**Principles of Biomedical Sciences Independence High School**

**Mrs. Seaman**

**2016-2017**

**WELCOME** to Project Lead the Way and the Biomedical Sciences Program at Independence High School. We are very excited to be introducing a new program that prepares students for a career in biotechnology, medicine or a health related field.

Project Lead the Way is a national, not-for-profit educational program that assists high-school students in developing strong backgrounds in science and engineering. This dynamic program uses hands-on, real world curriculum to engage and challenge students to achieve their highest potential.

The PLTW Biomedical Sciences courses are rigorous and challenging. Although intensive, they will increase student motivation, cooperative learning skills, and higher-order thinking skills. This course requires students to seek out information. There is no text and they will use computers in class daily. The goal is to help prepare students for the 21st century where they will learn continuously, think critically, work with others to solve problems using technology proficiently.

Please visit the Project Lead the Way website for information regarding the Biomedical Sciences Program. <http://www.pltw.org/Biomedical/biomedical.cfm>

The curriculum is posted online at the Learning Management System . Students will use this site to complete assignments.

**CONTACT: email:** [**darlenew.seaman@cms.k12.nc.us**](mailto:darlenew.seaman@cms.k12.nc.us) **or phone: 980-343-6900 ext 4011704 or my weebly page @ ihsseaman.weebly.com**

Students and parents if you have any questions concerning, grades, homework, labs or any issue you would like to discuss, please feel free to use the above . We will do our best to return your email as promptly as possible. We are here for you, so if you have any questions please do not hesitate to contact me.

**Objectives:**

This course provides an introduction to the biomedical sciences through exciting “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bio-informatics. A theme throughout the course is to determine the factors that lead to the death of a fictitious person. Students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. Key biological concepts including homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences Program and to lay the scientific foundation necessary for student success in the subsequent courses.

**Required Materials:**

**Class Binder:** Students are required to keep and maintain a binder for this class. The binder should be a 1.5-2 inch three ring binder with a folder with pockets inside. It is preferred that students use one binder o for this class only and not to share it with any other classes.

**One ream of paper**

**Dividers**

**Flash Drive**

**Grades:**

70% Formal grades – (tests and projects and major presentations, etc.)

30 % Quizzes, Labs, Class Work and Homework

**Attendance, Late Work and Make-Up Work**

* **Attendance**- Our curriculum is mainly laboratory investigations and research based projects and presentations. It is very difficult for students to make up these missed activities. **Every effort should be made to be in class**
* **Recovery – Any absence after 10 days must be recovered minute by minute per CMS School Board Policy. Recovery for this class is available from 2:30 – 3:30 Tuesday and by appointment with the teacher. There will be no recovery during exams.**
* **Late Work**: Homework, projects, labs, etc. are due at the beginning of class on the assigned day. A total of 10 points will be deducted from the grade for each day an assignment is late.
* **Make-Up Work:** It is the student’s responsibility to find out what material was missed when absent. The curriculum is online, so students can check the LMS for what happened in class. **There will not be time for in class make-up work. All labs, quizzes and projects will have to be made up after school by appointment.**

**Classroom Expectations:**

**Be Present:** In order for you to learn, you must be present. The expectation is that you are in the classroom, willing and ready to learn each day. This class is fun but it is also challenging. If you miss class, you miss a lot and it is difficult to complete make up work for this type of class.

**Be Prepared:** Bring your notebook, flash drive, writing utensils and a good attitude to class.

**Be Respectful and Courteous:** Please remember to treat others in **a** tolerant, considerate, courteous and respectful manner at all times. **Always do your own work, if you are uncertain if you are allowed to collaborate, ASK. We frequently work with partners or in small groups. It is important that each person contributes. *Lab Conclusion questions are ALWAYS an individual assignment***. Learning to work effectively in groups is a life skill that you will get many opportunities to practice. Because this is a course with students up and working every day, it is many times a noisy classroom. Please remember that there is a difference between discussing the current activity and discussing social activities. You are expected to use your time wisely. If your group is finished with the current activity, you may always be proactive and work on upcoming career journals. The laptops are provided for research and should not be used for visiting other internet sites. Students will be given one warning about visiting other websites. The second occurrence will result in 30 minutes after school detention. No food or drinks are allowed in the classroom due to working on computers daily. We have a one to one computer ratio and so there is no need for cell phones. Students may use personal laptop computers brought from home. No cell Phones!

**Do Your Best:** This includes every class, lab, and assignment. I expect you to try your hardest, and make your best effort. You will only get out of the class as much as you put in. Don’t settle for less than your best! A curious mind is required daily**.**

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**Please cut return to the school**

**I have read and understand the information provided in the 2016-2017 Syllabus for PLTW Principles of Biomedical Science**

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Student’s name printed

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Student Signature Date

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Parent Signature Date

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Best contact number Best email contact