not need to fill these in. If you are unable to report either the number or total debt amount for any class, please enter "NI" in the appropriate box and provide an explanation in the text box below. Note: For these totals, please report only actual medical school debt that must be repaid: That is, exclude funds and students that receive only funds exclusively for a future service commitment (i.e., HPSP, NHSC scholarships). Also, exclude debt resulting from the portion of enrollment attributed to a joint, dual, or combined degree program (i.e., M.D.-Ph.D., M.D.-M.B.A., M.D.-M.P.H.).

	Number of Students with Medical School Debt	Total Medical School Debt Amount for All Students
First year	62	2803068
Second year	51	5159050
Third year <sup>1</sup>	66	8282871
Three-year track graduates <sup>2</sup>	0	0
Fourth year <sup>3</sup>	2	280826
2014 Graduates <sup>4</sup>	55	8358902
Total	236	24884717

	Percent of Graduates with Medical School Debt	Average Graduate Debt
	82	151980

If you entered "NI" in the boxes above, please provide an explanation below:

\_\_\_\_\_

III. Please report the number of graduating students with total education debt in each of the ranges below. Total education debt includes pre-medical education debt and education debt incurred while in medical school. The total number of graduates will be automatically calculated and must equal the number reported in Section 1 of the survey.

	Number of Graduates with Education Debt
No education debt	12
\$ 1 - \$ 19,999	6
\$ 20,000 - \$ 29,999	2
\$ 30,000 - \$ 39,999	0
\$ 40,000 - \$ 49,999	1
\$ 50,000 - \$ 59,999	2
\$ 60,000 - \$ 69,999	3
\$ 70,000 - \$ 79,999	2
\$ 80,000 - \$ 89,999	2
\$ 90,000 - \$ 99,999	1
\$100,000 - \$109,999	2
\$110,000 - \$119,999	1
\$120,000 - \$129,999	1
\$130,000 - \$139,999	1
\$140,000 - \$149,999	1
\$150,000 - \$159,999	2
\$160,000 - \$169,999	1
\$170,000 - \$179,999	4
\$180,000 - \$189,999	4
\$190,000 - \$199,999	2
\$200,000 - \$209,999	0
\$210,000 - \$219,999	1
\$220,000 - \$229,999	0
\$230,000 - \$239,999	1
\$240,000 - \$249,999	1
\$250,000 or greater	14
Total Graduates with Education Debt	55
Total Graduates	67

- <sup>1</sup> Third-year students include all students in the third year, including those repeating the third year and/or in a three-year track M.D. program.
- <sup>2</sup> Three-year track graduates refer to students completing the M.D. program in a three-year track M.D. program.
- <sup>3</sup> The fourth-year row is to be used for students in the fourth year and beyond of the M.D. program and who were NOT member of the 2014 graduating class.
- <sup>4</sup> All enrolled students who graduated during the 2013-2014 academic year, including those in a three-year track M.D. program.

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aamc.org](mailto:kschulze@aamc.org).

**Supplemental Data Section**

**Instructions:**

The Supplemental Section of the LCME Part I-B Student Financial Aid Questionnaire is optional. The following data are not required by the LCME, but are requested for use in research and development efforts associated with current issues and trends in medical school financial aid and education debt.

Although the majority of the data in this supplemental section of the survey are unrestricted and may be published with institutional identification, data from a few items are considered restricted and may not be published with institutional identification, but may be released at the discretion of the AAMC president or his designee to qualified individuals and organizations who agree to protect it. These items will be labeled with (R) to indicate their restricted classification.

I. Report the number of students and the total dollar amount awarded of "Super PCL" to third and fourth-year students for the purpose of paying off the balances of higher cost education loans.

	Number	Super PCL Amount
Third-year students	NI	Total dollar amount of Super PCL NI
Fourth-year students	NI	Total dollar amount of Super PCL NI

II. Has your school already IMPLEMENTED any initiatives or programs designed to help reduce medical students' education debt?

	Implemented	Considering	Not Considering	Please Provide an Explanation
Guaranteed tuition and fees for the length of the M.D. curriculum	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Although not guaranteed
Non-traditional tuition structure	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Capital campaign to increase scholarship funds	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Been implemented for
Partnership with outside organization(s) to reduce student debt	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Always striving to incor
Changes in grant or scholarship requirements	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Conducted cost of livin

III. (R) a. Do you have the ability to identify the federal cohort default rate for your medical school?

- Yes
- No

(R) b. If yes, what is the most recent federal cohort default rate for your medical school?

\_\_\_\_\_

IV. For the following three categories, please provide an unduplicated count of medical students that received a school-funded grant/scholarship (without a service commitment) in the 2013-2014 academic year. For reference, see Section 2 - Grants/Scholarships, Question I. B. Other grants and scholarships (school-funded).

Medical students receiving a need-based grant/scholarship only	NI
Medical students receiving a non-need-based grant/scholarship (M.D.-Ph.D. support, tuition remission, or other) only	NI
Medical students receiving both a need-based and a non-need-based grant/scholarship	NI

V. a. Did you automatically include a standard amount for residency interview expenses in your Cost of Attendance (COA)?<sup>1</sup>

- Yes
- No

b. If yes, what was the standard amount included in the COA?

Amount



c. If you did not automatically include an allowance for interview expenses in your COA, did you evaluate these expenses on a case-by-case basis?

Yes  No

d. If yes, how many students received an adjustment for interview expenses?

Number of students

Total amount of approved requests

<sup>1</sup> Answer yes if you included a predetermined "standard" amount in the COA for ALL fourth-year students.

If you have any difficulty with the survey, please contact Katriona Schulze at [kschulze@aamc.org](mailto:kschulze@aamc.org).

### Survey Contact Information

Please enter the contact information of the individual who completed the survey.

*First Name	Prudence
Middle Name	
*Last Name	Barker
Suffix	
*Title 1	Assistant Director of Student Financia
Title 2	
Title 3	
*Phone (XXX-XXX-XXXX)	304-691-8739
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