

FUNDAMENTAL FOUNDATIONS

A PEER LED STUDY-BY-SUBJECT GUIDE

CELLULAR AND MOLECULAR BIOLOGY

GETTING STARTED

“Develop good note-taking skills early. Most of the material covered on the exams will first be covered in the lecture hall, and it is extremely important that you learn to keep up with the pace of the class.” John R., Premedical and Health Studies '14, peer tutor

“Keeping up-to-date with the lectures is key when studying effectively. A common mistake for students is leaving material for the last minute to learn. Keeping up with the material day-by-day, then reviewing in the week before the exam, is the best way to succeed.” Philip C., PharmD '15, peer tutor

“Read the sections in the book that will be covered in the lecture before attending class.” David G., Premedical and Health Studies '14, peer tutor

ACTIVE LEARNING STRATEGIES

- Attend all lectures, and come to your class prepared to take notes.
- Practice labeling pictures found in the text or online.
- Map out processes, such as DNA replication, and label all of the parts.
- Understand and explain key concepts in your own words.
- Draw out the processes that you are learning. For example, drawing the steps of mitosis or the steps of digestion will help you understand the material better than just reading about it.
- Rewrite your notes in your own words after class, preferably within 24 hours of the lecture.
- Make flashcards as you cover the material, rather than right before the exam, to remember the key terms and to stay caught up with the course content.
- Read the chapters that are going to be covered in class before the lecture, and be sure to read all chapters that will be on the exam. Use your textbook to supplement your lecture notes.
- With permission from the instructor, record and re-listen to lectures. While listening to the lectures, add more in-depth comments and questions to your notes.
- Seek out a variety of perspectives on the different reactions and processes that you learn about in class. Exploring different ways of understanding the information helps make it stick.
- Be sure to complete the objectives and pay attention to the material in the study guides for the course.

TACKLING THE TEST

Go through the test and answer what you know. On the second run through, take the time to work through the difficult problems.

If scrap paper is provided by the professor, draw out a process to jog your memory.

Take deep breaths and stay relaxed throughout the entire exam to limit careless and unintentional mistakes.

If you have time, check your work when you are finished.

Give yourself reasonable rewards for studying hard.

DO'S AND DON'TS

Do....

- Go to class. Taking notes and listening will help you prepare for the test and learn the information.
- Take good notes so that you have an ample supply of study material for your exam. When taking notes, try different styles until you find what works best for you.
- Review notes, lectures, and readings regularly. Be sure to review every single week.
- Repeatedly expose yourself to the course material in as many ways as possible. For example, listening to the professor, reviewing slides, reading the textbook, and speaking with your friends all will help.
- Remember that the material you learn in biology will come up again and again in your courses at MCPHS. Use this as motivation to work hard in the class and to really understand the material.

DON'T...

- Try to memorize the material without understanding why it is important.
- Let yourself be distracted by Facebook, the Internet, or other media in class or while you are studying.
- Fail to see the professor or seek help from tutors throughout the semester.
- Underestimate your exam. Study for your exam as if it is going to be difficult.
- Let the material between exams build up and then cram all of your studying into one night.

MEMORY TIPS

- Make an effort to understand the *where, why and how* things happen, instead of simply repeating facts.
- Go over the material with friends. Discussing the material with someone else allows you to pick up on what you may have missed while reviewing the material you already know.
- Use flashcards to break down what you need to know into numerous terms, and continuously quiz yourself until the exam. Make flashcards every week, rather than right before the exam.

FINISHING YOUR FOUNDATION

"Biology is a process that has many wheels like a clock or a watch, they range in size from very small to very large, if you understand the little wheels and how they make the big wheels turn, everything becomes easier." David G., Premedical and Health Studies '14, peer tutor

"There are a lot of concepts that repeat themselves throughout your time in school, especially for the health professions. Everything that you learn in this course will be the basis for what you will learn in later courses. Whether you are a visual or an auditory learner, you need to find what works well for you." Philip C., PharmD '15, peer tutor

"If the opportunity presents itself, feel free to experiment with study tactics you have not tried yet. It is also never a bad idea to go over the material with friends; you never know what they caught in class that you may have missed, and discussing the material with somebody else will allow you to go over it all once more while possibly picking up on something you did not even know you had to know." John R., Premedical and Health Studies '14, peer tutor

Please note: This handout is a compilation of resources provided by peer tutors and academic support professionals. This information is meant to supplement recommended study techniques provided by course professors, peer tutors, the Math Center, the Writing Center, and the Academic Resource Center. They are not intended as a replacement for MCPHS resources, faculty and staff, class attendance, course syllabi, or course materials. For additional information, please contact the Academic Resource Center at 617.732.2860.