## USING CLASS POWERPOINTS TO YOUR ADVANTAGE, from a senior biology minor turned psychology major

For most biology classes you take at UPB, you will have access to the PowerPoints. Many students use these PowerPoints to study for quizzes and exams. Although PowerPoints can be a great tool for preparing for tests, they can also do more harm than good if you do not know how to study from them. Take for example the way I used to study from PowerPoints as a first-year student. Two days before the exam, I would sit down and spend the entire day looking through every single slide, reading them over and over again. This is **NOT** what you want to do. Instead, start as soon as the material has been presented, and try the following:

## 1) MAKE FLASHCARDS

Flashcards can be great for biology classes, as there tends to be a lot of memorization of steps and terms. It is important to note, however, that flashcards should not be used to learn everything. Reserve them for things like new terms, steps in cycles and processes, and other lists of similar information you might need to learn. They can be helpful for ensuring you don't leave out steps or categories when studying. Make flashcards as you go through the material in lecture, and review them regularly. This makes it less overwhelming!

## 2) ENGAGE WITH THE INFORMATION

This is likely something you have heard a lot, but there is a reason for it. Actively thinking about and working with the material in different ways makes it easier to remember and tests your understanding. This can look like turning the title at the top of a slide into a question, creating short quizzes for yourself for each topic within a PowerPoint, and comparing and contrasting terms that look very similar. For example, a PowerPoint about macromolecules might mention glucose, fructose, sucrose, lactose, and galactose. These terms look very similar and might be hard to remember, so writing out what each one is and how they differ will make them easier to differentiate. Do this as you study, preferably starting a day or two after the material is presented.

## 3) RESTRUCTURE INFORMATION IN A WAY THAT MAKES SENSE

One of the most beneficial things that I have learned while in college is that learning has a lot to do with taking in information, making sense of it, and structuring it in a way that is easy to learn and remember. A topic that might seem daunting can become more manageable if you learn to put pieces of information into categories or units, a process called chunking.

Let's apply this to the PowerPoint about macromolecules. The PowerPoint might mention kinds of carbs, kinds of fats, what each kind of carb does, what each kind of fat does, the structures of each macromolecule, their components, and so on. All of this information might appear in an order that makes it confusing to keep straight, and similar topics might be mentioned at different several points.

To keep everything together and make it easier to see it all in front of you, create an outline where you can gather all the information about a similar topic and structure it in a meaningful way. This might look like turning fats, carbs, and proteins into main headings. Then, you can create structure, function, and example subheadings under each main heading. The goal is to keep similar pieces of information at the same heading level as you go through the topic.