



DREXEL UNIVERSITY
College of
Medicine

*In the Tradition of Woman's Medical College of Pennsylvania
and Hahnemann Medical College™*

YEAR ONE

Survival Guide

*The unofficial guide to surviving your first year at Drexel
Med*

a publication for students

by students

INSTRUCTIONS

HOW TO USE THE SURVIVAL GUIDE:

The Survival Guide was constructed to be a very detailed, but not exhaustive, reference source; by design, it is overly inclusive. This should not be viewed as one large document, but as a source to reference when certain questions may arise. Reading it cover to cover will provide very little benefit; instead, you should familiarize yourself with the table of contents so you can cherry pick information based on your needs. This year, we've split the Survival Guide into distinct parts by Section so that you don't have to download the whole thing and scroll through dozens of pages.

INTRODUCTION

WELCOME CLASS OF 2020!

I'm sure that you've been getting congratulated since you first heard of your acceptance, but one more couldn't hurt; Congratulations on entering DUCoM's Class of 2020!

Treat this guide as you treat a dictionary; nobody reads the dictionary cover to cover (no judging if you do), they pull it out when they need to look up a word. So, when you find yourself confused about a class, wondering what books to use, or just interested on how some of your peers took on a class, just look it up!

The Survival Guide is organized into the following sections to help you become better acquainted with your new lifestyle:

- Section I. IFM and PIL First Year Courses and Resources
- Section II. Living in Philadelphia

Keep in mind, there is no one-way to get through med school, and as obvious as this sounds, a lot of students still gravitate to copying upperclassmen. This guide isn't here to tell you what to do, it's here to help you get a broad idea of how other students got by; use their advice by assimilating it into your study habits instead of outright copying others. More likely than not, your study habits will change throughout your first year, and that's good; by the end of this year you will refine your techniques and be able to use your time much more efficiently so that you can also live a life. But this may not come easy to everyone so make sure that you seek help when you need it. We've all been there to some extent and you'll only be hurting yourself if you don't address a problem when you recognize one.

These and a few other worries are at least acknowledged, if not substantially addressed, in this Survival Guide. Please know this Guide is offered with your first year survival in mind but may not solve all of your problems. Please note that respecting the advice of our faculty is paramount and that the counsel voiced within this guide is meant to be a helpful supplementation to their instruction; any contradictions may be due to a matter of opinion and should be weighed as such.

The first year of medical school—and beyond—can be described as a marathon requiring your patience and energy; pace yourself and keep the long game in mind. Good luck and enjoy your first year tackling the challenges of a career in medicine.

Have an amazing first year!

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SURVIVAL SLANG

BHI - IFM Biopsychosocial Determinants of Health and Illness course

BRS - Board Review Series textbook, there is one for every major course

Brown Bag Discussion - Noon time presentation and/or discussion on topics relating to community health

Bridging the Gaps - citywide program which includes a seminar series as well as a summer community health internship program

CEE - IFM Community Educational Experience

IPA - Individualized Process Assessment (for PIL only) occur during Blocks II and III, oral presentation where you will present and discuss a case with a member of the faculty

LIs - Learning Issues (for PIL only), list of topics your small group decides to learn more about after reviewing the case in each group session

Module Guide - the one thing you can no longer live without, also known as a syllabus (IFM)

Netrition - Nutrition Website

Study Lounge - Room 104, study space by the Dean's Office

Q-Bank - practice USMLE questions provided by Kaplan

Resource Sessions - PIL lectures

SAC - "the sack" not "S-A-C" : Student Activities Center

Sim Center - where you have simulated patient encounters with computerized mannequins.

Stalker page - class composite photo page

Standardized patient (SP) - actors posing as patients for your mock patient interviews

Videodisk - DVD with microanatomy slides, available in the lab, library, and online through the Microanatomy website

SECTION I.

FIRST-YEAR COURSES PIL AND IFM

AUTHOR'S NOTE:

As you prepare for your studies, you will begin asking yourself what resources you should get to help you study. You will undoubtedly hear a lot of people label many books as "Must Buy" or "Required". But, for as many medical resources and books that are available to you, there are even more different types of study habits; owning every medical book made may be good for one person, while owning a single anatomy atlas is all that another person might need.

When someone in a grade above you tells you that a certain book is an absolute necessity, keep in mind there are other classmates that don't even know that that book even exists and both would do just fine.

THE QUESTIONS ISN'T "WHICH BOOKS DOES A MEDICAL STUDENT NEED?" THE QUESTION IS "WHICH BOOKS DO I NEED?" You can only figure that out by talking to a number of Second Years and upperclassmen and getting a range of opinions and knowing your own study habits. There is, unquestionably, books listed as "Required Reading" for a course that are not necessary at all, so always ask around before you spend \$250 on really expensive firewood.

A WORD FROM DR. RUSSO

“There are several things that I think are critical to the success of matriculating medical students.

1) Time management - keep up with the work, put yourself on a schedule and don't leave studying to reading days. Medical school is vastly different from college both in pace and volume of material, even if you were a successful crammer before, it is unlikely that this will work for you in medical school.

2) Get help when you need it. All medical students are academically successful students so if you run into academic difficulty, it's hard to acknowledge and ask for help. One of the most important things you can learn as a physician is to identify when you need to help and ask for it. Course directors and academic support services are here to help you succeed.

3) Keep yourself mentally, emotionally and physically healthy by making sure you develop and sustain relationships that are important to you, eat well , exercise and schedule in free time to re-energize yourself.”

IFM OVERVIEW

The Modules:

- Fundamentals
- Abnormal Amniocentesis
- Muscle Weakness
- Weight Loss
- Chest Pain
- Suspicious Lump
- Shortness of Breath
- Failure to Thrive
- Abdominal Pain
- Gunshot Wound
- Symptoms of Neurological Disorder

Schedule Available at [WebCampus](#) (Bookmark This)

Additional instruction/exams, interspersed during the year:

Community Education Experience (CEE)
Geriatric Experience
CEAC Standardized Patient Interviews

BIOCHEMISTRY

RESOURCES STUDENTS USED:

- [Lippincott's Illustrated Reviews: Biochemistry by Dr. Ferrier](#)
- [BRS \(Board Review Series\) Biochemistry, Molecular Biology, and Genetics](#)

The good news is that the notes & Lippincott's (a text book written by the Course Director & professor for Biochemistry at DUCoM) are explicit in covering what you need to know. The bad news is that you need to know all of it. But at least all of the questions on the exams are directly from the notes; there isn't very many surprise questions. This course is important in understanding what is going on in other subjects, medicine and pathology.

TIPS REGARDING BIOCHEMISTRY FROM STUDENTS:

"Keep up with the lecture notes, review the whole week's notes at the end of every week. Attempt the practice questions back and forth at least a week before an exam, then study related material on anything that was difficult all the way up to the exam. Also, BRS pretest booklet is a must!"

"Biochem feels like the first real med school class we take. Make sure to stay on top of it from day 1. There is nothing known as "winging" an exam in med school."

"Dr. Ferrier's integrated reviews are amazing. The Muscle Weakness/Weight Loss module will all come together during those reviews. Also, you don't have to study for the final over winter break, with Dr. Ferrier's notes it's definitely possible to prepare in a week."

"For the final, don't freak out!! Just study her sheets, and 2-3 full days is more than enough time to do well. "

"Focus on the irreversible reactions in long pathways."

"The notes for biochem are extremely thorough, especially Dr. Ferrier's. I never used any additional reading materials - having a solid understanding of the notes (including details), is enough to do very well in the course! For complicated pathways, always focus on the regulated enzymes, they will absolutely be tested on the exams!"

"Go to reviews and never hesitate to ask Dr. Ferrier or Dr. Jameson questions, even if you find them intimidating, they are not and they REALLY know their Biochem."

"If you don't know what's going on or are even remotely lost, visit Dr. Ferrier. Her patience and mastery of the material—and more importantly, her ability to give you more of the "big picture"—will impress for sure."

"Every detail in the notes is fair game."

"The test in late October/early November is jam packed, do not fall behind in October!!!!"

"I had my undergrad biochemistry textbook so I never purchased any additional books. However, I never even used my textbook. The notes have all the necessary information in them and the practice questions posted online for each module are really useful to assess how much you know before exams. Dr. Ferrier's review lectures are awesome - definitely watch them before exams."

"Do all the practice problems and understand the answers and key concepts that they are trying to convey. Don't forget about material that is presented during conferences as it is a great supplement to material taught during lecture and is also indirectly tested on the exams. Dr. Ferrier is a wonderful teacher, don't hesitate to seek her help at any time. Go to review sessions prepared, otherwise they are a waste of your time. Make sure you've completed the practice problems and come with a list of nutrition questions you may have or things you would want reviewed in detail."

"Do not worry about all of the details of pathways at first. Focus on the overall pathway first like where it takes place, what goes into it, and what the products are. Then go back and fill in the details. It will help keep everything in order."

"This class is a beast but a cool tip I found is to get the Lippencott Biochem Flash Cards (~\$35). They are written by Jameson and Ferrier and after using them, I realized there were exact exam questions taken from these cards. Great way to get a few points on the exam and review the topics."

"The pathways are complex - you only have to know the key steps, but you have to know the context in order to answer the exam questions. Draw out the pathways on whiteboards, it really helps."

"Don't fall behind! It's easy to get overwhelmed, so make sure you stay on top of things. Do a little every day and don't rely on cramming before a test. Mnemonics are your friends when it comes to memorizing pathways/intermediates. The final sounds scary, but just use the focus sheets provided to narrow your final studying and it will be a piece of cake."

"Weight loss module exam is a monster. It has the most material to cover so study well for it."

"The notes were very thorough for Biochem. Making simplified outlines of pathways and doing the supplementary practice questions were also helpful. Focus on main concepts before memorizing all of the details."

"Don't stress too much about every step of the pathway! The course directors really like to focus on key regulated steps, and irreversible steps."

GENETICS

RESOURCES STUDENTS USED:

- [Thompson & Thompson Genetics in Medicine by Dr. Nussbaum](#)

*Reviews are typically scheduled before each exam and Dr. Larson is available to go over anything. Dr. Larson will tell you in the beginning to keep a Disease Chart, **DO THIS**; these diseases you are expected to have memorized and each module will add between 6-16 new diseases. The questions about these diseases are cumulative. Information on the far majority of these disease can be completely obtained from the “Blue Sheets” in textbook linked above.*

TIPS REGARDING GENETICS FROM STUDENTS:

“Genetics isn't about reading the notes excessively; you need to have a good understanding of them but you also need to think #WWLL What would Larson like?”

“TAKE THE PRACTICE EXAMS! They are the only way to prepare you for Dr. Larson's questions. Don't fall into the trap of thinking you'll do well in the course after taking the Fundamentals exam. It is not representative of the more integrative problems later on.”

“Don't be fooled by the Fundamentals exam, the questions get trickier.”

“The blue sheets in the textbook are great resources. Use them for your disease charts and keep your charts updated as the course runs. This will make your life easier in the long run. Take practice exams and READ THE QUESTIONS CAREFULLY. Sometimes the wording can be tricky.”

“You NEED to know the disease charts. Memorizing it will give you some easy points on the exams. There will be a lot of questions that you can't answer if you haven't memorized the chart!”

“Nussbaum's Genetics in Medicine is where the entire disease chart comes from. It is available in the library and not worth buying since all test materials.”

“The conferences are critical to doing well on exams. They put material learned in class into a clinical context and often present new information.”

“The practice exams for genetics are useful in identifying what you do and do not understand. Try to make sure you attend each genetics conference in order to get that extra 1-2% added onto your course grade—you never know if you'll need it.”

“This course is very conceptual. You have to think about the applications. Take your time with the practice tests and be sure to really understand what makes each answer correct or incorrect, as some questions on the exams were similar.”

“Follow Dr. Larson's outline for the final. It gives you a very good idea of what to expect on the exam and is a good guideline to use when sifting through your notes from the year.”

MICROANATOMY

RESOURCES STUDENTS USED:

- [Histology: A Text and Atlas by Dr. Ross and Dr. Pawlina](#)
- [Wheater's Functional Histology: A Text and Colour Atlas](#)

*Microscopic Anatomy is course that will begin very early in the year. The course consists of, both, a written and practical portion. The virtual slides, electron micrographs from the Rhodin atlas and laserdisc materials are very helpful in reviewing the material and **ARE ALL AVAILABLE ONLINE**. Also, Dr. Smith makes Review videos for every Module; **MAKE SURE YOU FIND AND WATCH THE MICRO REVIEW VIDEOS BEFORE EVERY MODULE EXAM**. They are located at the [Microanatomy Website](#) under "Resources" labeled "Review Videos". More on this later.*

TIPS REGARDING MICROANATOMY FROM STUDENTS:

"Try not to fall behind during the first module while studying for the Biochemistry and Genetics tests."

"Going to lab helped me as the teachers answer questions helpfully (even the stupid questions). Many people stop going to lab because everything is online (and labeled).

"Virtual microscope is great, but if you need more practice recognizing structures the Histology Atlas link on the course website is amazing. Definitely look over the electron micrographs and be sure you know the structures listed at the end of labs!"

"Use Dr. Smith's reviews videos! Just watch them on repeat until you can identify everything. Many of those slides were on the practical."

"Back Tests, Back Tests, Back Tests. Go back and understand/review wrong answers."

"It is possible to get by without textbooks

since the virtual slides are well-annotated and the videodisk reviews are thorough. Practice exams are excellent for assessing your weak points. Sometimes they will get tricky and give you an SEM picture on a practical, so have a good idea of the 3D structure of whatever organ you're looking at. If you have time, you can randomize the online videodisk slides and test yourself that way."

"Make your own powerpoints to study from. It's great to share resources and study together, but if you generate your own study materials, especially when it comes to the practical materials, you will learn much more from it. Also, take the time to actually try to find the structures on the virtual slides yourself, before going to the annotations. The more that you can look around a tissue sample and figure out what structures look like, the better prepared you're going to be for the practical."

“Use Dr. Smith's reviews videos! Just watch them on repeat until you can identify everything. Many of those slides were on the practical.”

“I recommend using the Microanatomy website for the laboratories. Before the practical, I recommend using the online histology and electron microscopy atlas. This will help to train your mind to look for certain features that will help you deduce what you are looking at.”

“I had both Ross and Wheater's and I liked having both books. Some people didn't use them as much though. The website is extremely dense and has everything you need on it. Using Wheater's histology slides and searching the internet for other examples is a good way to get really familiar with what a particular histology section will look like, that way you can easily identify it in the 60sec/question on the practical.”

“Use the video disks, they're MONEY! You can do them in the lab, or test yourself online by randomizing the images!!!! You select all the sections by holding down shift, then click randomize.”

“There are lots of resources. Start early by getting to know all the available tools on the course website. The practical draws most of their images from these auxiliary sources.”

“Doing all the practice exams is key as many questions repeat or there are many similar questions! The class is very nit picky so be sure to read the lecture notes carefully and memorize the parts carefully. Also buy WHEATERS histology. This book is an excellent supplement that

will help you get above a 90% on the practical parts of the exam.”

“Written—know your written microanatomy notes well, i.e. read them over and over as much as possible before an exam. Also, if you can get a hold of backtests, they repeat a lot (although not as much as gross anatomy or neuroscience). For the practical, use the virtual lab microscopy manual for the images as much as possible. Go through the lab as much as possible beforehand and try to quiz yourself without using the annotations. ~25% of the practical questions come from straight up lab slides alone that can be reviewed through virtual lab. ~30% of the questions will be directly from videodisk. Review the videodisk guide for each section thoroughly, do the quizzes at the end of each section, then go back and quiz yourself by mixing and matching images from each section. This last quizzing part will really sharpen your practical-taking skills, and since videodisk is also all LM's, it will help for the first section mentioned. The rest of the practical can be studied off of the slide reviews, aka the most important part of microanatomy! Slide reviews are key—Dr. Smith takes so many EMs from the slide reviews and they will show up as your printout EMs on the practical. Know the slide review images (whether they be from EMs, videodisk, other LMs from Wheater) COLD. Some people just watch the slide review a few times, and have done well in the class. Slide reviews are absolutely key. If you need any extra help or begin struggling in the course, contact Dr. Smith immediately. She can meet up with you in the lab and help you identify what you may be struggling with.”

MICROANATOMY WEBSITE PRACTICAL PRACTICE:

VIDEO DISK (LASERDISC):

As mentioned above, ***all of the VideoDisk (LaserDisc) slides in the lab are available online.*** It also allows for a randomized quiz of all of the slides.

On the Microanatomy website click on “Histology Atlas” underneath “Resources” to gain access to the online laser disk

Once you’ve read the Female Reproductive System chapter in the Review Guide binder and looked at the frames associated with that chapter (found at the bottom of each lab) you’re ready to test yourself.

Click on the “Female Reproductive System” under the Subject column. (You can select more than one subject by Ctrl + Left click on multiple Subjects)

Click on “Enter Subject” to list the lessons associated with this subject.
Choose the lesson you want

You can select more than one lesson by pressing Ctrl + Left Click.
You can also select everything with Shift + Left Click + Mouse Drag.

Check the “Random” box. This will randomizes the frames and hide the answers
Click “Start Lessons” to proceed

Once the frame is displayed, try to figure out what its showing.
Click on “Show Description” to display the answer.

ELECTRON MICROSCOPY (RHODIN):

As mentioned above, ***all of the Rhodin EM slides in the lab are available online.***

On the Microanatomy website click on “Electron Microscopy Atlas” underneath “Resources” to gain access to the online EM slides.

Once you’ve read the Female Reproductive System chapter in the Review Guide binder and looked at the frames associated with that chapter (found at the bottom of each lab) you’re ready to test yourself.

At the top left of the page is a Drop Down box for Chapter and Figure number.

NUTRITION

RESOURCES STUDENTS USED:

- [Netrition](#) (Bookmark This)
- [Medical Nutrition and Disease by Dr. Hark and Dr. Morrison](#)

*A bit of history is necessary, the previous course director, Dr. Swaney, retired and is no longer head of Nutrition. Dr. Mike White, his replacement, is also the course director and primary lecturer for Physiology. Nutrition is a quick course that doesn't have many test questions, which means messing up one exam can permanently hurt your score. Although not stressed, **NETRITION IS NOT OPTIONAL**. It is a remnant of the previous course director but is still heavily used as a pool of questions for exams. Exams will expect that you know the material well and you may want to counsel the required readings in Hark and Morrison.*

TIPS REGARDING NUTRITION FROM STUDENTS:

“Definitely recommend the Netrition site. Dr. White does a good job in lecture and covers most of the relevant material, but several key points are better illustrated or more clearly emphasized in the Netrition chapters, which are where Dr. White gets most of the material for lecture, anyway.”

“When White says to memorize charts/values...DO IT. There will be questions about them on the exams and he will expect you to get them right.”

“Study the cases very well. Dr. White likes the case studies and focus on deficiencies.”

“Start on the nutritional assessment assignment asap (even before the class starts) as it is annoying. There is also some extra credit.”

“Due to the low number of total question in this class, do NOT slack off for the first test!”

“The material wasn't extremely difficult. The key is to learn how Dr. White writes his test questions for this course, which were fairly tricky. Due to the small amount of points it can be difficult to come back from a low score on one test.”

“Netrition was amazing. Really helped in learning material since there was a quiz at the end of each section.”

“The first nutrition exam falls during the same exam period as a huge biochem exam, so start studying for both early.”

“Netrition Netrition Netrition. Dr. White's wording on quizzes or exams can be confusing or “misleading” at times, so make sure you know your nutrition facts cold. Also, definitely do the extra credit.”

“Dr. White's likes to use clinical based questions, not straight memorized facts from the notes. He writes some tough questions but there is logic to them.”

BHI

RESOURCES STUDENTS USED:

[Behavioral Science in Medicine by Dr. Fadem](#) (available in the library)

Behavioral Science is a course that typically does not match up with the module material being studied (e.g. the module is Chest Pain but the behavioral science material being presented may or may not have something to do with chest pain). While at first you may feel that much of what is presented is intuitive, the exam questions can be challenging and will sometimes focus on something you may not expect. The Fadem text has a great deal of assigned reading and the practice questions at the end of each chapter that mirror some of those on the exams. Try not to put off behavioral to study for other courses.

TIPS REGARDING BHI FROM STUDENTS:

“It seems like mostly common sense, but they like to test on facts presented on the slides. If there is a chart or list, being familiar with it is a minimum, committing to memory is ideal. But don't stress too much about it.”

“Take notes on the PowerPoint slides and know the tedious facts and you'll do fine.”

“A lot of things are common sense, but give enough time to learn new materials.”

“Memorizing and having a good understanding of the notes are enough to do very well in the class - you don't need a book!”

“Be sure to complete the study guides that are sent out the week before the exams - they aren't sufficient to do well on the exams, but they usually help you get the correct answer on a few of the questions.”

“Behavioral Science is not a hard course but many people don't do well in it because there are so few exam questions. Lots of the lecture information will seem like common sense, but don't just glance over it. Really review the slides before exams - i.e. memorizing numbers and graph trends. Even if a fact seems obvious, review it! All questions are taken from the power-point slides. Use the study guide e-mailed out before exams to help guide your review.”

“Follow the study guides they give you before each test. Also don't put off the studying especially for the first exam, there is actually a lot of material.”

“Lectures are not necessary to go to, but can be fun (especially in the sexual section!)”

“You will receive a study guide before each exam – reread the pages listed on it and you'll do fine.”

GROSS ANATOMY

RESOURCES STUDENTS USED:

ATLAS:

- [Netter Atlas of Human Anatomy](#)
- [Thieme Atlas of Anatomy](#)
- [Rohen Color Atlas of Anatomy](#)

STUDY SUPPLEMENTS:

- [BRS Gross Anatomy](#)
- [Netter's Anatomy Flash Cards](#)

TEXT BOOK:

- [Moore Clinically Oriented Anatomy](#)
- [Gray's Anatomy for Student](#)

IPAD APPS:

- [Visible Body – 3D Human Anatomy Atlas](#)
- [Essential Anatomy 5 - 3D Atlas](#)

WEBSITES:

- Course Website
 - *Login through Blackboard/Learn*
- [The Body Online Dissector](#)
- [Downstate U. Dissector Quiz](#)
- [Lawrence Galtman Cadaver Gallery](#)
- [Stonybrook Radiology Self Test](#)
- [Wayne Med Radiology Self Test](#)
- [Teach Me Anatomy](#)
- [Wesnorman Anatomy Lessons](#)

Although every other course has course website with valuable information and resources, everything useful online for Gross Anatomy is on its Blackboard/Learn website (login using your Drexel username and password).

*As you read from the Tips From Students below, **the best/only way to really prepare for the written portion of Gross Anatomy is to do all of Dr. DePace's Practice Tests on Blackboard/Learn.** You get about 5 Practice Text per module which consists of more than 20 questions that require several pass-through to hit all of the questions because each exam only displays 20 questions, and which questions you get per pass-through is random with repeats.*

*As stated in the [Author's Note](#), owning every anatomy book is **not** always the best option. That said, although the lecture will show you many very informative figures and images, your lecture notes are completely devoid of images. The only way to get the images that you saw during lecture is to screenshot the video recording from you iPad or computer and paste it into your notes. The lectures utilize images from many sources, including those listed above and more unlisted sources.*

Joining AMSA and signing up for a credit card at the beginning of the year gets you the Netter atlas for "free" (since you're paying for AMSA or AMA membership). If you don't get Netter, many students like the Rohen atlas as it labels photographs of actual cadavers in lieu of cartoons. Some choose to replace the Sadler embryology text with the resources from the course website.

TIPS REGARDING *GROSS ANATOMY* FROM STUDENTS:

“Case studies are huge for the gross anatomy written exams. Huge.”

“Brute memorization. This may be the hardest class to study for. Make sure your dissection group has a good vibe and get hands on. Check other people's cadavers for structures you either lack (especially in pelvis) or accidentally destroyed (it happens). For the written exams, do previous tests since they are great for figuring out what you need to know and sometimes questions are repeated. Med Scholars is a must - they will show you structures that are properly dissected and will give you helpful hints for remembering things. Mnemonics will be your best friend, even if they seem silly. Use the online resources - they help greatly with radiographs. The case studies are also extremely high yield. Finally, buy at least 2 sets of scrubs (you'll want them) and always double-glove.”

“Choosing lab groups wisely. Especially for micro where you're not doing anything like a dissection, it is easy to talk/socialize. Lab groups with good friends have pros/cons--it all depends on your demeanor.”

“Do all the back exams, multiple times, until you know all the answers. When it comes to lab, you don't really learn much until everything has been dissected. My group found it helpful to take turns dissecting, usually half of us at a time. When the other half came in to do the next dissection, the first group would go over everything they did and learned. This way you're more efficient, especially around exam time.”

“The majority of this is going to be up to you to learn on your own, so don't let yourself fall behind on Learning Objectives when they're listed at the end of class and be prepared to actually spend time with a book here. Additionally, the Ackland videos are hugely helpful for labs and practicals, as you can see what the structures are really supposed to look like and may help you to find and identify them when you're working on your own cadaver.”

“The majority of the classes test on information solely in the lectures notes. The one exception is gross anatomy. Study for this course as though you were given nothing to study from. Do flash cards, read Moore's and do all of the practice questions provided and study the answers.”

“Really utilize your time wisely in gross anatomy lab. While there is little instruction, you will DEFINITELY need to know everything on the 95% list. The sooner you start identifying structures in other bodies, the better!”

“Gross Anatomy seems extremely intimidating at first but don't freak out! Once you dive into it- it becomes much more manageable. Prepare for gross lab and you will get a lot more out of your dissections.”

“Get a tutor even if you don't think you need one. They're really helpful.”

“Don't get behind, if you have questions ask, always go to med scholars, and be sure to utilize the back tests!”

“You may think that all you need to do is study from the lecture notes and look at the atlas for clarification, but you'd be wrong. You'll feel a little less lost on the written exam if you read the blue boxes in Moore's Clinically Oriented Anatomy. Reading the chapters is good, too, if you have time, but if not - blue boxes. Also, don't forget to look at the list of structures to know at the end of labs in the Thieme dissector. Some structures are there that are not mentioned in any lectures or other resources, so it's good to look over the list if you have time.”

“Lab isn't mandatory. If your group is willing, split up into two groups that take turns coming to lab, it may be a better use of your time. Also, always double glove, it helps with the smell.”

“Do all of the back tests. They are key.”

“Netter's Anatomy atlas AND the Color Atlas of Anatomy.”

“DO EVERY SINGLE BACK TEST! And make sure you know why each answer was right - even if you got it correct. Test questions reappear. And even if they don't show up exactly word-for-word, the same concepts are tested each year. Really taking the time to do the back tests is key for the written exam - if you take them seriously and really put the effort into them, you should be able to extremely well on the written exam.”

“Spend time in lab going over at least your body. You don't have to spend time going over multiple bodies so long as you understand the relative positions in your own.”

“I purchased both the Netter and Rothen atlases. Netter is an artistic rendition of the human body while Rothen is photographic. When studying for the written as well as initially familiarizing myself with the anatomical relationships, I used the Netter atlas. The Netter flashcards are also immensely helpful as they not only help you remember what certain structures look like and their relationships, but also provide clinically relevant facts, which have a tendency of showing up on the written. I used Moore's Clinically Oriented Anatomy and found it to be a helpful supplement to the notes especially if you wanted more information about a particular disease or anatomical relationships. In addition, I would recommend doing all of the back exams because the questions tend to get reused. I did not purchase an embryology textbook. I found the studying the embryology lectures to be sufficient for the written exam. Remember to study the case reviews that are posted and to review any other material on the gross anatomy website for that particular section (i.e. CT scans, MRIs, mock practicals, etc). The Lachman case review book is also helpful. It clearly and concisely explains the mechanisms behind certain pathologies and can be helpful for the written exam. For the practical, I would use the Rothen atlas more frequently especially as test time approached. In addition, I would also recommend watching the dissection video reviews online as it reinforces information used on both the written on practical. Finally, make it a priority to attend all med scholars review sessions as they are invaluable for the practical exam.”

“A very large percentage of the written questions will be either the exact same questions as back test questions, or switched around into a different format covering similar information. For the practicals, make sure you go to Med Scholars. They will go over the need-to-know structures for the exam! But be aware that there are some structures tested that are NOT gone over in med scholars... know the Top 40 list for each practical!”

“For practicals, make sure to study more than just your body, and get a computer program to help learn the muscles, arteries, veins, and nerves. Don't forget to look at radiographs and pictures in your atlas about what muscles attach to specific points of the bones in that area.”

“For labs, get a group together who has the same work ethic and humor as you! This is necessary as you are stuck with them all year!”

“Med scholars is the key to doing well on the practical and back tests are the key to doing well on the written. Keep up with the material.”

“Gross anatomy was my toughest class because it was so demanding—and you really have to think spatially. Know that DePace can take a simple structure such as a vessel or even organ, and place it in an orientation you are not used to seeing. Have your group members quiz you as much as possible beforehand, and do not be afraid to study with other people in the class that aren't in your lab group, with a med scholar or tutor, or even by yourself, if you think it will help.”
“Don't wait until the weekend (or even

week) before the exam to start studying. You should really make the effort to stay on top of the material, as it builds very quickly over short periods of time. Find an atlas that works for you, but be aware of the great degree of variation that exists between cadavers. You should take the time to look at other bodies before the practicals, especially before the abdomen exam. Take the clinical case reviews seriously because there are always questions about them on the exams. Also, do as many of the back exams as possible, but don't solely rely on these as a means of preparation. Having some idea of what you are looking for before going into the dissections was also very helpful.”

“Everyone has a different methodology. Figure out what works for you and stick to it. Just because other people are spending 10+ hours in the lab before practical exams doesn't mean you have to. Many do just fine studying from Netter and/or Rohen.”

“Make sure you know your dissections, and general area of anatomy before you go into lab, or else you will be super confused. Being prepared before going to lab, I found was key to really absorbing the material. It will also help you ask the right questions to the teachers there. Make sure you ask many questions as possible during these lab sessions because as you get closer and closer to exam date everybody will have questions and it will be really hard to access the professors!”

“Take advantage of Med Scholars tutoring sessions.”

PHYSIOLOGY

RESOURCES STUDENTS USED:

- Course Website
- [Medical Physiology by Guyton and Hall](#)
- [Physiology by Dr. Costanzo](#)
- [BRS Physiology](#)

Medical Physiology is one of the most interesting and one of the most concept-oriented courses of first-year. While you have to memorize things, the course requires you to be thinking your way through every exam question. Quizzes help keep you on task and gauge if you're getting it or not, but do not always reflect the difficulty of the exam questions. The text Boron and Boulpaep is intense and most agree that it was too much. The course website provides tons of practice questions and usually some Powerpoints or figures as seen in lecture. Exams in this course are challenging—be prepared, email the faculty, as they want you to understand the material. As many exam questions are applied, know that questions maybe challenged and multiple answers may be accepted for some exam questions.

TIPS REGARDING PHYSIOLOGY FROM STUDENTS:

“The practice questions are not reflective of exam material. Make sure to know the lecture notes inside and out. BRS is really helpful, I wish I had known to use it earlier.”

“The amazing Dr. White will shepherd you through the body with help from a few other professors. This is one of the more concept-heavy classes with a lot of exam questions relying on your understanding of how everything interacts. Pay attention to the objectives at the beginning of every lecture and the study guides posted on the course website to focus your studying. Practice questions are a must. If you have time, I found Guyton and Hall to be excellent extra practice. Stay on top of this course because there will be a lot of lectures. Know your transporters and hormones.”

“Lecture notes are incredibly informative and lecture objectives are excellent guidelines for what is pertinent information, but lectures are more like the puzzle pieces necessary to build an understanding. The tests require you to complete this puzzle by integrating all the pieces. Rhoades and Bell textbook (rent from library) can help you INTEGRATE the material for the level required on the exams”

“Dr. White's lecture notes are amazing. Literally just study those and if you don't understand anything ask him. He will tell you what you need to know.”

“BRS Physio is a Must Have for the final.”

“For the final exam, print out the list of learning objectives for all sections and attempt to address all of them. If you can accomplish this task, then you can attain at least a highly satisfactory on the final.”

“Draw pictures, make charts, and talk it through out loud until it all makes sense. Once you can ramble it off without any help you are ready.”

“Do as many practice questions as possible, those given online, Guyton and Hall, BRS, etc.”

“Use the BRS Physio book at the library. Reading the chapter related to the current module early on helps you get a general understanding of what the unit will be like. Also read the related chapter when preparing for exams. This class is very conceptual and was the hardest for many people. Do practice problems when you have attained a solid knowledge base to be sure that you can reason through case -related questions.”

Dr. Moreland, when he teaches the muscle physiology section, pay very close attention to the wording of certain terms in the notes, especially if you are not familiar with them. When he teaches GI, pay very close attention to the powerpoint slides on transporters and know the finer details of them—they are posted on the course website for review and he expects you to go back and know those transporters cold.”

“Dr. Moreland acts very laid back during lecture and about the material but writes some of the hardest exam questions. Even if he says it’ll be easy, it won’t be.”

“Budget your time wisely for this course and don’t ever get behind on the material. It will catch up to you and take its toll on your other courses as well when you’re trying to assimilate new and old material at the same time.”

“The notes cover everything you need to know. Dr. White usually repeats verbatim from lecture so reading the notes itself suffice for studying.”

“Guyton was okay- only helpful problems for endocrine are the arrow ones.”

IMMUNOLOGY

RESOURCES STUDENTS USED:

- Dr. Larson's Review Material
 - You will get these in class at the appropriate time

*Immunology is a very integrated class; everything in the course ties in with each other and because of this, **this class is very front loaded**. The beginning of the course is very confusing because all you will be doing is memorizing facts but later they will all start falling into place and make sense. Don't be discouraged if at first it seems overwhelming, that's normal. Keep at it and ask for help when you need it; Dr. Larson is very approachable.*

The course is well-organized and the module notes will carry you through exams. Textbooks on reserve can be used for reference but most felt that although required purchasing one of the texts was not necessary to succeed in the course. The Parham and Kuby books were probably the most referenced books during lectures.

TIPS REGARDING IMMUNOLOGY FROM STUDENTS:

"Do well on the first exam. There are only two exams (the second is a not must pass final). If you do well on the first you've got some breathing room going into the second."

"DO THE PRACTICE EXAMS! Also, the earlier you can try to integrate the material yourself, the sooner you understand that immunology is more than just rote memorization."

"If you've never taken it, I highly recommend the book "How the Immune System Works" by Lauren M. Sompayrac. I never took Immunology before and it's a tough course in your first year. The book is not dense and gives a pretty good overview of the subject. It was especially helpful in putting together the "big picture" of everything."

"Use the appendices, review lectures, and cytokine charts provided by Dr. Larson. These are very helpful and high yield."

"Read the notes. Be patient, it will all come together in the end and make perfect sense after Dr. Larson's review lectures that integrates the material well."

"Immuno is very overwhelming at first, especially if you have never taken it before! If you struggle in the beginning, know that things will start to come together for most students mid-way through the course. The notes are very thorough and are enough to do well on the exams. The only reason to get a textbook is if you have never taken an immuno class before and need some background information!"

“Memorize the cytokines like there is no tomorrow. Everything is in the notes, ask for help if you don't understand something, and don't forget to study the labs!!”

“One class where nothing made any sense until I put it all together at the end. If you don't get it right away, don't panic and just keep going. It will all come together before the end.”

“Pay attention to Dr. Larson's integrated concepts reviews and exam reviews as early as possible before the exams. She explains major concepts that you need to get down in order to understand the finer details of immunology. Also, use the practice quizzes/exams as a guide to see how much you understand. Her conferences, though lengthy, are important and she can and will take quiz and exam questions from those conferences. Her quiz questions, in my opinion, were tougher than her exams. She can pick out very small, yet important details, so know your details if she is pointing them out in class.”

“Study the diagrams and pictures provided in the notes!! Quiz and exam questions are not necessarily from text but from pictures!!”

“Immuno can be a difficult subject, and tends to increase in complexity as the year goes by. Try to see the big picture

and use past exams to test your knowledge.”

“Keep up with the material – at first it may seem like a foreign language, but it will make sense as you progress.”

“There are abundant practice questions available that are indicative of how one will do on the tests/quizzes, so do them all. You may not see a gross-esque repeater, but you will see items that are eerily similar on the real deal.”

“This class is new for so many people, so it may be a good idea to pick up the Abbas or Kuby textbooks in the library to get an overview. However, even this may be unnecessary because Dr. Larson's integrative lectures and reviews are extremely comprehensive.”

“Don't be afraid to approach Dr. Larson during her office hours. She really helps you narrow down any difficulties you may be having with the material.”

“Keep up with the lectures and pay attention to detail. Make sure you get things clarified early on in the class if you don't understand something as the course builds on itself.”

PMR

RESOURCES STUDENTS USED:

- Nothing – Everything comes from the notes

Principles of Medical Research (PMR) is a course that almost everyone does well in. Dr. Gracely is an amazing lecturer and funny if you let him be. There are only about 110 or so points in the course so you really can't afford to mess any of the exams up if you plan on doing well.

TIPS REGARDING PMR FROM STUDENTS:

“There is an abundance of review material for this class, so take it seriously, but don't stress. Dr. Gracely's notes are extremely well organized and have practice quizzes with answers at the end of every lecture. If you've taken a statistics class before this, this class will be a welcome break.”

“Do the quizzes at the end of lectures and the practice exercises/exams. They are remarkably similar to the exams.”

“Make sure you know and understand all the definitions.”

“Do the practice exams even if you think the material is easy and you don't need it. That is the best way to make sure you know how he will test you.”

“Dr. Gracely attempts to be funny and he usually is. Get ready for some of the corniest and driest but best humor in the land. Take nothing and everything he says seriously.”

“Everything is in the notes, it's not hard at all to do well.”

“If you want to do really well make sure go hard in the beginning of the course—there aren't that many questions in this course. Everything he tests is in the notes and going to class was helpful, definitely do the practice tests he posts.”

“The course doesn't have many points, so if you want honors, make sure you get as many points as possible early in the course! If you miss too many early on, it won't be possible to obtain honors. Going over the notes and practice exams is plenty to do well on the exams!”

“Even though 10 people (if that) show up to his classes, GO just because he's a very entertaining instructor. Also, he advises DUCOM's Journal Club, a worthwhile discussion group that analyzes articles chosen by students. Check it out!”

“Don't bother watching PMR lectures...just review the notes and make sure you can do all the problems on the practice test.”

P&P

RESOURCES STUDENTS USED:

- Nothing – Everything comes from the notes

IFM Physician and Patient (P&P) is intended to introduce you to patient interviewing skills as well as the clinical setting and problem-solving. The P&P course involves you and a small group who meet frequently with a fourth-year facilitator and clinical faculty member. The course is a little touchy-feely but it is normally done tastefully. P&P is a nice palate cleanser from the rest of your studies. Typically you are assigned readings from the doc.com online resource and are required to complete a quiz as well as answer a mandatory “optional” question. P&P is a great reminders of what you’re doing here in the first place.

TIPS REGARDING P&P FROM STUDENTS:

“This class is a lot of things. It introduces clinical skills like interviewing and basic physical exam skills. You will discuss potentially uncomfortable topics in your small group. You will go to an AA meeting. You will visit a geriatric person and learn to communicate with them. And finally clinical frameworks are either hit or miss, but always remind you why you decided to go to med school in the first place. While the scheduling can be annoying (especially at exam time) this class will be worthwhile.”

“Usually common sense but know what the terms mean and symptoms for the few diseases/conditions they talk about.”

“Be active in your small groups and prepare for standardized patient interviews and you’ll put yourself in good position to achieve Honors.”

“Get the best grades you can on the written module exams, but they are only worth 15%. Focus on the midterm and final standardized patient interviews.”

“Remember the Clinical Framework Portion of your grade only makes up a small percentage of your overall grade. Don't stress.”

“Since the P&P lectures correlate the best with the module theme (e.g. chest pain) you will have the knowledge to answer most of these items from studying for other classes in that module.”

“Be prepared to meet due dates for geriatric requirements or go to Hahnemann/Abbingtion at difficult times (e.g. during weeks with exams).”

NEUROSCIENCE

RESOURCES STUDENTS USED:

- [Course Website](#) (*Bookmark This*)
- [Nolte's The Human Brain](#)
- [USMLE Road Map Neuroscience](#)

*Neuroscience is one of the most challenging and interesting. It starts out very strong as there are numerous resources available particularly for the first few exams. The USMLE Roadmap is virtually the course syllabus and often has better diagrams than what is in the notes. **The course website is one of the most valuable resources for this course. Take the time to get familiar with it, it will pay off.** The slides shown and labeled on the website are those used for practical exams. The course gets more and more difficult as it progresses since most of the material builds on previous material. The entire course is cumulative. Review sessions, whether by Dr. White or other faculty during labs, are critical to grasping material.*

*A common issue with Neuro is getting inundated with the amount of resources you get, lectures, lecture notes, tutorial, the course website, and any book you may have. Pay close attention to the top of every lecture handout under "Resources" and if there's a tutorial listed on there, then absolutely do it before you go over the lecture; it will make way more sense. **TUTORIALS ARE KEY.***

TIPS REGARDING NEUROSCIENCE FROM STUDENTS:

"This course, if you haven't had exposure to neuro before, will initially be very overwhelming. Just learning what things are called will be a challenge. The course website is a necessary tool, since they have excellent tutorials that walk through the material as well as pictorial slides of parts of the brain. Keep up with lectures and pay attention to the notes. The professors are always happy to answer even the (seemingly) dumbest questions and are enthusiastic teachers."

"Neuroscience is definitely a class that builds on itself so make sure to stay on top of everything early."

"It's all about those tutorials! Do them once. Do them twice. Do them a third time. Then do the questions as many times as possible before the exam. THEY DON'T ALWAYS REPEAT but they are definitely indicative of exam-like questions."

"Everyone says to do the tutorials. The tutorials will help you get at least a 70%. However, if you want to do well in the class, you cannot ignore the lecture notes. These are vital!"

"TUTORIALS, TUTORIALS, TUTORIALS. The website is magical."

“The notes are dense and hard to follow at first so it may take you a couple passes.”

“Go to every lab to get the bonus points. There were 5 bonus points our year, and they definitely help if you are borderline for a particular grade. Study the lecture notes first, and use the tutorials as a review guide. The test questions all come from the lecture notes. Back exams are no longer posted, but if you can get a hold of them they are definitely helpful as some questions are repeated. There are only 3 exams in neuroscience so take each one really seriously if you are trying to do well in the course.”

“The tutorials are extremely helpful for succeeding in neuro, sometimes they are much more clear than the notes! Take the practicals seriously, they are most often more tricky and more difficult than the written exams.”

“Neuroscience is definitely a class that builds on itself so make sure to stay on top of everything early.”

“The class starts with a lot of information but do not worry about understanding everything right away. Focus on the spinal cord for the first exam and everything else will fall into place as the course progresses.”

“Do not get behind on the tutorials! They have a lot of information in them and it is helpful to use them as a supplement to the module notes. Study seriously for the practicals - they can be hard to get the hang of because you have to be able to recall a lot of information in a short time.”

“Be on top of your tutorials AND lecture notes. All test material will be taken out of lecture notes, but tutorials are really there to help you UNDERSTAND the material if you do not get something. Tutorials, I’ve learned are necessary to do well on exam, but not sufficient by themselves. Also, dive into the backtests as early as possible. You don’t have to completely understand the material before diving into the backtest. Best way is to have an idea of what is going on and learn while you do the problems on the back test.”

“Tutorials are great for the concepts, but the questions for the written exams will come almost word-for-word from the written lecture notes. Use the tutorials more to get the concepts down, especially the pathways tutorial, and to test yourself before the practicals with the quizzes. Also make sure to utilize the annotated quizzes, older quizzes, and practical quizzes. Dr. Shumsky repeats several questions from that bank for exams. Also, know every dot on the slide atlas and constantly know the significance of each section/dot in the slides and how that structure (ex: tract) might appear on a different slide.”

“The tip to doing well in this class is the practice exams. Do all of them on the website and blackboard. Many of the questions will repeat or there will be many similar questions.”

CEE

IFM Community Education Experience (CEE) requires of first-year students time spent not studying but instead engaged in a substantive project focused on educating parts of the community on various aspects of medicine and health. This is a course for which you are assigned a grade and is not optional. Some CEE projects are more time-intensive than others and this is noted in your dean's letter.

This course is often described as a welcomed break from studying since you are mandated to complete this community service. Make sure you research the CEE that you sign up for because if you choose one that doesn't suit you, you will dread Wednesday afternoons. This is typically a love-it or hate-it kinda thing.

TIPS REGARDING CEE FROM STUDENTS:

“Community service can be a fun break from studying or it can be an excruciating time away from much needed studying. This also lets you have Wednesday afternoons off for the rest of the year!”

“Have fun!”

“You don't need help with this class. In fact, I question why this is even here.”

“Keep up with the work.”

“Pick something you are interested in and it can be really fun! “

“Don't be suckered by the yearlong CEE, brown bag lunches are so much better than many more CEE sessions, unless you really like it!”

PIL OVERVIEW

The BLOCKS:

Block I + II – Gross Anatomy, Embryology, Genetics, Microanatomy (aka Histology), Physiology, Neuroscience

Block III – Microbiology, Immunology, Genetics, Biochemistry, and Nutrition

Block IV - Primary Care and Community Practicum (PCCP), Community Health Component (CHC), Pharmacokinetics

- * You will work in a primary care practice or Emergency Department to apply what you've learned in a clinical setting
- * You won't have class during this 7-week period, but you'll be preparing case reviews and studying pharmacokinetics on your own

Additional instruction/exams, interspersed during the year:

Medical Ethics
Statistics
Behavioral Sciences
Clinical Skills
Geriatric Experience

Two Individualized Process Assessments (IPAs): Block II and III

Oral presentation, where you will present and discuss a case with a member of the faculty. Tests your ability to gather information, make the differential diagnosis, and then explain your hypotheses to a faculty member. You will also recommend treatments and rehabilitation wherever suitable.

Cumulative Pass/Fail exam at the end of the year

The Basics

You'll meet with your group of 7-8 students three times a week, along with your faculty facilitator who may be a clinician or a scientist.

You'll be in a different small group with a different facilitator each block.

At the end of each group session, your group will come together and decide what you don't know and what you want to know more (i.e. "Learning Issues" or "LIs").

Your group will assign the learning issues among its members. Each member then pursues

his/her assigned LIs. When the group meets again, all the information is shared and integrated so everyone has a better understanding of the case.

Your facilitator will steer you in the right direction to make sure you don't spend your time pursuing Learning Issues you don't need to know. Your facilitator also serves as an information source you can turn to if your group is stuck.

PIL Exams

The usual components:

- 1) Multiple choice questions
- 2) Essays

What can you learn from small groups?

Clinical context of basic sciences
Working effectively with other people
Differential diagnoses
Interpreting lab values
Gathering and integrating information
How to present information
Treating a patient as a whole person
CONFIDENCE

What is the Individualized Process Assessment (IPA)?

DAY 1

- Pick up your case from the PIL office at a scheduled time
- Take the case to an assigned room, where there will be a medical dictionary and an anatomy atlas
- You will have one hour to read the case and write down the relevant information
- Once you've gathered enough information, you'll have to make *at least* three hypotheses (which don't need to be the "correct" diagnosis) and rank them according to likelihood. You must be able to explain why you picked these hypotheses and why you think one is more likely than the other.
- You will be given 24 hours to do research on the case. You may need to re-rank your hypotheses and/or come up with new hypotheses all together.

DAY 2

- Review the case with a member of the faculty, presenting your research and defending the three hypotheses that you've finalized.
- In addition, each student is required to read and prepare at least one primary science article that is relevant to the case.
- PIL Resources

- There are two PIL-only rooms on campus - the PIL resource room and the PIL library - which all PIL students have access to using their student ID. The PIL resource room is equipped with a refrigerator, coffee Keurig machine, copy machine, PIL small group folders, medical dictionaries, and a fun picture wall! The PIL library is a small room with a couch, table, and a plethora of textbooks that students can check out and use throughout the year.

OVERALL ADVICE

“Group can be a little difficult with anatomy. Just grin and bare it, it gets better and makes a lot more sense in block 2 and 3.”

“This goes by fast. Enjoy your first group. Even though it seems very hard at the time, this is the easiest block of the year. Use the free time to do something fun. Studying for microanatomy can get boring so switch between gross and micro, but be sure to quiz yourself about the different aspects of an organ when you study it (i.e., when studying the gross anatomy of the gut, think about the microanatomy of the enterocytes). For embryology, read the textbook and use the embryology site. The lecture notes do not seem
"PIL is a unique curriculum and it takes some getting used to, but once you do it can be a lot of fun and is a fantastic way to learn!"

"Most small groups grow to become really close and comfortable with one another. It's really common to have "Food Fridays" or "Munchy Mondays" where we would take turns bringing in food for the rest of the group. A lot of times we would also have a group dinner with our facilitator at the end of the block."

PIL-SPECIFIC GUIDELINES

Please keep in mind that these advices were collected from past PIL-2 studentsL- who went through a different academic schedule scheme than the current PI 1. The changes that were made are clearly explained in the paragraph below which is *written by Dr. Russo*:

- There are some significant changes coming to the first two blocks of the PIL curriculum. In previous years, PIL Block I focused almost exclusively on the anatomical sciences - Gross Anatomy/ Embryology and Microanatomy/ Cell Biology. Both courses started and finished within the 2 ½ month Block I timeframe. Block II was divided between Neuroscience (first half of the block) and Physiology (2nd half of the block). This format had meant that students could focus intensely on each subject but left little time for integration and both students and faculty felt that the pace of the courses was much too quick.
- The new integrated Blocks 1 and 2 format allows for increased integration across disciplines, and will allow students the time needed to synthesize the information received in each discipline and explore the connections between them. The Anatomical Sciences will span the two Blocks entirely, and thus will be spread out across 5 ½ months. Similarly, Physiology will be taught sporadically throughout. Neuroscience will still be given in a relatively concentrated time frame so that it will be finished at the end of Block I, but it is presented in an integrated manner with Gross Anatomy (overlapping mostly with the anatomy of the head and neck), Microanatomy and Physiology. The order of the cases has been completely revised; new cases have been added and some have been removed. Each exam covers material from multiple disciplines, thus each exam covers a narrower range of topics within each discipline.

Just for PIL – From Students

“Your facilitator has a list of learning objectives that s/he’ll make sure you cover in your learning issues. Make sure you are covering everything you need to.”

“Refrain from making broad learning issues and/or learning issues that having little to do with the case. These can take up a lot of your time, which should otherwise be spent learning things that you’re going to be tested on!”

“The Physician Desk Reference is an excellent resource on various drugs and medications and Harrison’s Principles of Internal Medicine is another gigantic tome of knowledge that covers pretty much every disease under the sun.”

“Robbin’s Pathological Basis of Diseases is a pathology textbook that has very good explanations for diseases in pathophysiology.”

“Toward the middle of the year, you’ll receive instruction (and an assignment) from the librarians on navigating Ovid and Pubmed. It might be beneficial to learn them earlier.”

“Lectures are available on streaming video, however, Resource Sessions are great opportunities to interact with your instructors, your classmates, and ask *your* questions.”

“You might want to follow the two-weekends-rule: start studying for your exam *at least* two weekends before test date and *on top* of your regular studying. Just because you’re reviewing for your exam, that doesn’t mean you can ignore new materials coming your way. If you ignore new materials, you might find yourself in trouble on the next exam.”

“If I had to do it over again, I’d organize the packets of notes I received for Resource Sessions by subject and it’s also helpful to subdivide each subject by cases. I’d want separate binders for Clinical Skills, PAP (statistics, health insurance, etc), PCP, and a binder for Psychology.”

“I’d save the Case handouts (including Learning Objectives and Integrated Science Questions) in a single binder for each block.”

GROSS ANATOMY & EMBRYOLOGY

TIPS FROM THE FACULTY:

The Gross Anatomy course is paced fairly evenly through Blocks I and II as it integrates with the other disciplines. It begins in a traditional way, with an emphasis on early embryology and a regional approach to the dissection so that students begin with the back. From there, dissection will proceed to the limbs. Students should be aware that dissection of the head and neck comes early in the course, so it will be necessary to hone dissection skills early on as this region can be very challenging. Embryology is largely taught through self-study modules available online.

Special Word from Dr. Depace, the Course Director:

The key for success in Gross Anatomy is to keep current on the information. Use the posted objectives as a guide for what material will be on the examinations. Prior to coming to lab, it is important to pre-read the dissector to know how to approach the dissection. Frequent review of the lab material is the key to preparation for the lab practicals. It is important to have and use one of the recommended texts for images and more detailed information. I hope this information will help everyone get off to a strong start.

TIPS FROM THE STUDENTS:

“Moore's Clinically Oriented Anatomy all the way. & know the old practice exams (correct and incorrect answers) like the back of your hand. They're extremely helpful! Also, don't slack off 2nd half of PIL Block 1 in the gross lab, otherwise the end will be a complete nightmare.”

“Seeing as PIL students take Gross in only a few months, you can survive with only one pair of scrubs, max two. Definitely, definitely find yourself a good atlas that you like. I personally love the Gray's Atlas because it's less cluttered than Netter's.”

“Fight through it. One of the hardest classes since it's the first class you have (in PIL). Make sure you keep revisiting the anatomy throughout the year and add to the topics covered. Study the theory early on and make sure you can identify parts on everyone's cadaver. A good way of studying is to go through the review list, make sure you can identify the body part and then quiz yourself on the theory behind the part (all in the cadaver lab).”

“Everyone is going to tell you that you only need to know what is on the RS notes. Hogwash. Use the IFM practice tests. Do all of them.”

“Get Netter’s and Rohen’s and use them side by side. Skim the blue pages in Moore before the exam, it covers a lot of good clinical problems.”

“Spend time with a group of people in the lab, learning the practical as you go.”

“You need to work hard for this course because it’s a lot of material over a short period of time.”

“Listen to Dr. DePace because he makes the exam and he points out a lot of what you need to know for the exam.”

“Use IFM gross practice questions. Do as many as possible.”

“Drawing and coloring are excellent ways to learn anatomy. Your drawings don’t need to be superb. But you should know enough details about a part of the body to *sketch* it.”

“A muscle’s origin and insertion will almost always tell you what it does. Try to visualize the three dimensional anatomy in your head.”

“Spend as much time in the lab after hours as you can. Talk through perfusion, innervation, and anything else with study buddies.”

“Let Dr. DePace know ASAP if you are having difficulty. I got a tutor, too, which helped me calm down a bit!”

“Remember that the point of knowing embryo is partly to understand what can go wrong with anatomy when it does not develop correctly. Make sure you know the diseases that are emphasized in lecture, i.e. the Tetralogy of Fallot will come back again and again...”

MICROANATOMY & CELL BIOLOGY

TIPS FROM THE FACULTY:

The Microanatomy course follows a traditional approach with a primary focus on cells and tissues in the first half, and organ systems in the second half. The pace of the course varies depending on the other courses with which it is integrated. Microanatomy is intensive for the first part of Block I and then picks up again in Block II. Much of the cell biology curriculum is taught through self-study modules presented at the beginning of the course, and referred to frequently in subsequent cases. Students without previous exposure to cell biology may wish to do some self-directed learning on the subject in advance, and can access the PIL website for information on suggested resources.

TIPS FROM THE STUDENTS:

“Make sure to look over the online lab reviews before attending lab. It's a lot, but you'll get a lot more out of the lab that way.”

“Everything you need is in the notes and on the online portion of the course.”

“Use the videodisk early. The manual has a lot of information and reads a little easier than the labs, and the images are used in the exams. Studying for microanatomy is best done with a group of students so you can quiz each other.”

“Know the obscure images (as well as the ones you see in lab). Use the small group time to go over the images as well as the descriptions.”

“Schedule an appointment with Dr. Goldman for microanatomy to go over the material, she's really helpful.”

“The information from this block may seem overwhelming at times, but use the outlines to keep you grounded.”

NEUROSCIENCE

TIPS FROM THE FACULTY:

Medical Neuroscience is a fast paced course integrating neuroanatomy and function with clinical concepts that lead to diagnosis of clinical conditions. The knowledge is cumulative (what is learned one day is necessary to understand the material presented the next day). A number of online resources (brain atlas, tutorials, diagrams, quizzes...) are provided to facilitate this process. The central nervous system is introduced as a series of interconnected black boxes and a main objective of the course is to reveal the neuroanatomical content of these boxes and learn how they work together. As the students learn about brain structures, functions, pathways, lesions, and symptoms, they progressively acquire a 3-D representation of the brain. They learn how to put together this information to understand how clinical symptoms are produced and from where they originate. PIL cases, learning objectives, self-study, tutorials, self-assessments and guide to resources and exams are designed to pave the way to this goal.

TIPS FROM THE STUDENTS:

“Get acquainted with the neuro website early on. The tutorials are really the majority of the information you need to know. The written and practical question banks are also EXTREMELY helpful. Do them over and over again, understanding why certain answers are correct and why certain ones are incorrect. You'll be golden. Also, the neuro professors are phenomenal, so go to them with any questions. Especially Dr. Sessler, he'll sit down with you for hours and walk you through things if you're that lost.”

“The fastest class of the year. It's not the hardest but definitely challenging. Ask Dr. Sessler for help as soon as you recognize you don't understand something. Use the tutorials and the website - they are very well developed and incredibly useful. The time limits on the practical exam are always daunting but actually pretty feasible once you're taking the exam - don't stress about that too much.”

“Using the online resources is key. There are plenty of practice questions and some really great tutorials to help you master the material. I liked using the book because I was very interested in the subject, but its definitely not needed to do well.”

“Do the tutorials online.”

“Let Dr. Sessler guide you through the course because he'll emphasize the points that are really important.”

“Use the neuro website, it's great. Make sure you click on

EVERYTHING you can. Something that seems like it leads you to the same place as something else might not and actually contains new info.”

“If you don’t go to lecture, make sure to watch the last 10 minutes or so when the professors go over practical slides. Drill them over and over.”

“Buy a review book and use the course website. Do every practice problem you can find and go over the tutorials more than once.”

“This focused science is one of the most clearly presented sciences in the first year.”

“I would suggest doing the practice questions as much as possible. Most of the exam questions draw directly from the practice questions in the tests and end of tutorial quizzes. Also try and draw the pathways from memory on the board .”

PHYSIOLOGY

TIPS FROM THE FACULTY:

Medical Physiology is designed to provide medical students with the fundamental information and integrative concepts about major organ system function that are most pertinent to the fields of clinical and academic medicine. Medical Physiology contains a large amount of information and many difficult concepts. The learning objectives will help you focus your studies. You answer these learning objectives and retain salient points by attending resource sessions, reading the textbooks, participating in case sessions, doing practice problems, and explaining physiological concepts to each other in small study groups.

Special Word from Dr. White, the Course Director:

- 1.) The Learning Objectives at the beginning of each lecture/resource session provide the take-home message for that session. Exams are written with the learning objectives in mind. Review them before you attend the lecture or watch the video- it will help focus your attention.
- 2.) Use the practice questions to test your knowledge as you go along- don't wait until right before the exam to realize that you don't understand a major concept. Try doing questions in blocks of 10 giving yourself 15 minutes- that will test your knowledge under test-like conditions.
- 3.) If you are confused about something, the sooner you seek help (Dr. White, classmates, tutors) the better- concepts build on one another.

TIPS FROM THE STUDENTS:

"Know EVERY learning objective."

"Use the BRS or Roadmap to review as you go and then use the Costanzo textbook to get more in depth information."

"The BRS review cases/problems for physiology are a great review. Use them to study."

"Be sure to spend some time answering the course objectives as if they were short/long essay questions, that is a great way to prepare for the test."

"Make sure you understand all the graphs well enough such that you can draw them from memory."

BIOCHEMISTRY

TIPS FROM THE FACULTY:

Special Word from Dr. Jameson:

My general advice is to read the lecture notes and listen to the lecture. After the lecture, put everything down and re-construct the most important points. Start putting in detail so that it makes sense. I like to think about this as studying from the top down (build a big picture and then fill in the details). Clearly, there is a qualitative difference between studying for microanatomy and biochemistry. In microanatomy, they will tell you what you need to know (know it and you will do well). In biochemistry, know the major points (don't get hung up in all of the details). In biochemistry, you will need to know the steps that are regulated, anything where a surplus or deficit results in a pathology, and any major drug target.

TIPS FROM THE STUDENTS:

"Lippincott is the best review book to get (considering the book editor is our course director). Know the notes inside and out. It seems like a lot, but it's definitely do-able if you put the effort in. Also, do the practice quizzes AS YOU GO ALONG. They seem like a lot, but you'll get a feel for what areas you're weak in. & finally, the Berg Biochemistry book is great to fill you in with more details, and is a really easy read for a big text."

"Pay attention to all of the pathways. Dr. Ferrier gives a studying method that stresses the start and end products, rate limiting steps and energy requirements. Do this for all of the pathways that you learn. For the longer lectures like lipids/cholesterol, break them up into one hour slots and review each part of the lecture before moving on."

"Know the 'when, where and how (i.e. the committed step) for all the processes you study."

"Dr. Ferrier is one of the best teachers you will find at Drexel. Unfortunately she doesn't teach every RS. Buy a sleeping bag and make her office your new home."

"Try and draw out the pathways on the board from memory without cheating. This will help you answer the essay questions."

NUTRITION

TIPS FROM THE FACULTY:

Special Word from Dr. White, the Course Director:

- 1.) Link Nutrition concepts back to the underlying physiology and biochemistry- this will explain both nutritional needs and pathologies associated with deficiencies and excesses.
- 2.) Work through the practice questions on the LEARN site and Netrition- Nutrition is an applied science, and these questions (as ones on exams) often are more clinical in nature, requiring you to recognize what symptoms mean.
- 3.) That table of Numbers to Know - you do need to know those numbers

TIPS FROM THE STUDENTS:

"Nutrition is completely online, but it is still a very difficult course. Make sure you know the material front to back because exam questions are often very tricky."

"Don't discount this class. Probably the most important of the year in terms of clinical utility I patients are frequently counseled about diet and nutrition. Dr. Swaney is pretty fair with the questions. As he states, memorize the deficiency tables and be familiar with the topics.

The questions tend to be integration of several nutrition topics rather than identification type questions."

"Do the self-studies as they come: DO NOT wait to do them later – you'll be overwhelmed."

"Be sure to do the practice tests provided."

"Nutrition is combined with Biochemistry - you will get one combined grade for both classes, so know your nutrition because these are easy points you shouldn't be losing."

"Dr. White is the new nutrition course director. His questions are very fair and not overly complex. Just be sure to actually memorize the "numbers to know" table and be comfortable with the practice questions."

IMMUNOLOGY

TIPS FROM THE STUDENTS:

“Remember, 65% is passing in this section. Exams are pretty challenging. Don't slack off, but as long as you pass the entire block of IGM (Immuno, Genetics, and Microbiology) overall with a 70%, you can still get a 65% in Immuno in pass. Also, if you're struggling, GET HELP FROM LARSON ASAP. She's a lot better one on one.”

“Know the cytokines and all of the figures!! Toward the end of the class, make sure you can integrate all of the aspects of immunology. Although only the second half of the class is tested on the second exam, the questions require you to know the topics covered in the first half. Understand how the different parts of immunity work together.”

“Beware that the End-of-Block exam is more of a comprehensive exam. More than half of it focuses on the mid-block material, especially the cytokines! The comprehensive exam covers essentially the exact same stuff as the end -block exam, so at least studying for that is straightforward!”

“Live and breathe your lecture notes and the review handouts and appendices that Dr. Larson gives out.”

“You will learn the majority of the immunology before the first exam: it's a lot but keep up with it – the second half of the block will be that much easier.”

“Be sure to look through your notes during spring break just to keep the info fresh: you'll need it to build upon when you get back for the second half of the block.”

“Memorize the cytokines and what they do.”

“Buy or check out Basic Immunology – by Abul K. Abbas; Dr. Larson recommends this book at the beginning of the course...listen to her! Start reading this ASAP alongside your notes, it is extremely helpful and makes a big difference if you've never taken Immuno.”

GENETICS

TIPS FROM THE STUDENTS:

“Don't blow off Genetics due to having so little material compared to your other Block III courses. It's a straightforward course and you can go up a letter grade simply by doing well in the class!”

“I remember the written portion of the Genetics exam to be one of the hardest — remember your Southern Blot and PCR: they don't magically go away.”

“Just use the notes. If anything is unclear, ask Dr. Larson. The textbooks aren't very useful since they give much more detail than is needed for the class”

“Same thing as immunology – live and breathe your lecture notes.”

“Go to the independent learning workshops and email Dr. Larson to go over things you didn't get.”

“In block I, you get the basics/introduction of genetics; I'd encourage you to make sure to visit Dr. Larson to learn to figure out the notations.”

MICROBIOLOGY

USEFUL: BRS Immunology/Microbiology

Roadmaps Microbiology and Infectious Diseases

The PIL curriculum introduces microbiology toward the end of the first year, introducing concepts to be built on in the second year. Students were introduced to viruses and bacteria as well as Gram staining and other lab techniques. In addition to the BRS book, lecture notes sufficiently cover material required for evaluation.

TIPS FROM THE STUDENTS:

“This is a very basic introduction to microbiology. The lab was not very useful, although mandatory. However, in second year, you will not be introduced to the three model organisms again, so make sure to learn them well now - you will need to know them in the future.”

“Dr. Russo's notes are very basic. I would highly suggest you go to the lecture just to hear her lecture (she is very engaging), and then go back and fill in the details she didn't include in her notes.”

“Try to tie in Immunology with Microbiology as much as possible. This will help in integrating the material and remembering what type of immune response a bacteria, virus, fungus, etc. will occur.”

“Dr. Russo likes to test you on the little details in her notes. Also her notes do not give you much room to write notes, so come prepared with another sheet of paper, and watch the lecture again.”

“Focus on exactly what is given for the review.”

“Enjoy the intro! It's fun.”

YEAR-LONG CLASSES

COURSES: Behavioral Science
PAP (including Statistics)

Behavioral Science

Special Word from Dr. Verma, the Course Director:

Behavioral Sciences course runs through the first two years. My general advice is to make sure that you look at the Behavioral Science learning objectives in each case and discuss it in your small groups. The other thing that I would strongly urge you to do is to ask questions - during the resource session, after the resource session, during exam review sessions and if something else needs a clarification, use the Bulletin Board. Ask, ask ask... You will not be able to clarify your doubts if you are following the recording of the Resource Session.

TIPS FROM STUDENTS:

“Go to the BS reviews before the exams”

“While Dr. Verma’s Resource Sessions are informative, definitely make sure you go to the Review Sessions — he basically tells you what he will test.”

“This is the one class that everyone thinks they’re doing worse than they really are. Hash out the answers to the review sheets and don’t get discouraged.”

Statistics (component of PAP)

Special Word from Dr. Gracely:

The statistics component of PAP introduce the statistical and research methods background a physician needs to use research as a part of evidence-based medicine. Most students do well and I don't make the material needlessly tricky or difficult. I emphasize methods and concepts relevant to applications and reading the literature, as well as basic numerical methods (like survival rates or clinical test statistics) widely used in medical reports. I tell jokes and occasionally even do a magic trick!

One critical characteristic of successful medical students is effective time management. This is especially important for smaller courses like mine, which may be forgotten or put off to study for larger courses. Bad idea! Plan enough time, and structure time in advance, so you get to all of your classes. It's also difficult to cram for a concept-intense class.

PIL classes are more spread out, so that you may want to review material from previous classes before entering a new one, even in a different case/block.

With challenging material like mine, which involves more concepts and less

memorization than most other courses, self assessment (also a key characteristic of successful students) becomes especially important. Can you put away the notes and explain the concepts? Can you define the terms and apply them? Can you perform the calculations under exam-like conditions? There are exercises with the handouts, and sample exams. Use them to assess your skills and knowledge. Don't just learn the answers -- that's a recipe for failure, since the actual exam questions won't be identical. Be sure you understand the concept or method involved.

Finally, USE what you learn. Take note of the results sections of articles you encounter. Read the methods -- critique them! Take note of terms and concepts you learned from me and review them. You may also want to attend some sessions of our epidemiology journal club.

I'm readily available by email. Since my PIL sessions are more spread out (over 2 years) there are no review hours, but I'm happy to answer questions.

TIPS FROM STUDENTS:

"Just read through the notes and do the practice exams. One of the easier/straight-forward classes of the year."

"Dr. Gracely is very clear with his expectations. You will do fine if you can answer all of the practice problems he puts in the RS notes."

"On the calendar the lecture has two attachments with it. The first is the notes he gives you in lecture, the second is a set of practice questions. Don't ignore the practice questions, they emulate the test questions."

Patient as a Person

TIPS FROM STUDENTS:

"Now that I have finished first year, I wish I had kept a separate binder for all the PAP courses, instead of keeping them sorted by Block."

"For bioethics, prepare for the test by finding the lecture notes (on the course website rather than the calendar page) and the recommended textbook. DO NOT USE THE NOTES HANDED OUT. These are more for discussion purposes than learning."

"For ethics, as direct, factual questions because their test questions often don't match with what was 'discussed' in lecture. Sometimes they go off topic."

"Topics of discussion in ethics are great, but testing is terrible. Often times the RS objectives aren't covered in the RS, so the onus is on you to learn the material."

"For clinical skills: Practice, practice, practice. Use PCP to really hone in on these skills."

PCCP & COMMUNITY HEALTH COMPONENT

TIPS FROM THE STUDENTS:

“Best part of year 1. This block makes all that hard work you put in blocks 1-3 worth your while.”

“It is really best to walk into a potential preceptor’s office. I was emailing/calling potential preceptors and got very little response. It was when I walked in that I got results.”

“Have fun! By this time you've completed the first year and use block 4 to review the topics of first year and add a little to your knowledge base. Be able to integrate the basic science into the clinical cases that you see. Also, use this time to learn more about the aspects of medicine that are not formally taught, like interacting with other health professions, working with patients, understanding how money affects healthcare delivery, etc.”

“Use the PIL office and think of your old doctors to find preceptors.”

“Don’t expect to be able to do everything but definitely do what you can and learned, challenge yourself, and make sure to watch and listen. Your preceptor will have lots to teach you.”

“Try to design your learning issues so that you’re able to review a broad portion of the focused sciences as you go”

“If you go out of state, be sure to have internet wherever you end up – the online health sciences library e-books are a wonderful and indispensable resource in preparing the learning issues; this is in addition to your own textbooks (if you purchase them).”

“If you want to do really well, depending on the site where you are, do a comprehensive case each week and be complete with it. The faculty reviewers want to see how well you do on your feet, so the better you know your case and learning issues, the better you’ll do.”

“This isn’t really a vacation, it’s actually pretty intense.”

“It takes a lot of time to set up a site you really want, because doctors are busy, so plan this

out accordingly.”

“Be friendly to the staff you work with.”

“If you want to go out-of-state, contact Alumni Relations! They will help you so much.”