



JUMC Survival Guide MD 2/6

2021 – 2022

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Introduction

You've made it through 1st year of medical school and if you made it this far, you have what it takes to take on the next five years. You have now been through the basics, started to learn the language of medicine and hopefully you are well on your way with discovering the study techniques that work or don't work for you. This should make the next years easier for yourself, but there is still a lot to learn.

Second year of medical school is another academically challenging year. We in StudyAid want to repeat some of our study tips to keep you on top of the game, as much as possible.

Disclaimer

Do not solely rely on this Survival Guide for passing rates for exams and number of absences. This can change without us knowing.

Section 1 – General Study Tips

I. Study clever

- The clue is not how long you study, rather how efficient you are while you study.
- Study in short intervals (approx. 45 minutes) and then take a 10–15-minute break.
- Use these short breaks wisely: your brain relaxes a lot more if you take a breath of fresh air, do a quick stretch, or get a snack, rather than scroll through your Instagram feed.

II. Take breaks and take care of your mental health

- You will have long days in the lecture halls and reading room, and you will get exhausted. Therefore, it is very important that you take some time off.
- Find something you enjoy and set aside time to do it: doing sports, being social with friends, playing music, cooking, etc. If you don't find a balance between studying and taking breaks, you risk burning yourself out.
- Being active is very important as you will be sitting a lot, and there are a lot of ways to do this here in Krakow; a walk around Planty or by the river, doing yoga, playing soccer, or join a lesson at one of the fitness centers.

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III. Remember to focus on your own achievements

- You might feel that everyone else is studying more than you, getting better grades than you and in general are much smarter than you. This is very normal! Usually this is only in your head and everyone else thinks the same way about you, but you are also now in an environment where everyone is at a very high academic level, and this is something you have to learn to cope with.
- Focus on yourself and compete against yourself rather than others.

IV. Get a good overview

- Read through each syllabus for each subject thoroughly.
- Note down how many absences you have as having too many absences can result in you actually failing the subject – especially now that more classes are obligatory.

- Check how many points you need on each mid-term, what the percentage is for passing and how many retakes they offer. The points and passing percentages we mention in this survival guide are just based on previous experience and may vary. You are responsible for finding out the exact points and passing percentages for your year.

V. **Don't be fooled by the weeks without exams**

- This is the big difference from your 1st year, where you always had the next exam to prepare for. This year you will have two main exam periods at the end of 1st and 2nd semester. You therefore must be more self-disciplined and constantly study and review material each week.
- There is a lot less you must study during the first semester compared to the second. Make sure that you have an even workflow during the first semester so that you are not overwhelmed by the second one.
- Create a good baseline to work from when exams come. There is a very large amount of material to be learned in this year as well and it is crucial to prepare for classes, take notes, do some questions each week, make flashcards and practice them regularly. This will really save you when exams start piling up during the spring semester.

VI. **Anki**

- Many of you are probably well on your way with using anki, and you are probably seeing the benefits of it. For those of you who are not familiar with anki, we will write a short intro to what it is and how to use it here.
- In short, anki is a flashcard program you can download on your computer. You can make your own cards, but one of the best features is that there are hundreds of premade, high quality "decks" of flashcards already made for you to use. This saves you the time of making your own flash cards, so you can go straight into the process of retaining the information.
- Anki's algorithm is based on spaced repetition, which is proven to be one of the most effective ways to get information from your short-term memory to your long term memory.
- When you start a new deck, you see your first flash card. When you press space, the backside of the flashcard is revealed, and you can choose how difficult you thought the flashcard was to you. This allows the program to decide when you need to see the card again to not forget it.
- Anki should **not** be used for cramming for exams, but rather as an everyday routine to retain the information you're learning. Try to create a routine where you get through your review cards every day, and on the days, you learn something new you do new cards. We recommend getting your reviews done first thing in the morning or when you start studying, to make sure it's prioritized.
- If you give yourself some time to try this on a regular basis, you will soon see how much more you will retain, and this will save you a lot of stress on exams.
- When you are looking for decks, google the subject you want and check if there is anything already made. If you want to make your own, I suggest watching some YouTube videos on how to do it properly (i.e. how to make flashcards that are actually possible to remember long term). You should watch some YouTube videos on how to use anki anyways if you are completely new to it.

- Anki should **always** be used when you are watching Sketchy or Pathoma (there are many premade decks for these classes). If you do not use anki with these sources, you are wasting your time.
- It is also worth checking out the anki decks made for USMLE Step 1, for example “Zanki Step”. They have a lot of subjects that we go through at JUMC and can be helpful (there is some immunology there for example).

Section 2 – Pathomorphology

2.1 – Sources

2.2 – Structure of the Course

2.1 – Sources

I. Pathoma: book + video lectures

- Good resource for building a solid foundation and for reviewing before exams.
- You can get the book from the printing office in the anatomy building.
- Pathoma works best if you use it in combination with anki. Being disciplined with reviewing with anki will give you a *big* advantage when exams come around.

II. Seminar slides

- These will be very important. The exam questions are often detailed and they can contain information that seems very unimportant when studying. The positive side of this is that usually the answer to the questions can be found in the slides.
- We recommend using the slides in combination with Pathoma

III. Robbins Basic Pathology

- This is the bible when it comes to pathology, it is also a brick. Very good to use as reference, maybe not ideal to carry in your bag.
- As it is available as a PDF, you can search more easily in it so we don't necessarily recommend you buying it.

IV. Pocket Companion to Robbins and Cotran Pathologic Basis of Disease

- As mentioned above, this is technically a pathophysiology book, but it connects the pathophysiology and pathomorphology parts of the course in a good way. If you're confused, this can be a good source for some clarity.

V. Pathology Made Ridiculously Simple (MRS)

- Like Pathoma, this is a good source to lay down the basis of your knowledge, although using it as your only source is not sufficient.
- The phrasing in this book series is a little easier to read, so if you're having a hard time grasping the big picture, this is a good alternative.

2.2 – Structure of the Course

I. Lectures and seminars

- One lecture and one seminar each week. Lectures are not obligatory, but are recommended to participate in if the coordinator has the lecture.
- Pathomorphology and pathophysiology topics don't always match up. If you want to give yourself an advantage, check out some of the morphology of your current Pathophysiology subject, and opposite.
- Don't forget that pathomorphology has a few more subjects than pathophysiology (reproductive, bones, etc.)

II. Exams

- Midterms
 1. Two midterms at the end of each semester where you need 50% in total to be allowed to take the final exam, as with pathophysiology.
 2. Before each midterm there's usually a mock exam, prepare for this, and use it for all it's worth.
- Final exam
 1. At the end of semester IV
 2. Consists of Pathomorphology and Pathophysiology.
 3. Pathomorphology and Pathophysiology midterms are separate, but the final at the end of the year is one test consisting of two parts, one part Pathomorphology and part Pathophysiology. They are not equally weighted, pathomorphology will be 65% of the exam, and pathophysiology will be 35%.
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Section 3 – Pathophysiology

3.1 – Sources

3.2 – Structure of the Course

3.1 – Sources

I. Lectures

- The lectures should be the base of what you study, but you might want to use additional sources to get a better understanding of the topics.

II. Videos

- Use Youtube (Osmosis is great!) to fully understand the concepts of pathophysiology.
- Sketchy also has pathophysiology lectures, some students like these.

III. Books

- Lange Pathophysiology of disease
 1. The lectures line up very well with the organization and chosen subjects in this book.
 2. The layout of this book is pretty similar to Ganong's review of physiology, so if you liked this setup this would be a good choice.
- Thieme Color Atlas of Pathophysiology
 1. Good schemes and drawings, the professor herself often uses these in her Power points.
- Pocket Companion to Robbins and Cotran Pathologic Basis of Disease
 1. Combines Pathophysiology and Pathomorphology in a good way.
 2. High yield information on many of the subjects focused on in class.
- Clinical Pathophysiology Made Ridiculously Simple (MRS)
 1. The MRS series is a good introductory source and works well to understand the big picture. Not a sufficient source in itself if you want to do well on exams (i.e.: use in addition to lecture slides)

3.2 – Structure of the Course

I. Seminars

- Once a week, mandatory
- The professor does not appreciate it if you show up to seminars intended for other groups. If you need to attend another group's seminar, talk to the professor beforehand and have a good reason.
- Make an effort to prepare for seminars as the professor is excited to teach and appreciates it when students ask and answer questions. It will also enable you to get a lot more out of the seminars.

II. Exams

- Midterms
 1. Two midterms at the end of each semester where you need 50% in total to be allowed to take the final exam. If you have less than 50% in total, there is a retake before you can take the final exam.
- Final exam is at the end of semester IV with pathomorphology

III. In general

- Pathophysiology is a very important, but challenging subject. There is a lot of material that is covered every week and we suggest you try to prepare for the seminars and aim to review them as well within the week.
- Get yourself a good routine for how to consistently work with pathophysiology. It is a subject where it is important to see the whole picture, but also to memorize the small details. The professor is very fair and makes completely new questions for both the midterm and final exam.
- She tests you on the material from the lectures.

Section 4 – Microbiology

4.1 – Sources

4.2 – Structure of the Course

Micro is a subject that is important, and it is recommended to start early as there are many sketchy videos to get through and a lot of material in general. Make sure that you watch all of the sketchy micro as the professor changes each year what he is going to ask the most questions about on the exam.

4.1 – Sources

I. Sketchy Micro

- Videos which use one drawing for every microorganism. As you remember the drawing associated with the microorganism you will remember the other details on the drawings as well associated with that microorganism. There is a file of videos circulating, so we suggest you find someone who has all the videos to avoid having to purchase them. These videos can even be enjoyable at times.
- Print out a Sketchy Micro Booklet at the Anatomy building so you can take notes as you watch the videos.
- Use anki after every couple of videos and keep up with your reviews!

4.2 – Structure of the Course

- Labs and Lectures once a week.
- Pay attention in labs, the professors may even say certain things that will be on the exam.
- Final exam (no midterm) is multiple choice.
- Microbiology can be a fun subject for many, especially if using SketchyMicro. However there are a lot of small details that need to be memorized and therefore it is important to start preparing for this subject early, so that when you approach the exam you have time to go back and repeat the details. Prof. Kochan is a fascinating guy who loves sharing personal stories, this can make the labs fun. He's also very active on his YouTube channel ;-)

Section 5 – Immunology

5.1 – Sources

5.2 – Structure of the Course

5.3 – Tips for Studying Immunology

5.1 – Sources

- I. **Basic immunology: Functions and disorders of the immune system (Abdul K. Abbas and Andrew H. Lichtman)**
 - Contains explanatory drawings (many of which they use in the lectures), concise explanations to immunological concepts and questions. The immunology lectures are very similar to the content in this book. A good way to approach the immunology course is to prepare for classes with this book, and then pay attention in lectures.
- II. **Janeway's immunobiology**
 - This is a more comprehensive book. It's more detailed and heavier to read. For the immunology class at JUMC, it might even be a little too detailed. Like Robbins in pathomorphology, this is a good source to search in when something is unclear.
- III. **StudyAid Immunology Booklet**
 - This booklet is built up with the lectures at JUMC in mind. You can use this booklet to prepare for your classes.

5.2 – Structure of the Course

- Some of the immunology lectures are mandatory, others are not. *Pay attention to this!* Generally, the mandatory lectures are the ones the professor believes are more difficult and important. It's extra important to be prepared for these classes.
- No midterms
- Final exam with multiple choice questions.

5.3 – Tips for Studying Immunology

- It's a good idea to spend some time on immunology while the classes are ongoing. This is before all the exams start piling up, so having done this at a quieter time will let you focus on the bigger classes when the time comes.
- Make sure you know the powerpoints, because many of the questions will be from these.
- When studying Immunology it's easy to end up focusing on the small details and it can be intimidating. It's important you remember to look at the big picture before diving into the details! If you start with the big categories and work your way down to the specific details, you'll sail through immunology.
- You will have Clinical Immunology again in the 4th year, so it is very useful to try to understand the basic concepts of immunology this year.

Section 6 – Pharmacology

6.1 – Sources

6.2 – Structure of the Course

6.3 – Tips for Studying Pharmacology

6.1 – Sources

I. Books

- Katzung Pharmacology Review (more compact + with questions)
 1. Compact pharmacology books with review questions, make sure you do all these review questions!
 2. Most of the material on the exam will be from this book, and we highly recommend using it as the primary source
- Katzung Basic and Clinical Pharmacology
 1. Like Robbins in pathology, a good book to search for more details if you want it
- Lippincott Pharmacology
- Rang and Dale Pharmacology
 1. Better for the exam on diuretics, respiratory and GI
- BRS Pharma (very compact + with questions) (available as PDF)
 1. Does not necessarily contain all the listed drugs, but has very useful questions
- First Aid USMLE book Pharmacology section

II. Lectures

- Will not be sufficient for a full understanding
- However, you will receive a “reading list” with all the drugs you need to know before each midterm; use this list as your main study guide. Know all the drugs on this list. There might be drugs on the exam that are not on this list. Make sure you also know all the drugs in Katzung review.

III. Videos

- Kaplan (there is a file of videos circulating)
 1. Kaplan USMLE booklet also available to print at Anatomy building to follow videos)
- SketchyPharm
 1. Booklet to print at Anatomy building also available for notes
 2. Use with anki!

6.2 – Structure of the Course

- Pharmacology will last for a total of 3 semesters, and will be one of your major subjects, and one of the most time consuming.
- Lectures are once a week and are compulsory.

I. Exams

- Midterms
 1. There are 5 midterms, you will have 2 during semester IV, the remaining in 3rd year:
 1. General Pharmacology with Adrenergic and Cholinergic drugs
 2. CNS
 3. Antibiotics and Anti-cancer and Endocrine
 4. Diuretics, Respiratory, GI
 5. Cardio
- Final: If you manage to receive 80% on average of all the 5 midterms, you will be exempted from the final. If not, there will be a final exam with questions from all subjects.

6.3 – Tips for Studying Pharmacology

- Pharmacology can be thought of as just like learning a new language, or memorizing a dictionary of new words... Flashcards are very useful in Pharmacology.
- Unless you are superhuman, it is impossible to go through all the sources for each exam, so you need to decide which sources work for you and you might want to vary a bit from exam to exam depending on how good each source is for that specific topic (you don't need to buy all the books, many are available as PDFs somewhere on the internet...)
- Kaplan Videos or SketchyPharm can be a very good introduction to each topic or a good review at the end.
- For people starting to think about doing the USMLE Step 1, it could be useful to use First Aid as your textbook source to get used to the format etc. First Aid has some good mnemonics that could be useful for everyone. (Available as PDF). The Sketchypharm videos go hand-in-hand with the First Aid book.

Section 7 – Laboratory Diagnostics

7.1 – Sources

7.2 – Structure of the Course

7.3 – Tips for Studying LD

7.1 – Sources

- There are not really any good sources in this class unfortunately, as the book that is on the booklist is generally not very organized and it does not follow the structure of the classes very well.
- All the PowerPoints are provided, and the majority of the questions on the exam will be from these.

7.2 – Structure of the Course

- Lectures once a week
- Final exam. The questions on this exam are relatively fair.
- Be prepared to think fast.

7.3 – Tips for Studying LD

- We recommend using the PowerPoints to make flashcards or anki decks throughout the semester. If you want to skip this part, a few years ago some JUMC students made an LD anki that is still relevant. Ask your friends in the higher year if they have it, or have your class representative ask Studyaid for the file to distribute to the class.
- The material in this class is extensive, but if you keep up with anki or flashcards each week, you will not have to worry too much about the exam. Don't forget to review your previous cards regularly to retain the information.

Section 8 – Sociology

8.1 – Sources

8.2 – Structure of the course

8.1 – Sources

- Seminars

8.2 – Structure of the Course

- Seminars once a week - obligatory. strict
- Pay attention in class and bring some terms and theories with you from each class.
- Points are given each class, based on how active you are.
- You will prepare one presentation where you can get points.
- At the end of the course you have a big project which counts to the final grade.
- Multiple choice exam (30 questions) and one open question.

Section 9 – Hygiene

- No books are needed in this class
- The class consists of one mandatory lecture each week.
- There is a short quiz at the end of each lecture, and the number of points you get on these will determine your final grade. Show up to class, be active and pay attention so you can do well on the quiz. There is no need to prepare for this quiz before class.
- If you go to class and hand in your quizzes you will pass.
- No final exam.

Section 10 – Biophysics

10.1 – Sources

10.2 – Structure of the course

10.1 – Sources

- The Professor uses a word document as his presentation every class, which is also your source of information.

10.2 – Structure of the Course

- 1 seminar and 1 lab obligatory every week.
- You need 50% on the lab reports to get credit
- Seminar credit - only participation.

I. Seminars

- The professor will hold a presentation (going through a word document) about a topic.

II. Labs

- You split into teams of 2 students and complete a different exercise/experiment in each lab and prepare a report where you fill out calculations and discussions of the experiment. It should be very possible to get full points for the labs.
- These labs can be time consuming and may appear challenging, but the lab instructors are helpful.
- It helps to be prepared for the labs, because there is usually little time to complete the labs. Ask the older years for their lab reports, as these are the same labs that you will complete.
- You can get a maximum of 10 points in each lab. 5 for communication and working together well, and 5 for the actual lab report.

III. Exams

- Final MCQ exam at the end of the semester. If you fail, there is an oral retake.
- Use anki, ask older years.

Section 11 – Telemedicine

- No books are needed in this class
- Computer labs once a week and in some classes you have to write a report.
- The exam consists of multiple choice questions and then a few open questions.
- On the final exam you'll be allowed to use the PowerPoints as a source, so it's a good idea to merge all the telemedicine documents in one file so you can search it easily during the exam.

- Some of the labs can be time consuming, especially if the course is going to be online, try not to spend any more energy than you need to on this subject.