

**Scientific Foundations Committee**

May 2, 2014  
7:30 – 9:00 am  
Mayo B-646

**Minutes**

<b>2013-2014 Scientific Foundations Committee Members</b>		
<b>MEMBER</b>	<b>COURSE/ROLE</b>	<b>ATTENDANCE</b>
Steve Katz	Chair (INMD 6814 Physiology)	X
Sharon Allen	INMD 6803/6804/6805 ECM 1, ECM 2, ECM 3A	X
Richard Amado	INMD 6815 Human Behavior	
H. Brent Clark	INMD 6819 HHD – N & P (14-15)	
Eli Coleman	INMD 6816 Human Sexuality	
Greg Filice	MS 2 ID Thread	X
Glenn Giesler	INMD 6813 Neuroscience	
Bob Kempainen	INMD 6808 Human Disease 1	X
Anne Minenko	INMD 6809 Human Disease 2	
Kaz Nelson	INMD 6819 HHD – N & P (14-15)	
Catherine Niewoehner	INMD 6810 Human Disease 3	X
James Nixon	INMD 6803/6805/6806/6807 ECM 1, ECM 3A/B/C	X
Jan Norrander	INMD 6801 Human Structure and Function	X
Deborah Powell	INMD 6817 Principles of Pathology, MS2 Pathology Thread	X
Michel Sanders	INMD 6802 Science of Medical Practice	X
David Satin	INMD 6803/6804/6805/6806/6807 ECM 1, ECM 2, ECM 3	
Lisa Schimmenti	INMD 6802 Science of Medical Practice	X
Peter Southern	INMD 6812 Microbiology	X
Heather Thompson Buom	INMD 6811 Human Disease 4	X
Doug Wangenstein	INMD 6814 Physiology	X
Tony Weinhaus	INMD 6801 Human Structure and Function	X
Kevin Wickman	INMD 6818 Principles of Pharmacology	
Mary Ramey	MS2 Lab Med/Path Coordinator	X
Mikhail Klimstra	MS2 Student Representative	X
Kelly Setterholm	MS1 Student Representative	
<i>Mark Rosenberg</i>	<i>Vice Dean for Medical Education</i>	
<i>Kathy Watson</i>	<i>Senior Associate Dean for UME</i>	X
<i>Jeffrey Chipman</i>	<i>Assistant Dean for Scientific Foundations</i>	
<i>Majka Woods</i>	<i>Assistant Dean for ACE</i>	X
<i>Anne Pereira</i>	<i>Assistant Dean for Clinical Education</i>	
<i>Marshall Hertz</i>	<i>Faculty Advisor</i>	
<i>Brad Clarke</i>	<i>ACE Curriculum Specialist</i>	X
<i>Leslie Anderson</i>	<i>Chief of Staff, Medical Education</i>	X
<i>Scott Slattery</i>	<i>Director of Learning Development</i>	X
<i>Jill Eck</i>	<i>Director of Student Affairs</i>	
<i>Anne Edverson</i>	<i>Medical School Registrar</i>	
<i>Brian Woods</i>	<i>Lead Course Manager</i>	

Guests: Dane Thompson, Mark Hilliard, Sue Mowbray

The meeting was called to order at 7:30am by Steve Katz.

## **Minutes**

Draft minutes from the March 7 & April 4 meetings were reviewed. It was moved and seconded to approve the March minutes without amendment, and the April minutes as amended. The motion passed unanimously.

## **Announcements**

### Best Practices Day

Best Practices in Medical Education Day will take place on Thursday, May 8, at the Campus Club. The keynote address will be given by Dr Greg Ogrinc, from Dartmouth Medical School. He is a national champion on quality improvement and teaching. This will be a fantastic faculty development day. All should come. Please rsvp by end of day 5/2.

### Graduation

Graduation is on May 9, 2014, and will be in the new Northrup Auditorium. Sightlines & acoustics are excellent! Consult the handout for details.

## **Annual Course Reports**

### HD3 – Catherine Niewoehner

Refer to ACR handout for details.

The course covers endocrine & renal pathophysiology, pharmacology & pathology. ID concentrates on sexually transmitted diseases and societal problems. Lab medicine is also started and carries over to HD4. In small group evaluations, participation and professionalism points help to get people there on time. Student ratings on course evaluation are consistent. It's clear that the small groups are the heart of the course. No one failed the course, though one student barely squeaked by, and at some point, an alternate exam will have to be created for course failures. It will take a one year to prepare.

### *Working well:*

There is a great group of people to work with. Communication is open and helpful. Student LEADS were very communicative and helpful. Aliyu should be canonized for his wonderful support and organization as Course Manager. This is a VERY labor intensive course, with a large number of tutors. The community tutors teach in pairs, so that they can trade off as necessary due to scheduling. The UMN tutors teach singly. The pediatric tutors are not rated, as it's only one extended session. Lecturers in general were rated highly. The new lecturer was considered too research focused, and received a low rating. This will improve with coaching & time.

For the Whole Class Exercises, guests are present for two sessions talk about personal experiences; one participated by phone this year. Path labs- any complaints come more from the labs going late (ending at 5:30), but not about the content. Lab tutors were well rated.

### *Areas of Concern:*

Flipped session: students don't like it, though educators do like it. This was a new & complex topic, not presented at a good time within the semester. Students didn't get PPT slides before class, in order to be interactive. The intro lecture was cancelled due to the cold weather day. Students did respond to the midterm failure letter that was sent out. This exam was also rescheduled because of the University closure. Students were really upset by this exam being rescheduled to Thursday of the same week.

### *Areas for Improvement:*

Reposition the flip session in the schedule. The midterm will be written, rather on Blackbag.

### *Questions/Comments?*

#### RE: FLIPPED SESSION

Dr Sanders suggested that there needs to be more than 1 session, with perhaps a redesign of the session and more introduction before the session happens. Dr Wangenstein offered an example from an undergraduate colleague. This would make the session less desirable for students, but the colleague subdivides this type of session into two: the 1<sup>st</sup> is a background lecture, then students read papers, and the 2<sup>nd</sup> is the discussion session, but between these there is a 5-question quiz to test knowledge from the reading. Dr Nixon tried a similar model for ECM, but the students did not like it. It's wonderful because then in the class session you are able to focus on higher-level discussion. There is an inherent problem with our classroom setups.

Mark Hilliard related that Eric Mazur at Harvard makes several points when he does this process: 1.) Make it clear that what is going to be discussed in class will be evaluated, 2.) He doesn't pack too much in the session. Discussion takes time away from lecture. Dr Powell shared that Dr Crosson is very enthusiastic and passionate about this material, but the pre-readings must be done and emphasized. The theory is that students learn from each other through discussion. Material from those sessions was reinforced in the lab. The concepts are very important and the pedagogy is worth pursuing, even though it's a huge amount of work.

Dr Nixon emphasized that there is an important balance between enough but not too much reading & that it's helpful to have a study guide to go along with it. It would be helpful if all courses could intersperse these kinds of sessions throughout. Dr Weinhaus suggested that there needs to be consistency in small groups; they should not be lectures, and students should expect that they will participate.

#### ECM3: POCC – James Nixon

Refer to ACR handout for details.

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This course spans both years and includes a longitudinal lecture component (structure & financing of care, law & policy, ethics) & POCC clinical clerkship component. These clerkships meet in the afternoons in rotation throughout the two years.

- Inpatient--6 sessions in inpatient medicine setting (interview patients, take histories, physical exams), 2 sessions in OR (watch for things that occur that would help prevent errors, informed consent). History & Physical findings are presented to their small group & preceptors in order to practice presentation skills and clinical reasoning.
- Outpatient--ambulatory preceptor site. These occur generally in family medicine, but also ENT, and vascular surgery. There is usually a single preceptor. Didactics occur on Wed. morning related to prevention, diagnostic reasoning, safety, counseling (smoking cessation), chronic disease management.
- Acute/LTC--4 sessions in an ER, 4 sessions in LTC setting (nursing home, hospice or homecare). The related didactics are ultrasound, how EMS is activated, ambulance arrival & getting patient to ER; care of elderly, dying, end of life.

Didactics are delivered in a combination of online & in-person formats. The course is rated generally good by students, between 3 & 4, but the evaluations are not separated by inpatient/outpatient/acute-ltc. This will be fixed for the next evaluation.

#### *Working well:*

Students enjoy spending time with patients, getting to know them and making contacts. This is a good prep for the start of 3rd year clerkships.

### *Areas of Concern:*

This is very complex course. It's difficult to find preceptors, particularly for outpatient. Sites are often not identified until a day or two before the session starts. Travel is difficult for those without cars. Logistics are very challenging, time-consuming, disruptive. Sometimes clinics are not aware of student visits. Milestone 2 was new this year--@50 of the 165 failed one portion of that. In talking to students, many students didn't prep properly. Their H&P skills get rusty if a year separates the learning of this in inpatient in year 1 and the Milestone in year 2. Quality Improvement needs to be revisited as students don't feel that it is "real".

### *Questions/Comments?*

Catherine Niewoehner congratulated Dr Nixon for the staggering amount of work in this course. Dr Filice wondered when Milestone 2 is (it occurs in February). Dr Sanders commented that the choices on the course evaluation responses are not in the same order on each group of questions, and that there are not the same number of responses for each group of questions. There was explanation and comments about the inconsistency between separate area of the evaluation, and that these should be addressed to Genne for correction.

### **Student Issues/Concerns/Questions**

#### Peer Review Committee – Zlata Vlodayer

Zlata Vlodayer (outgoing chair) & Kate Reise (incoming chair) attended. They are glad to be at SFC at the invitation of Dr Watson.

This committee is tasked with investigating violations of the Statement of Intellectual Responsibility (cheating policy). Violations of the code go to PRC. They investigate the case, gather statements, take time to thoroughly discuss the matter. After investigation, recommendations may include: dismissal of the case, sending a warning letter to the student with recommendations for future acts, or referral to the administration (COSSS for cheating, Dr Watson or COSSS for professionalism violations). The PRC goal is not to determine whether a violation has occurred, but rather to screen for probable cause.

There are procedural guidelines, including that faculty members should be report suspected violations directly to the PRC. There are 10 members on the committee, who are elected through student council, and represent all 4 years of medical students. They also advocate for students in the event where a referral is not warranted. All cases are confidential, apart from the committee chair knowing the identity of the student or accuser.

The PRC will communicate outcome of cases to faculty & students, will note discrepancies between similar cases. Cases of violation of professionalism are a perfect example of an appropriate referral (behavior, performance in small groups, attendance).

These resource links were shared:

UMN Med Professionalism Code: <http://www.meded.umn.edu/policies/professionalism.php>

UMN Med Statement of Intellectual Responsibility:

[https://www.meded.umn.edu/policies/intellectual\\_responsibility.php](https://www.meded.umn.edu/policies/intellectual_responsibility.php)

PRC Procedural Guidelines:

<https://www.meded.umn.edu/policies/documents/PeerReviewCommitteeProceduralGuidelines20130213.pdf>

### *Questions/Comments?*

Dr Wangenstein asked about the proportion of referrals come from students and faculty. Zlata responded that it's about ½ & ½. Dr Weinhaus asked if there was any role for the student council president. Zlata informed SFC that the president casts a tie-breaking vote if there is a tie on the PRC. Dr Filice commented that due to the number of personnel involved in courses, it's not always possible for everyone to know PRC procedures or

precedent. Dr Sanders thanked the committee for their professionalism and work, and Dr Nixon noted that discussions and outcomes from the committee have been well received. Course Directors may email Dr Watson or Kate Reise at [reise023@umn.edu](mailto:reise023@umn.edu) if you need to get in touch with the committee.

## Discussion

### Setting Honors criteria at 90% of course points

Dr Katz pointed out that this topic has been reviewed and discussed at length in the past. (See March 7 minutes) Honors is here to stay, but the question is “What is the criteria for Honors?” Honors should be based on competencies across the curriculum, and 90% of total course points figure was suggested as a starting point across the curriculum.

Per Dane Thompson: Background= A 1<sup>st</sup> year student didn’t like norm-based system of awarding Honors (top 15%), when the admissions policy states that there is no norm-based grading at the UMN Med School.

This applies only to MS 1 & 2, not the 3<sup>rd</sup> & 4<sup>th</sup> years. But there is variability between courses, and there needs to be buy-in from Duluth as well. Dr Katz presented his table comparing the number of Honors grades using the current system with the number of Honors that would be giving using the 90% of course points system. There would be a big jump in most courses, with some courses awarding honors to practically the entire class, and it shows that the courses are very heterogeneous in the grading systems.

Dr Allen pointed out that ECM shouldn’t have honors. It uses a very different grading system to assess students, based on competencies & skills, and not on points. Students would end up arguing about points & ½ points. Dr Filice’s asked for a refresher on what is the goal of Honors. Is it whether you’ve mastered the material, or is it you’re in the top % of a group of students? Per Dr Katz, in the past SFC agreed to the top 15% of the class, but then each course went off on its own path.

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Dr. Schimmenti believes that using the top 15% of students in the class creates a competitive atmosphere, so that students don’t collaborate. It’s not a healthy environment for students to collaborate in. However, residencies are in short supply, so those programs can use Honors to differentiate students and see who performs well. We need to use a system that identifies top students, without fostering a system of competitiveness. Dr Sanders asked if a higher percentage (93%) would be better.

Dr Nixon stated that the cutoff should be different for each class. Course directors should identify what the cutoff would be for the mastery of material in their course? Dr Filice reminds everyone that in practicing medicine, quality is very important now. It’s not relevant to say in a practice that “Here are our top 90% of doctors”. It goes against trying to bring everyone up to a high level. In clerkships, there are 7 domains for evaluating knowledge, including professionalism and interaction with patients. But it isn’t really helpful to have a norm-based Honors system. Honors should mean a high performance level.

Some courses have other criteria, such as completion of assignments, attendance, etc. But we need to set total course points, and then courses can add other criteria. Mikhail pointed out that Honors needs to mean something. If the whole class gets Honors, it’s meaningless. Perhaps a look back at historical data per course would show what the percentage of students was that received Honors. Majka Woods reminds everyone that this confusion and the differences between courses are what brought this issue to a head. There needs to be consistent criteria across courses.

Mikhail wondered if the confusion comes in the 1<sup>st</sup> year because there are concurrent courses in each semester, rather than consecutive courses, as in the 2<sup>nd</sup> year. Dr Schimmenti thinks that setting a clear bar would motivate students to strive to achieve. It’s ok, according to Dr Nixon, to have 25% of a class get Honors as long as the

criteria are challenging, and clear to students. HSF has tried both systems: performance-based & criteria-based. Dr Weinhaus pointed out that performance-based criteria have to have multiple components. Criteria-based Honors was a disaster for it 1) created competition with students battling for points, and 2) students could calculate midway through the course whether they could achieve Honor or not, and if not, would stop striving. However, the personalities of the class could determine the level of competitiveness, according to Mikhail.

Consistency & transparency are important, according to Dr Thompson Buom, but if too many people get Honors, perhaps the grading criteria need to change. Should it change to a pass/fail course? Dr Powell doesn't like the 15% rule in the 1<sup>st</sup> year, but she awards Honors if they receive >90% of cumulative final points. In Pathology, they expect and test on medical knowledge and add a little professionalism. ECM should be judged differently, as well as clinical rotations. The other courses in MS 1&2 are knowledge-based. Students shouldn't be able to get pass and get Honors if they get 90% of the course points but fail the Path exam in the course. Mastery of the material should come first. Our core mission should be medical knowledge.

Dr Filice put forth a motion *that each Course Director set clear transparent high criteria for mastery of their course material (content & skills) and that students who reach that criteria would receive Honors for that particular course. This could be a percentage of the total points but not a percentage of the class.*

Discussion points: Dr Kempainen wonders how high is high? Dr Powell suggests at all course personnel meet for each course, look at historical data, and decide the high standard that should be met for each part of the course. Dane offered a personal opinion that Honors grading should be for motivation and offered a cycling analogy to illustrate his point. Honors should motivate students to help each other achieve a criteria-based goal. And trust the Course Director's opinion of a high level of mastery of material. He believes that it's ok if the criteria are different from course to course.

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The above motion was seconded by Dr Nixon, and passed unanimously.

Dr Wangenstein suggests that the committee discuss Honors for full year 1 & full year 2 based on the number of points students accumulate in classes, rather than for individual courses. He believes this is more important for determining residency placements. Dr Sanders wants everyone be aware of how any change in Honors would affect the decelerated students.

Dr Katz will recalculate the table at 93%, since the committee does not like the 90% criteria.

#### Procedure on rescheduling missed exams

This discussion was tabled until the June 6 meeting.

The meeting was adjourned at 9:01am.

Respectfully submitted,  
Brian Woods

**Annual Course Review (ACR)**  
**University of Minnesota Medical School**

**Course: Human Disease 3 (HD3) (INMD 6810) Spring 2014**

**Course Director: Catherine Niewoehner MD**

**Instructional Review Timeframe (End of Course):**

January 6-February 21 didactic material, labs and small groups  
February 26 and 27 final exams

**1. Briefly describe the learning outcomes for your course**

Course Objectives:

Students will understand

1. How the endocrine and renal systems often work together to maintain homeostasis during adaptation to changing conditions
2. How the endocrine system regulates feeding, fuel balance, response to stress, bone health, growth, sexual development and reproduction
3. The causes, consequences and approaches to evaluation and treatment (pharmacologic and nonpharmacologic) of endocrine disorders
4. How the kidneys regulate fluid, electrolyte, acid-base, nitrogen and mineral balance
5. The causes, consequences, and approaches to treatment (pharmacologic and nonpharmacologic) of renal and urinary tract disease
6. The pathology resulting from disease of the kidneys, urinary tract, endocrine and reproductive systems and the insight provided by laboratory medicine
7. The causes and consequences, individual and societal, of sexually transmitted diseases and how translational research has influenced diagnosis and treatment
8. Barriers to optimal understanding/treatment of the disorders indicated above

<u>Required Course Elements</u>	<u>Per cent of Grade</u>
Small Group performance	20
Laboratory participation	12
Interactive Whole Class sessions	3
Midterm (written/Black Bag)	10
Midterm Lab Practical	10
Written Final Examination	30
Lab Practical Final examination	18

Honors top 15% (based on total course points)

Small Group evaluation: 1/3 preparation, 1/3 participation, 1/3 professionalism

**2. Describe what evidence you have that the outcomes are being achieved. Include student review information.**

Responses: **[SA]** Strongly Agree=5   **[A]** Agree=4   **[N]** Neutral= 3   **[D]** Disagree=2  
**[SD]** Strongly Disagree=1

Response rate 134/169 students

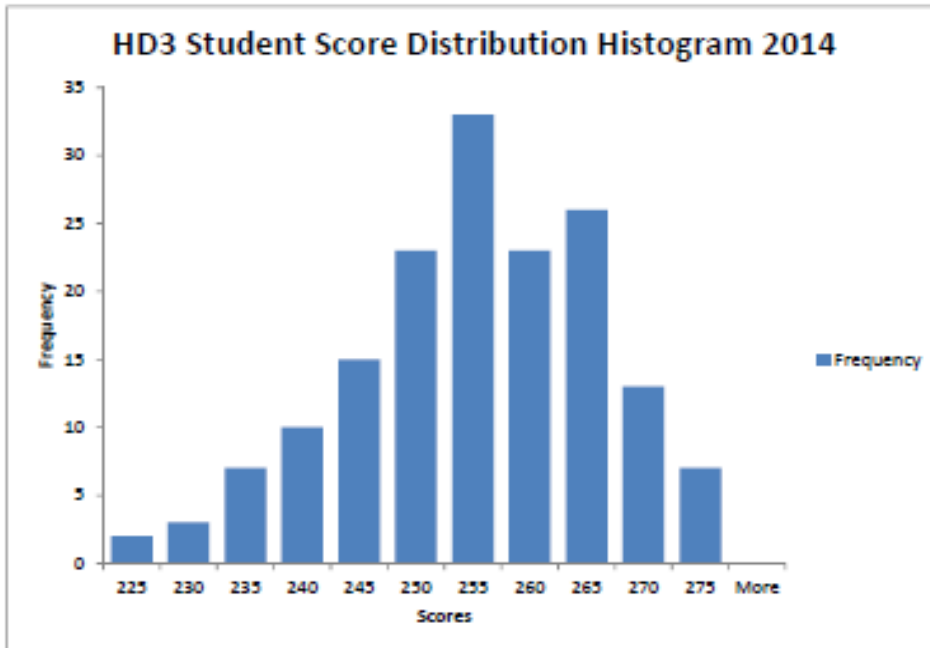
Q1 The course objectives were clear to me	<b>4.4</b>
Q2 The assignments planned for independent learning time facilitated my learning of the course material	<b>4.1</b>
Q3 There were adequate opportunities for non-graded self-assessments (quizzes, discussion questions, practice or review questions)	<b>4.0</b>
Q4 The resources provided for the class were useful in learning the material (recommended readings, course packet, BlackBag site)	<b>4.2</b>
Q5 There was close agreement between the stated course and session objectives and the information taught	<b>4.3</b>
Q6 The graded assessments appropriately tested the course objectives	<b>4.1</b>
Q7 Overall I have acquired an understanding of course objectives	<b>4.3</b>
Q8 The objectives addressed within the course were well-integrated	<b>4.3</b>
Q9 The clinical relevance of the objectives covered within the course was clear	<b>4.4</b>
Q12 The small groups contributed to my learning	<b>4.7</b>
Q13 The Pathology laboratory sessions contributed to my learning	<b>3.7</b>
Q14 The sessions with patients present contributed to my learning	<b>3.9</b>
Q15 The Laboratory Medicine laboratory sessions contributed to my learning	<b>3.5</b>
Q16 The Growth sessions contributed to my learning	<b>4.1</b>

Most students did well on the midterm examinations

Most students did well on the final examinations.

No student failed the final exam or the course





3. Describe what is working well in your course

1. Communication :

HD3 Working Group

Catherine Niewoehner

Connie Manske

Tim Walseth

Steve Katz

Debbie Powell

John Crosson

Andy Wallschlaeger

Tony Killeen

Mary Ramey

Greg Filice

Endocrine/Reproduction Pathophysiology

Renal Pathophysiology

Endocrine/Reproduction Pharmacology

Renal Pharmacology

Reproduction Pathology

Renal Pathology

Pathology Labs

Lab Medicine and Pathology

Lab Medicine Labs

Infectious Disease

Anna Petryk

Pediatric Endocrinology Coordinator

Student LEADS were attentive, communicative, and helpful.

Students thought responses to their concerns were provided promptly

2. Organization: Students thought the course was well-organized

Excellent support from Aliyu Ojarigi in Curriculum Affairs

Almost the entire course was loaded on Black Bag at the beginning of the course.

HD3 is labor-intensive, so organization is essential.

32 Endocrinology small group tutors

25 Renal small group tutors

12 Pediatric endocrinology small group tutors

17 Pathology lab tutors

6 Laboratory Medicine lab tutors

3. Small Groups: the heart of the course. Most lectures are followed by interactive small group case discussions.

- Endo tutors led small groups of 6-7 students. rating mean **4.5 (range 3.0-5.0)**

- Renal tutors led small groups of 8-10 students. rating mean **4.6 (range 3.0-5.0)**

- Pediatric endocrinologists led the small group session on Growth

Active student participation in small groups was excellent

4. Lecturers: Number of student responses = 118-123

- Students agreed or strongly agreed that 23/33 were very clear and understandable  
rating **4.0-4.6/5.0**

- Students were neutral about 9/33 rating **3.5-3.9**

- One lecturer (new this year) rating **3.0**

5. Whole Class Exercises

- Renal Pathology/Pathophysiology Clinical Pathology Conferences (CPCs) are popular.

- Two sessions with patients present (illustrating sexually transmitted disease and pregnancy complications) were well-received

- FCT cases were aligned with and complimented HD3 topic

6. Pathology labs – all renal pathology cases were revised. More emphasis on case discussion, although this still is a work in progress. Students were hired to provide immediate feedback and assist with preparation of case synopses that were available for review.

Pathology lab tutors rating mean **4.4 (range 3.0-5.0)**

Laboratory Medicine lab tutors rating mean **4.5 (range 4.2-4.6)**

7. Attempted more emphasis on disparities of medical care. Could do more.

#### **4. Describe any areas of concern.**

1. “Flipped” session on nephritic/nephrotic syndromes: In this format, the reading assignment must be completed prior to any in-class discussion on the topic. The whole class session that follows is meant to be inter-active and is devoted to cases and case questions for the class to solve rather than presenting an overview. Many students were very unhappy with this session for several reasons: (a) this material marked a complete change in direction – from classic renal pathophysiology to renal pathology; (b) there was no introductory session to signal this change in direction – that session followed later. It did not help that that introductory session had to be cancelled when the U of M closed due to weather. The students had to read this material on their own also; (c) there was no power point presentation to accompany the

“flipped” session to avoid providing answers in advance and stifling discussion; (d) answers/case synopses did not immediately follow the session to consolidate the material. Answers were provided later on BlackBag and the concepts were covered again in labs; (e) the session occurred just before the Midterm exams (material was not covered on the Midterm). These grievances are legitimate. This session was not well-placed in the curriculum

2. Some students did not understand that the Midterm exams were substantive and not formative despite many comments in advance. A number of students did not study because they were involved with other activities. They did not expect the exams to be difficult. E-mail letters were sent to all students who did not do well and to their advisors. They were offered a meeting with me or someone with expertise similar to Marilyn Becker’s. (Overall, Midterm scores were similar to those the year before.)

3. Students want more clarity regarding just what Pharmacology they need to know.

4. Review sessions: Endocrinology/pharmacology review sessions, Renal review sessions and Pathophysiology+Pharmacology + Lab Medicine prototype exam questions were available. Students asked repeatedly for Pathology review questions, although they had been having Pathology exams of similar format since the previous summer term and they always had access to laboratory specimens for review

5. Very high level of anxiety in the class as a whole - seemed much more than in the past. Exacerbated by the postponement of the Midterm exams from Monday to the following Thursday when the University was closed due to extreme cold.

## **5. Describe any changes you intend to make for the next academic year.**

1. If the “flipped” session is attempted again, the place in the curriculum will change. This is a 2-hour session, so timing is an issue. The session definitely will follow an introductory lecture. It will occur after the Midterm exams, not before. May have to be integrated better with the lab on the same topic, which will have to follow later the same day. Not sure how to resolve the issue about availability of power points concerning the session. This session required significant IT expertise to put into place.

2. The “written” portion of the Midterm exam will be on paper (not on BlackBag unless most of their prior year 2 exams are administered via computer). Students prefer paper exams so they can go back to previous questions easily, even though they know that the USMLE Step 1 will be done on the computer. Physically going between the lab practical (on paper) and BlackBag with worry about being timed out was stressful. They are concerned about potential cheating by their peers.

3. Pathology review questions are being developed.

4. Clarify important points especially for Endocrinology/Reproduction Pharmacology

5. Ongoing efforts:

- Reduce density of details throughout – decongest, decongest, decongest
- Better integration
- Disparities project as part of the diabetes curriculum

Catherine Niewoehner

**Annual Course Review (ACR)**  
**University of Minnesota Medical School**

**Course:**

**Essentials of Clinical Medicine 3 – Process of Care Clerkships**

**Course Director(s):**

**James Nixon, David Satin, Sharon Allen**

**Instructional Review Timeframe (End of Course):**

1. Briefly describe the learning outcomes for your course  
Essentials of Clinical Medicine 3 is a course that begins in Spring of Year 1 and continues through the Fall of year 2. The course includes 2 main components: Longitudinal Curriculum and the Process of Care Clerkships.

**Longitudinal Curriculum –**

1. Demonstrate effective communication and medical interviewing techniques appropriate to the setting of care and patient complaint
2. Conduct a physical exam appropriate to the setting of care and patient complaint
3. Demonstrate logical and accurate medical record documentation appropriate to the setting of care and patient complaint
4. Demonstrate basic competency in oral presentation communication skills
5. Develop basic clinical reasoning skills through hypothesis-driven history and physical exam appropriate to the setting of care and patient complaint
6. Exhibit the beginning of a pattern of continuous learning through self-directed learning and systematic reflection of experiences.
7. Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide optimal patient care
8. Demonstrate basic understanding of health systems and how physicians can work effectively in health care organizations, including familiarity with concepts of:
  - The structure and financing of medical care. (3A)
  - Healthcare ethics, law, and policy. (3B)
  - Quality assessment and improvement. (3C)

**Process of Care Clerkships –**

**Long Term Care**

1. Perform and interpret a cognitive assessment in older patients
2. Assess and describe baseline and current functional abilities in an older patient, making sure to include instrumental activities of daily living and activities of daily living
3. Perform a gait assessment on an older adult, including observing the patient rise from a chair and walk (or transfer), then record and interpret the findings.
4. Assess pain in an older patient
5. To enhance attitudes towards elderly patients
6. To be able to describe the scope and roles of sites and programs for “long-term care”, including skilled nursing facilities, assisted living, home and community based services, and hospice.

## **Acute Care**

Specific skills will be developed, including performing and presenting a more problem focused history and exams appropriate to the acute care setting. Students will additionally begin developing an understanding of acute care environment including rapid assessment of patient status and ancillary tools to these assessments, including ultrasound. Students will also gain understanding of emergency medical services and the systems surrounding emergency care.

## **Inpatient**

### **Communication Objectives**

1. Build rapport with each patient (Med)
2. Establish an effective empathic relationship (Med)
3. Demonstrate respect for each patient as a person (Med)
4. Demonstrate respect for the patient in the context of their social and cultural environment (Med)
5. Handle patient emotions effectively (Med)
6. Use effective interview processes (e.g., Segue)
7. Demonstrate symptom pursuit in relation to both the history (Med)
8. Document a clear, complete and accurate inpatient admission note (Med and Sml Grp)
9. Perform a patient presentation that is accurate and appropriate for the clinical setting (Sml Grp)

### **Physical Examination Objectives:**

1. Perform a comprehensive and directed medical exam
2. Demonstrate symptom pursuit in relation to the exam

### **Patient Assessment Objectives**

*Assess a clinical case by demonstrating the following: (Sml Grp)*

1. Summarize a clinical case
2. Narrow a differential diagnosis to 2 or 3 reasonable choices
3. Analyze why these choices are appropriate
4. Verbalize any uncertainties
5. Plan an approach for initial diagnostic work-up or treatment
6. Select a case-related question to pursue with a focused, evidence-based learning exercise (e.g., Educational Prescriptions)

### **Demonstrate a Commitment to Continuing Professional Development**

1. Demonstrate habits of lifelong learning including: (Sml Grp)
  - a. Ability to identify and acknowledge limits of knowledge and skills, including uncertainty
  - b. Accurate self-assessment
  - c. Ability to learn from experience and feedback
  - d. Ability to stay current with medical literature

### **Systems of Care**

1. Prevention of Medical Errors (Surg and SM1)
  - a. Describe the differences between an adverse event, a near miss and a medical error
  - b. Explain how systems can be designed to decrease medical errors
  - c. Identify an example of a procedure designed to decrease medical errors in inpatient setting
2. Informed Consent (Surg and SM2)
  - a. Explain the informed consent process including
    - i. Disclosure
    - ii. Understanding
    - iii. Decision Making
  - b. Identify ethical values that support the practice of informed consent

c. Observe informed consent form or process in inpatient setting and comment on form or conversation

**Outpatient**

1. Develop focused history and physical examination skills in the evaluation of outpatient problems
  2. Orally present outpatient cases in a clear and concise manner
  3. Write well-organized SOAP notes for outpatient visits
  4. Develop fundamental skills in patient assessment and differential diagnosis
  5. Appreciate the process of an outpatient visit from the patient’s perspective.
2. Describe what evidence you have that the outcomes are being achieved. Include student review information.

Students generally perform well on assessments. Additionally, course ratings are generally good.

**Category Instructions:** *My experience in the inpatient POCC improved my ability to:*

Process of Care Clerkship	INMD 6807 - Block C						
	Responses				Course		
	[SA]	[A]	[D]	[SD]	N/A	N	Mean
<b>Q20</b> Conduct a history and physical examination.	37	42	3	2	63	<b>84</b>	<b>3.4</b>
<b>Q21</b> Present a patient.	38	41	3	2	63	<b>84</b>	<b>3.4</b>
<b>Q22</b> Prepare an appropriate written patient presentation.	38	40	4	2	63	<b>84</b>	<b>3.4</b>
<b>Q23</b> Understand major strategies of prevention of adverse surgical events.	11	49	15	8	64	<b>83</b>	<b>2.8</b>
<b>Q24</b> Understand basic sterile technique and organization of an operating room.	11	55	9	7	63	<b>82</b>	<b>2.9</b>
<b>Q25</b> Obtain a focused history and physical examination.	36	40	2	1	60	<b>79</b>	<b>3.4</b>
<b>Q26</b> Form basic differential diagnosis.	33	42	2	2	60	<b>79</b>	<b>3.3</b>
<b>Q27</b> Write a S.O.A.P. note.	38	34	5	1	61	<b>78</b>	<b>3.4</b>
<b>Q28</b> Succintly present a patient.	36	40	2	1	60	<b>79</b>	<b>3.4</b>
<b>Q29</b> Understand several of the major processes (e.g. prevention, health promotion, chronic disease management) of outpatient medicine.	25	46	7	1	60	<b>79</b>	<b>3.2</b>
<b>Q30</b> Perform a functional assessment, a cognitive assessment, a gait assessment, and a pain assessment on older adult patients.	9	49	17	2	67	<b>77</b>	<b>2.8</b>
<b>Q31</b> Appreciate different settings (e.g. nursing home care, palliative and hospice care, home care) in long term care.	33	41	2	1	67	<b>77</b>	<b>3.4</b>
<b>Q32</b> Present an acute care case using the SNAPPS format.	11	41	19	6	67	<b>77</b>	<b>2.7</b>
<b>Q33</b> Gather a basic history from an acutely ill patient.	14	47	13	2	68	<b>76</b>	<b>3</b>

**Responses:** [SA] Strongly Agree=4 [A] Agree=3 [D] Disagree=2 [SD] Strongly Disagree=1

**Basic Science Core Rating Items - New****INMD 6807 - Block C**

	Responses					Course	
	[SD]	[D]	[N]	[A]	[SA]	N	Mean
<b>Q1</b> The course objectives were made clear to me.	5	15	41	78	15	<b>154</b>	<b>3.5</b>
<b>Q2</b> The assignments planned for independent learning time facilitated my learning of the course material.	8	27	51	55	12	<b>153</b>	<b>3.2</b>
<b>Q3</b> There was close agreement between the stated course and session objectives and the information taught.	2	11	51	78	12	<b>154</b>	<b>3.6</b>
<b>Q4</b> The resources provided for the class were useful in learning the material: (i.e. recommended readings, course packet, BlackBag site)	6	14	55	66	11	<b>152</b>	<b>3.4</b>
<b>Q5</b> There were adequate opportunities for non-graded self-assessments (i.e. quizzes, discussion questions, practice or review questions).	6	16	66	55	9	<b>152</b>	<b>3.3</b>
<b>Q6</b> The graded assessment(s) appropriately tested the course objectives.	3	14	50	75	10	<b>152</b>	<b>3.5</b>
<b>Q7</b> Overall, I have acquired an understanding of the stated course objectives.	1	12	42	85	14	<b>154</b>	<b>3.6</b>

**Responses:** [SD] Strongly Disagree=1 [D] Disagree=2 [N] Neutral=3 [A] Agree=4 [SA] Strongly Agree=5

3. Describe what is working well in your course.

1. Students value the opportunity to work in a clinical setting while they are gaining their foundational medical knowledge.

4. Describe any areas of concern.

1. Students at times feel it is unfair if they do not have cars to have to go on "2 hour bus rides to their locations"
2. Current structure may allow students to get "rusty" at history and physical skills prior to starting on clerkships
  - a. Evidence from Milestone 2 where around 1/3 of class failed some component (score <70%)
3. Very time intensive to find placement for all students (particularly outpatient)
4. Supervision and experience variable across sites
5. Quality improvement project not always seen as "real"

6. Describe any changes you intend to make for the next academic year.

1. Physical exam practice
2. Quality improvement project