**Survival Tips for Year 2 Biology**

1. Review IA requirements and begin thinking about your IA experiment. **You are permitted to begin on your IA over the summer but only if it has been officially approved by Mr. Cuccherini. You may email proposals to me at** **clcuccherini@henrico.k12.va.us**
2. Familiarize yourself with biostatistics. This will help you greatly with your IA, preparing for unit tests, and your external assessments that you will complete at the end of your senior year. Here are some helpful resources that I strongly suggest perusing at some point this summer. You will be expected to know how to conduct basic statistical analysis of data through a t-test, chi-square, and r-correlation. **<— Understanding how to use these to analyze scientific questions will give you a huge head start for the IA.**
	1. <https://www.youtube.com/watch?v=pTmLQvMM-1M>
	2. <http://learn.genetics.utah.edu/content/math/>
	3. <http://www.biostathandbook.com/>
3. KEEP ALL OF YOUR NOTES FROM YEAR 1!! Yes, you will be responsible for every bit of material covered in the content for year 1. I have built in review of the year 1 material into the year 2 content when feasible but it is important for you to constantly review this material so that it does not disappear from your brilliant mind’s.
4. Make a collection of helpful learning resources. Passively reading the textbook or spending hours on study guides may not work for you. Fortunately, there is the internet. This wonderful resource has an abundance of tools that will be useful **but you have to take advantage of them!** Here are a few that I find particularly helpful:
	1. [**http://learn.genetics.utah.edu/**](http://learn.genetics.utah.edu/) **You have to peruse this one carefully.**
	2. [**http://ib.bioninja.com.au/**](http://ib.bioninja.com.au/) **This one used to be lame but the updated version is a fantastic resource for reviewing concepts covered in this course. YOU SHOULD DEFINITELY DOWNLOAD THE APP!**
	3. [**https://www.bioknowledgy.info/**](https://www.bioknowledgy.info/) **This is a one stop shop for content clarification, practice resources, and most of the details you need to know about DP biology**
	4. [**https://www.amazon.com/IB-Biology-Study-Guide-Programme-ebook/dp/B013SUTFRW/ref=sr\_1\_1?ie=UTF8&qid=1526999406&sr=8-1&keywords=ib+biology+study+guide**](https://www.amazon.com/IB-Biology-Study-Guide-Programme-ebook/dp/B013SUTFRW/ref%3Dsr_1_1?ie=UTF8&qid=1526999406&sr=8-1&keywords=ib+biology+study+guide) **This is the IB biology study guide and it is an extremely useful resource if you are worried about preparing for test questions. It’s about $30 dollars but you could always split the cost with a study buddy and share it throughout the year.**
	5. **Your textbook! The textbook can be a completely useless tool if you do not use it properly. You will learn practically nothing and waste loads of time if you just open the book periodically to read the pages. You have to read, annotate, and engage. This means recording questions as you read, make note of connections to previous topics, pay very close attention to the green and yellow sections (the ones you probably have ignored in the past), and then attempt to answer the questions in the purple sections. If you use the textbook in this manner, then it will greatly improve your understanding of the material.**
5. Please, pretty please, communicate. If you are struggling to understand a concept or need clarification on directions, then email your teacher. This goes for all classes. I personally love it when students seek extra help. I won’t always be able to answer your email but I will always attempt to as soon as I am available. I won’t even mind if you email me over the summer to ask questions about what to expect for your senior year (I might not answer it for a few days because…you know…summer) but I certainly will reply when I get the opportunity. Please take the time to learn how to communicate with your teachers. Take charge of your learning and become an active participant.
6. Lastly, breathe… Life is going to get pretty stressful and I’m sure many of you have already experienced your trials. Most seniors choose to deal with the stress by allowing themselves to be engulfed by senioritis and give up on trying their best because they are “done with school”. The other method seniors take is to let the stress consume every aspect of their lives, lose sleep, eat poorly, and sacrifice everything to obtain the highest grade. Neither of these choices are good.

**Do your best, do not fear failure, and take pride in what you achieve.** We all want the best that is available in the world but we all obviously can’t have the best available at the same time (because you know…physics). However, that shouldn’t stop you from trying the best that you can. You will probably fail, it will probably be frustrating, but every time you give your best effort… you improve. Take pride in that improvement and build on it every time you face a challenge. If you fail to turn in a homework assignment because you spent hours studying for a test after you just got off of a 12 hour shift on a Saturday and you have to take a zero, then you take the zero. Try again next time. **You will know when you’ve done your best…and when you haven’t.**

**For more advice on how to survive your senior year, please view the senior advice videos from the previous classmates.**

<https://drive.google.com/open?id=0ByQlDvgHsPlLNjFBQ2ZLWV9XV0k>