

Gastrointestinal System

Course Directors: Dr. George DeMartino, PhD, Dr. Neha Patel, MD

GPA Factors: 2.0 credit hour, P/F

Grading:

Quiz 1 – Physiology/Histology/Embryology	6 pts
Quiz 2 – GI Infections	5 pts
Quiz 3 – Clinical/Pathological Manifestations of GI Diseases	7 pts
Quiz 4 – Clinical/Pathological Manifestations of Liver, Pancreas, Biliary Disease	7 pts
Path Quiz 1	5 pts
Path Quiz 2	5 pts
TBL 1	15 pts
Final Exam	50 pts

Calendar:

Timeline: Beginning of August to beginning of September

Lecture: 9 am – 12 pm most days, afternoon lectures ~2 times a week on average

Required Activities: One (1) gross pathology session, two (2) small group pathology sessions, 1 TBL activity (GI bleeding), NO simulation lab, one (1) CBL session

Syllabus: The syllabus is very detailed and includes most of the information you will be tested on. This is the main reading material for this course in addition to Robbin's Pathology for the pathology sessions. Printed copies of syllabus available at the Bookstore along with online copy on Moodle. Each lecturer's syllabus section may have slides, reference articles, and videos to view. All questions on quizzes will come from the syllabus sections and materials provided by the lecturers for any given module.

Textbook: There is no required textbook. Recommended resources include Robbins Basic Pathology, BRS Pathology, Pathoma, and First Aid. Recommended textbooks as per the syllabus: *Medical Physiology*, *Textbook of Medical Physiology*, *Vander's Human Physiology*, *Harrison's Principles of Internal Medicine*, *Bates' Guide to Physical Examination and History Taking*

General Comments:

There are four quizzes in the course with reviews for each quiz afterwards. You need to pass the final in order to pass the course. The quizzes are only worth 5-7% of the total grade so they are good opportunities to stay on top of the material while also assessing yourself with questions as the course progresses. You will receive feedback at the end of the course on how well you did for each subsection of material (ex: Physiology, TBL iRAT scores, etc.). This is not punitive; it simply allows you to focus your future review of material more usefully.

The quizzes covered a) histology, physiology, and embryology of the GI tract b) GI infections c) clinical/Pathological manifestations of GI diseases and d) clinical/pathological manifestations of liver, pancreas and biliary tract diseases. For the histology and physiology portion of the course, there were helpful practice questions at the end of each lecture syllabus material which were a good way to assess your understanding of concepts. In addition, BRS Physiology is a good resource for an outline of physiology and for more practice questions.

As a general learning tool, the learning objectives are a good way to assess your comprehension of the syllabus, along with doing any and all practice problems provided. Additionally, there are weekly review sessions led by upperclassmen tutors that focus on more difficult material. You can either opt to attend these sessions and ask questions in person or review the presented slides Carol Wortham will send out after each week's review. These slides include student written practice questions for each lecture.

CBL: At this point in the curriculum, you should be familiar with the CBL format. The GI CBL is helpful for clearing up questions about clinical presentations of a lot of the conditions. Because of the CBL placement at the end of the block, it serves as a great opportunity to review a lot of the clinical correlates of the material you are learning.

GI Bleeding TBL: For the GI Bleeding TBL, it occurred later in the block so it served as a good review of old material before the test. Many students found this set of practice questions (<http://www.gilearn.org/ddsep5/chapter05.pdf>) helpful in preparation for the GI Bleeding TBL. The material in the TBL corresponded well to the associated lecture material.

Sim Session: Unlike in some of the other organ blocks, there is no SIM for GI.

Pathology: The pathology small group and gross sections are similar to those of previous courses and correlate to the pathology material presented in class and to the images presented in the Robbins textbook.

Two great resources are Pathoma and First Aid which are both great supplementary resources to outline the material provided in the lectures.

Specific things to focus on during the GI Block:

Dr. DeMartino does a great job of explaining GI physiology, but it is important that you are able to grasp the “big-picture” concepts and apply physiological concepts in various situations rather than just rote memorization of physiological facts. It is a good use of your time to learn how to interpret the lab values in regards to the liver questions. Lecture “Clinical Approach to Liver Disease and Jaundice” by Feranchak does a good job of delineating various LFTs and their specificity/sensitivity.

Endocrine, Energy and Reproduction

Course Directors: Ellen Grishman, MD; Joyce Repa, PhD

GPA Factors: 2.0 credit hour, P/F

Grading:

2 Endo Quizzes	30 pts
Path Small Group Endo Quiz	4 pts
Sim Session (Attendance)	3 pts
Patho Gross Lab	2 pts
Repro TBL	15 pts
Path Small Group Repro Quiz	4 pts
Online Histology Problem Set	2 pts
Final Exam	40 pts

Syllabus: The syllabus is very detailed and includes most of the information you will be tested on. This is the main reading material for this course in addition to Robbin's Pathology for the pathology sessions. Printed copies of syllabus available at the Bookstore along with online copy on D2L. Each lecturer's syllabus section may have slides, reference articles, and videos to view. All questions on quizzes will come from the syllabus sections and materials provided by the lecturers for any given module.

Textbook: There is no required textbook. Recommended resources include Robbins Basic Pathology, BRS Pathology, Pathoma, and First Aid. Recommended textbooks as per the syllabus: *Medical Physiology*, *Textbook of Medical Physiology*, *Vander's Human Physiology*, *Harrison's Principles of Internal Medicine*, *Bates' Guide to Physical Examination and History Taking*

General Comments:

This course is distinct from the rest of the IM courses in that there are many different organ systems affected by the endocrine system and so instead of one unifying theme throughout many of the lectures, there is a lot of variety. Because of this variety, it can at times be difficult to keep straight all the pathways (thyroid vs. parathyroid vs. HPA, etc.) so we would recommend finding a way to keep these straight – the course does do a relatively good job of keeping related lectures next to each other. As an extension of the course content involving “endocrinology of energy metabolism”, the Fall 2018 EER course will include additional lectures on weight loss strategies,

and will now also cover general nutrition (macronutrients/micronutrients, and nutrition support in disease states).

The material in the reproduction section of this course is very much related to the GU pathology that was covered in Renal. Future iterations of the curriculum may change the organization of where this is covered, but for now, it is helpful to go back and review a bit of the male pathology to compare and contrast how it relates to the female pathology.

For the Contraception TBL, the material tested on the IRAT/GRAT is now in the syllabus. Make sure to look up different forms of female contraception ahead of time so that you will at least be familiar with what they are. There are many helpful charts online, and the CDC website (below) has a lot of high yield information.

<https://www.cdc.gov/reproductivehealth/contraception/index.htm>

Step 1 Correlates:

Pathoma does an excellent job of explaining many of the concepts covered in this course, and so similar to previous course would highly recommend as a supplement. As mentioned above there are a lot of important connections to be made between female and male reproduction to help remember as well as to keep distinct so watching both sets of Pathoma videos is highly recommended.

Remembering which hormones are made where and whether they are peptide vs. steroid is difficult to keep track of, but is high yield on step. Breast pathology in the course did not cover everything seen in First Aid and Pathoma and so studying those on your own while everything else is still fresh helps.

Brain and Behavior Block

Course Directors: Lindsey Pershern, MD, Lauren Phillips, MD

GPA Factors: 2.0 credit hour, P/F

Grading:

Quizzes (3)	39 pts
TBL (2 sessions- 5% iRAT/10% gRAT)	15 pts
Brain Cutting Session	2 pts
Small Path Session	5 pts
Neuro Exam Session	1 pts
Cultural Contributions to Illness	1 pts
Sim Session	1 pt
Final Exam	35 pts
End of Course Evaluation Completion	1 pt

Syllabus: The syllabus is very detailed and includes most of the information you will be tested on. This is the main reading material for this course in addition to Robbin's Pathology for the pathology sessions. Printed copies of syllabus available at the Bookstore along with online copy on Moodle. Each lecturer's syllabus section may have slides, reference articles, and videos to view. All questions on quizzes will come from the syllabus sections and materials provided by the lecturers for any given module.

Textbook: There is no required textbook. Recommended resources include Robbins Basic Pathology, BRS Pathology, Pathoma, and First Aid. Recommended texts as per the syllabus include *Neuroscience by Purves et. al*, *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (available through the UTSW library via the *Psychiatry Online Database*), *The American Psychiatric Publishing Textbook of Psychiatry* (available through the UTSW library via the *Psychiatry Online Database*)

General Comments:

There is a lot of content in this course. It is very important to stay up to date with all of the information, as it is easy to fall behind in this course more so than the previous IM courses. In general, there are a lot of tiny details that we as medical students feel must compulsively memorized (again in this course there was more of this than previous), but the course directors do an excellent job of creating questions that make sure test details related to important concepts.

Make sure to spend time to prepare for the Neuro exam session – this is a required activity that is actually very useful to learn well, as it was taught with variable efficacy in the colleges and is good to have mastered before going into rotations. Coming to the session feeling comfortable with the exam helps to remember better the movements and logistics of the exam itself and helps you get a lot more out of the session than otherwise.

Neuroanatomy:

- Think of this like other anatomy: memorization is the name of the game. Pre-made O drive ANKI decks and class slides themselves have unlabeled pictures at the end for practice
- Practice doing 2nd and 3rd order questions about the structures (eg function, pathology, derivative structures) and not just their name
- Draw it out! Drawing out pathways and integrating them is the best way to test your knowledge. In addition, knowing where the pathways cross is essential. Know when pathology should be ipsilateral or contralateral to a sign.

Stroke:

- There are an overwhelming number of stroke syndromes, but they become a lot more manageable if you know your vascular anatomy and neuroanatomy. For example, if you know what distribution of the brain is supplied by the MCA, and what those areas do functionally, you can easily figure out the symptoms of an MCA Syndrome.
- Consider studying the background anatomy thoroughly, and then just learning where the vascular block is for each syndrome rather than trying to individually memorize the symptoms of each syndrome. This will make it easier to understand and remember.
- Rule of 4's video: <https://www.youtube.com/watch?v=ffhVSdHA6Mo&t=1s>

Seizure:

- Have a basic understanding of what the EEG measures. You do not need to know how to read an EEG
- Know the medications that are for global vs focal seizures, sketchy pharm is extremely helpful for this as well as the side effects

Tumor:

- Know which tumors are common in which parts of the brain, and childhood vs. adult tumors
- Know characteristic pathologic and radiologic clues
- Know what symptoms to expect with a suprasellar vs. supratentorial vs. infratentorial mass
- Knowing these things allows you to use process of elimination in a complex question stem

Psychiatry:

There are a limited number of psychiatric diagnoses that will be covered in this course and some have strict criteria, especially with regard to length of symptoms. Oftentimes, timing is the distinguishing feature when determining diagnoses with similar criteria (ex: brief psychotic disorder vs. schizophreniform disorder vs. schizophrenia) It's important to know them all, and how to distinguish between those that might appear similar (for example - MDD vs. bipolar vs. cyclothymic). First Aid might be useful in this regard as it has a well-organized section that covers most of the same diagnoses as this course.

Understand the side effects of first vs second generation antipsychotics

Step 1 Correlates:

This course has a substantial amount of material that is important, but may not be the highest yield on board exams. One of the most important things to learn well in this course is the neuroanatomy – there are not a lot of helpful resources to go to during your dedicated study time, and mastering it well in this course makes it easier to come back to later on.

Going through Pathoma for CNS tumors is a great supplement to your primary text. It is very well organized and easy to understand, as well as being relevant to future board exams. The headaches were not taught at all, but per Dr. Burns will be covered in the second iteration of the course.

Cranial nerves should have been drilled a good amount during anatomy, but these need to just be known stone cold (in terms of which cross, where they come out of the brain stem, as well as their function and what happens when they are damaged) so mastering it very well here goes a long way to step preparation.

The Psych diagnoses can be difficult to distinguish, but Dr. Jenkins does a good job with the personality disorders. Important to try to get a good feel for the major Psych disorders (i.e. Schizophrenia and it's variants, depression, bipolar, etc.) because these are ubiquitous on the shelf.

Helpful Outside Resources:

- Pathoma and FIRST AID, as always
 - Question banks (USMLE-Rx, BoardVitals, etc.)
 - O drive neuroanatomy anki flashcards
 - <https://www.youtube.com/playlist?list=PLqTetbgey0aekpYHoIPKssY94U-OBMeNE>
 - <https://www.youtube.com/user/khanacademymedicine/search?query=nervous+system>
- Some folks found SketchyPharm really useful for anti-seizure and anti-psychotic meds

Foundations of Clinical Reasoning

Course Directors: Dr. Wagner, Dr. Covin, Dr. Reed

GPA Factors: 1 credit hour, P/F

Grading:

System 1 Exercises TBL 15%

Quality Improvement TBL 15%

Evidence-Based Medicine TBL 15%

Epi/Stat TBL 15%

Synthesis TBL 15%

Final Exam 25%

All TBLs are 5% iRAT and 10% gRAT.

Calendar:

Date	Weekday	Start Time	End Time	Session Title
11/27/2017	Monday	9:00 AM	10:00 AM	Introduction to Clinical Reasoning
11/27/2017	Monday	10:00 AM	12:00 PM	System 2 Exercises
11/27/2017	Monday	1:00 PM	2:00 PM	Clinical Reasoning and Diagnostic Errors
11/27/2017	Monday	2:00 PM	3:00 PM	Cases in Diagnostic Errors
11/28/2017	Tuesday	10:00 AM	12:00 PM	TBL – System 1 Exercises

11/28/2017	Tuesday	1:00 PM	2:00 PM	Epidemiology
11/28/2017	Tuesday	2:00 PM	3:00 PM	Epidemiology
11/29/2017	Wednesday	10:00 AM	11:00 AM	Biostatistics
11/29/2017	Wednesday	11:00 AM	12:00 PM	Biostatistics
11/30/2017	Thursday	9:00 AM	10:00 AM	Introduction to EBM
11/30/2017	Thursday	9:00 AM	12:00 PM	TBL – Epi/Stat
12/01/2017	Friday	9:00 AM	10:00 AM	EBM Demonstration
12/01/2017	Friday	10:00 AM	12:00 PM	EBM TBL
12/01/2017	Friday	1:00 PM	2:00 PM	Self Directed Learning Quality Improvement
12/4/2017	Monday	10:00 AM	11:00 AM	Self Directed Learning Quality Improvement
12/4/2017	Monday	11:00 AM	12:00 PM	Introduction to Quality Improvement, Pt. 1
12/4/2017	Monday	1:00 PM	2:00 PM	Introduction to Quality Improvement, Pt. 2
12/05/2017	Tuesday	10:00 AM	12:00 PM	TBL - Quality Improvement
12/05/2017	Tuesday	1:00 PM	2:00 PM	
12/06/2017	Wednesday	9:00 AM	12:00 PM	TBL-Synthesis
12/07/2017	Thursday	9:00 AM	12:00 PM	Review
12/08/2017	Friday	10:00 AM	12:00 PM	FCR Examination

(Mandatory sessions highlighted in yellow)

Timeline: End of November - Early December of MS2/PC3 year

Lecture: Variable; lecture, TBL or case studies 9 am – 12 pm most days, dedicated self study time in the afternoons

Required Activities: 5 TBL sessions, 1PBL (System 2 Exercises)

Note that there is a required activity the Monday after Thanksgiving break.

Syllabus: The syllabus includes most of the information you will be tested on. This is the main reading material for this course in addition to a handbook on Quality Improvement you receive at the beginning of this course. Printed copies of syllabus available at the Bookstore along with online copy on Moodle. Each lecturer's syllabus section may have slides, reference articles, and videos to view on Moodle.

Textbook: There is no required textbook.

General Comments:

A pretest is required before the start of this course that is not factored into the course grading. Much of this course is structured around TBL cases. The main assessments are in the form of iRATs and gRATs that are based on the previous day's lecture material and accompanying notes. Each TBL has an associated "syllabus" that has the main objective points. Corresponding First Aid sections of Epidemiology and Biostatistics are a helpful supplement to course material.

The final exam is a comprehensive multiple choice exam that covers the material presented in the 2 week course. There is a final review session the day before the exam.