

View Report

Text report

25 attempts have been completed

Question 1

Imagine that your best friend is taking this class next semester. What advice would you give her or him about how to prepare for Exam 1?

▼ Collapse Responses

- ▶ 1. Conceptualize the material rather than just memorize it.
- ▶ 2. HW and simulations are great resources in addition to the modules
- ▶ 3. Use the practice test as a basic guide rather than fool-proof replica of the test.

- ▶ Understand the concepts first. That's the most important part of the class, and will help you do well. Second, work with your group. Go over the homework and the simulations.

- ▶ Study charts from real life studies to increase the speed of interpreting what is going on. Revisit all simulations, and manipulate simulations on beforehand Flash cards of channels. Meet with the group and instructor beforehand.

- ▶ Work in your table group to go through the practice exams and study guide. Each person is going to understand something better then you so it is good to get a collective effort.

- ▶ To prepare for Exam 1:

Read the provided materials to better understand the concepts.

Thoroughly understand the homework.

Be able to look at a graph and describe the effects.

- ▶ Make sure you understand the underlying concepts well and not just what work you do in class. It helps to spend some extra time outside of class browsing the web to find articles that relate to what is covered in class, but covered in a different way. These articles dramatically increased my understanding of the topics I was doing simulations over.

- ▶ Review the modules. Highlight or note things that seem important. Go over the past homeworks. Everything will seem much simpler now and you can develop a deeper understanding than before. Understand the functions of the channels and how they interact with each other. Finally, review the quizzes.

- ▶ If your are interested in taking this course, make sure you are interested in the subject! Neurobiology is a topic that is much different from plain old biology you have been studying. It is very specific. It incorporates physics, math, and science, and critical thinking all in one. The more interested you are in the subject, the more likely you are to want to study the material on a regular basis and do well in the course. The concepts are very hard to grasp at first so definitely utilize all sources, such as your professor, your study group, the internet, etc.

- ▶ I would tell them to prepare first as much as they can individually and then study with the group. Studying with a group really helps to connect everything and confirm that what you know is correct!
- ▶ I would tell them to be thorough in their understanding of the concepts. This is not a traditional science class where you learn material from a book, take notes and memorize information. It will really test you on how well you can apply information. Go through the review and old questions and you should be fine.
- ▶ I would advise him or her to go back through the simulations and not only think about the take home messages, but why the graphs look the way they do or what was going on at each point in the graph.
- ▶ I would tell my best friend to use every resource available. The professor gives ample resources to thoroughly prepare each student. Everything that is tested branches from a basic concept or principle we learned in class.

Rely on your group and be sure to learn from Markham outside of class. Things become much more clear when you're in his office for some reason.

Lastly, buy into the system. The course is designed for group work and critical thinking, so that is the way to succeed.
- ▶ I would tell her to look at the quizzes and make sure she actually understood the answers. I would tell her to look at the homework and the points that were being made through it, and to look at the modules on the class website. Also, read the lecture notes.
- ▶ Completely understand what is going on within the simulations. Do them all again and keep in mind what channels and properties are at work in each simulation.
- ▶ I would read the modules prior to lectures and simulations. I found the "extra" readings to be extremely helpful in terms of preparation for the exam. The one thing I would suggest is to answer the questions under a time limit. (I wish I had done that!!) I know I felt the time crunch during the exam and left quite a bit of detail I really knew about certain topics off my exam, so my grade suffered greatly. I would also suggest sust reviewing the simple action potential information classes like human physiology have provided us. It is a really good refresher on the material.
- ▶ What helped me to prepare for the exam was going through the readings and modules that are posted for each unit/topic. This helps to understand the details. Also, going back through the simulations along with the homework assignments for each helped to refresh what the important concepts were.
- ▶ Study the modules and anything your fuzzy on get help. Reviewing the HW and the simulations would also be helpful
- ▶ I would tell my friend to know the simulations inside and out. Know the concepts behind the simulations and know how to apply them. Also the review and old test will be a good review. Since the test is free response, the quiz questions aren't as helpful but are a good review.
- ▶ Read modules as they open and keep up with it. Study simulation assignments and try to understand it the best you can as you do it in class. Take notes on the slides during class and note the explanations on the specific slides. Don't forget to study figures. Those are easy points on tests if you remember to look over them. Make sure you are very concise in your answers. Study the study guide and old study guides.

- ▶ Concepts. Concepts. Concepts. Make sure you know them.
- ▶ I thought I already submitted this, but I can't seem to find it. Here it goes again!

I would tell my best friend to use all of the resources provided in class. That starts with the group you are assigned to. A lot of the time, at least one person in your group will have picked up on something in class that you did not. Also, all of the questions are without definitive answer, so being able to gather different, but correct, perspectives will be useful. Make sure you pay close attention to the simulations because the principles learned in those play a large role in understanding the key concepts in the test.

Lastly, talk to Markham if you have any questions. He is really good at responding to emails, but he is even better at meeting you outside of class. Things seem to make sense when you aren't in the classroom for some reason.
- ▶ I found that the study guides and list of 10 major ideas were enough study material to do well on the test. I would tell a friend to master the 10 major ideas and fill out the practice test as if you were really taking the test.
- ▶ I would tell her to make sure she studied the simulations. If you know the concepts in the simulations, you should be pretty set.
- ▶ The quizzes do well at showing you possible questions that could arise from a principle. Also, they solidify the basic concepts, such as passive membrane properties and ion channel functions. In all they are an EXTREMELY easy version of the exam. Whereas, the practice exam trully test your ability to articulate everything you've learned. The study guide is a good outline of what you need to know, but you're responsible for having a great understanding of those principles. The best way to reinforce those principles/concepts is by simulation. I would also reccomend making your owm simulations with the knowledge you have because on the exam, rather than showing that you will have to articulate it.
- ▶ To prepare for Exam 1, make sure to make notes of key points after each lecture. That way you already have a review guide once you start studying for the exam. Also, make sure to review the key points of the stimulations. The point of these stimulations are KEY to doing well on the exam.

Number of Responses: 25

Question 2

Again, imagine that your best friend is taking this class next semester. What advice would you give him or her about how to get the most out of the time spent in class.

▼ Collapse Responses

- ▶ Work through the simulations individually as you discuss it with your group. Takes notes. Ask about real life examples. Attend class regularly. Occasionally look at what other groups are doing.
- ▶ Be aggressive in your understanding of the simulations. If you have your doubts, speak up-Markham is a patient, effective instructor.
- ▶ Make sure you firmly grasp what's going on in the simulations. Ask questions! Think of everything in terms of Ohm's Law.

- ▶ Be sure you understand your modules and simulations. ask questions to your group or the professor if you dont understand.
- ▶ Time spent in class:
Everyone contributing the team work.
Be able to understand the homework that is being talked about in the homework.
- ▶ Keep on topic. With a group, it is difficult to stay on task and discuss the topics in enough detail to keep them in your memory.
- ▶ Don't be passive. This is not the type of lecture oriented class where you can just sit back and absorb a little of what is covered. You must be an active participant in each session (especially the simulations) or your understanding falls behind.
- ▶ I would over each simulation THE SAME DAY after we do them in class. It is important to understand that take away message to each simulation. If you don't understand it- email Dr. Markham right away.
- ▶ Try to get as much of the simulations and homework done in class. That way if something is unclear you have your group and teacher there to figure it out.
- ▶ Always recap after class. Whether it is going through your lecture again (I usually record the lectures and replay them and write down anything I missed out that Dr. Markham said), or run through the simulations independently. If you can do that, you are a champion! While your in class, make sure you constantly bounce ideas and thoughts off of each other and ask for help or work with your group constantly. It is much easier to work in class than meeting outside.
- ▶ I think it's important to prepare before class by reading the modules or readings so that during class it is easier to understand what is occurring in the simulations.
- ▶ In class, make sure to actually pay attention and put any electronic devices away. Print out the notes or make notes in a notebook but don't bring an electronic device unless you are absolutely sure all you will do is take notes with it. Make sure to pay attention to the key points that the professor discusses and write them down. Most importantly, just pay attention! If you don't understand something, ask the professor!
- ▶ Work with your group, come up with concepts and if your stumped try thinking outside the box. Get Markham's attention if you have an idea you want to float.
- ▶ Definitely work on the simulations because they help connect everything together. Also don't be afraid to discuss as a group because talking out your ideas always helps and ask Dr. Markham for help because you have one-on-one time.
- ▶ Learn the simulations well, understand the quiz questions and you should be prepared well for the test. Also, know how to interpret the graph that comes out from a simulation.

- ▶ Know the simulations and print off the lecture notes before class. It is hard to make sure to write down everything Dr. Markham says, so have the notes so you don't have to waste time drawing diagrams, or writing down information. You can write down what he says in addition to the notes.
- ▶ During simulations, it is really important to understand them, even if you have to ask Dr. Markham questions all the time. Time is best spent learning. So again, really understand what's happening in the simulations and where on the graph different ion channels are playing a role.
- ▶ Pay attention during lecture and group work. Your group is a great learning tool. You'll always learn from them. Always work together and ask questions. Getting answers to questions is the best way to retain knowledge in this class.
- ▶ Print off the readings as well as the powerpoints. When doing simulations, do not leave until you are sure you understand the take-away message.
- ▶ Work hard to finish all the simulations with your group. Ask Markham questions as frequently as possible, no matter how frustrated he may seem with you not getting the answer. Be sure to learn the concepts and the simulations because that is what is on the test!
- ▶ First, you have to buy into the system. Get to know your group and make it known that you are there to do work. But don't be a jerk about it. Be friendly and smile big! Once you establish that connection with your group, you will be comfortable to ask all of the dumb questions you may have. Make sure you have fun while you are working, but understand the key concepts during the simulations. If you don't listen to Markham (I do, I promise!), it's alright because all of the facts are in the website. Just make sure you understand most things prior to walking out the door.
- ▶ Make sure your group thoroughly discusses each question and comes to a logical answer. And if you get confused about something, make sure your group helps you understand it. Make sure you take advantage of the fact that this is a group, because there will be many life situations where you have to work as a team. Make it a learning experience about how to work with different personalities, and try to hear everyone's opinion before moving on to a new topic or question.
- ▶ I would tell my friend to get as much of the simulations done with your group in class.
- ▶ Again, make sure you understand the simulations. Don't just make sure your group gets answers, make sure you understand the answers you are getting.
- ▶ DISCUSS! Discuss with your peers. DON'T settle for an answer if you think there's more to it, but then again don't cross the boundary to other thinking. A great resource is to ask the professor and communicate with feedback if anything is unclear. Write out as much as you can that explains the parameters of the situation.

Number of Responses: 25

Question 3

Again, imagine that your best friend is taking this class next semester. What advice would you give him or her about what to do for this class outside of our normal class meeting time?.

▼ [Collapse Responses](#)

- ▶ Meet with the group and instructor outside of class.
Discuss study tools.
Work with the simulator on your own.
Revisit grading rubrics.
Make flash cards.
Look up real life studies to apply what was learned.
- ▶ Read the modules. You have to have a good basis before you can start applying anything and the modules will provide all that. Make your own quiz banks. This helps you learn the material while making them and helps you study for the in class quiz.
- ▶ This kind of recaps my answers to question 1 and 2. Definitely build a strong relationship with your group. You will succeed and fail together and will be constantly working together. They will help you when you don't understand things, and you might be the ace that helps the others in the group that do not understand things. Meet with your group weekly. Also definitely go to office hours, and read the readings provided.
- ▶ Utilize your class group. Form out of class study groups. You know items they don't and they know information that you don't. It is mutually beneficial to both of your grades.
- ▶ First, read the modules. They're extremely helpful, and I didn't realize that until halfway through.
- ▶ The reading modules have helped to elaborate what is taught in lecture and they are very useful so reading these is a good idea. Also taking the quizzes and using those to test your knowledge is a great way to study!
- ▶ Make sure you keep up with out of class quizzes and homework. They add up to a lot of points and can really help your grade in the end.
- ▶ The readings online are very helpful when something is unclear. So if I were to give some advice, I would say to read those when you can. Also, meet with your group outside of class to discuss more about the simulations together and to work on homework.
- ▶ Outside of normal meeting time:

Read the materials posted; they go in to further detail than the notes/lectures.

Make flash cards for the quizzes; although the exact questions might not be on the exam, utilizing these for good grades will help if the exam is not perfect.
- ▶ Meet with your group and meet with Markham. The reading is important as it gives you all of the facts, but being able to talk through the concepts with another person is the most important thing in my opinion. I learned a lot by being able to see the problem from another person's perspective, which helps a lot because the test problems often ask for multiple reasons why a certain phenomena works the way it does.
- ▶ Again, spend some time browsing other articles on the web related to what is covered in class. There is a lot of information out there on how neurons function. Some of it is presented in a unique and interesting way that might really aid you in your understanding of the topic.
- ▶ Do the simulations again, solo. See if you can still explain what is going on. Record the lectures. Go back over them. The most difficult part for me is the language and vocabulary that I am not completely comfortable with, so going over it multiple times helps.
- ▶ I really wish I had read the supplemental reading with more vigor prior to my exam preparation. There were some really interesting tidbits of information scattered through those readings. They really help put class information into context. I know I've struggled with putting our simulations and really understanding how this is really happening in the brain. When you read a little bit more about the thalamus or studies done on MS patients, it really makes what you're learning more interesting and at least got me excited about the brain.
- ▶ Like I said before, using the resources that are posted is a big help in understanding the material. By viewing this before class, and using it as a supplement for the assignments and quizzes, it will help overall to understand the concepts and highlight areas that you still need clarification.
- ▶ After lecture, make sure to revise the notes made in class. This will reinforce the material and also helps you start a study guide for the exam. Make sure to understand the key points of that lecture. If you don't, just email the professor and ask. Review the stimulation and write down the key concepts you are getting from them.

- ▶ Look over the modules. For the many different ionchannels flash cards are great, know how each of them work. And, play around with the simulator to better understand whats going on.
- ▶ I would tell them to go over the simulations again and reinforce the concepts. I wish I had done that for the first test, because it would really improve how well I did. Read the course modules, I found those to be helpful.
- ▶ Outside of class, I would go over each of the simulations. That will help with the quizzes and test. Also, I would tell them to read the course modules which are very helpful and serve as a review of the information learned in class.
- ▶ Just remember to keep up with reading modules. It will help you remember what was being taught and what you need to know for upcoming quizzes, tests and simulations.
- ▶ Do the readings and look through the PowerPoints again.
- ▶ Your group and Markham are the key to this one. Make sure you study up prior to meeting with your group for a study session for the test. Some group members will be annoyed if you are just going along for the ride and not contributing anything. Make sure you listen to everyone, no matter how unintelligent it may seem, because in this class everything has a chance to be correct with the correct support. Also meet up with Markham. He can help you organize your thoughts and reason through problems. He always makes time for his students, no matter which library he is at.
- ▶ Take quizzes multiple times to refresh your memory, even after they're past the due date. Contribute to your group's homework assignments, because it will help you in the long run.
- ▶ I would tell my friend to work hard on the homework and do the quizzes and if they do both of those things they will be in good shape for the test!
- ▶ The modules that are given as a summary make a good place to start studying. Also, simulations are STILL very important so go over those and the homework again while studying.
- ▶ Read the assigned material. Make flash cards. Then take the quiz and aim be able to answer the question without looking at the multiple choice. Next, do the simulations. If possible, do the simulation with someone else. Its good to have multiple perspectives because there are many ways to answer some of the questions, if not it can only help you solidify the information by explaining/discussing with another person. Finally, talk to the professor. Possibly, use your knowledge to apply what you've learned to make your own unique action potentials because when you do that you truly understand the basic action potential as it works as a system.

Number of Responses: 25