Medical Interventions

Syllabus

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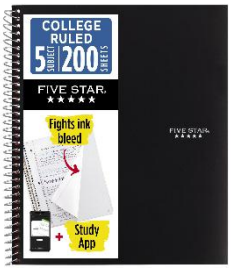
Class Overview:

Welcome to Medical Interventions (MI)! MI is the third out of four honors academy classes. This hands-on course introduces students to human health, medicine, and biomedical science through labs, projects, and real-world case studies. Students explore topics including body systems, disease prevention and treatment, genetics, and medical technology while building critical thinking and problem-solving skills.

Class Materials:

To be successful in this class, students are expected to come prepared every day with the required materials:

- Large Spiral Notebook 11.0 x 8.5 (Hard Cover preferred)
- Pocket Expanding Folder (Up to 10 pockets) Label tabs Units 1-9
- Pencils with erasers.
- Colored pencils.
- Small scissors.
- Small ruler.
- Highlighters
- Glue Sticks (2)



Classroom and Class Expectations:

In this class, attendance, punctuality, and active participation are essential. You are expected to arrive on time, stay engaged, and treat classmates and equipment with respect. Use technology only when directed and follow all safety protocols, especially during laboratory sessions. Labs are an important part of the learning experience; therefore, all students must follow lab safety rules carefully, including wearing required safety gear, handling materials responsibly, and working cooperatively. Failure to follow safety rules may result in removal from the lab and loss of participation credit. **No food, drink, or gum on Lab Days:** This is for your safety and non-negotiable. Other days you may eat as long as you clean up after yourself.

Academic Integrity: Cheating, of any form, will not be tolerated. Consequences will include a grade of zero for the assignment for all people involved. Parents and administrators will also be notified.

Plagiarism: Students must be very careful not to hand in projects which are plagiarized directly from the Internet. Students must give credit for sources they use and restructure the concepts using their own words. Students should not copy text directly from the internet and hand it is as their own work, this includes AI sources.

Cellphone/Electronic Usage and Policy: Use of electronic devices is prohibited during class sessions. Keep them in silent/vibrate mode during class. Only when allowed by the

teacher electronics can be used for research purposes as they pertain to the class, not to check social media.

Tardy Policy: Set up for class happens during the first 5 minutes of class, including bell ringer. Arriving on time is fundamental for a proper class understanding. Per school policy, after the 3rd tardy disciplinary action might be taken.

Attendance/Absences: **Is the student's responsibility to check for and complete any missed assignments promptly.** If you are absent, please consult the class Canvas, teacher board, CANVAS announcements or contact the teacher to get the work you missed. Assignments turned in late may receive partial credit, so timely completion is important for your success.

ISN (Interactive Science Notebook) and folder: Students will be required to keep a science notebook to demonstrate the skills they have learned in class. Students will be required to place several items in their ISN and folder, such as personal agenda work, reflections, exams, projects, class notes, foldable, labs, and other resources the student can use in the future as a reference. Students are responsible for keeping their ISN nice and neat. The class covers 9 units in total.

Quizzes, test and assignments: All quizzes and exams will be announced in advance. Several resources are available to help students prepare – in-class reviews, study guides, flashcards, and practice quizzes. A summative test will be taken after the completion of several frameworks. **Students have until the Unit test to turn in any assignments pertinent to that topic. Missing assignments will not be accepted once the class has moved on to a new unit.**

A Remediation window for each test opens for one week after the test. Remediations are not mandatory and are available upon request. Not completing remediation will result in the actual grade as final. Remediations are time sensitive. * These grades are summative and have a weight of 60% of the overall grade.

Class Units:

Unit	Unit Name
1	Infectious Disease: Prevention, Diagnosis, and Treatment
2	Antibiotics and Infectious Disease
3	Infectious Disease and Hearing Loss
4	Vaccination and Disease Prevention
5	Genetic Testing and Ethics
6	Reproductive and Genetic Technologies
7	Cancer Diagnosis and Technology
8	Cancer Risk Factors and DNA Damage
9	Cancer Treatment and Care
10	Future Cancer Treatments and Innovations
11	Organ Transplantation: Process and Ethics
12	Future of Medicine and Human Health

Biomedical Academy Admitted Students Guidelines

Requirements to earn a Biomed Honor Cord:

1. Must be a Biomedical Sciences Academy Student
2. Must be a completer of ALL four Biomedical Sciences Academy classes and requirements.
3. Must take AT LEAST 1 other science course per school year.
4. You must have a cumulative GPA of 3.0 or higher in all Academy and Core classes.
5. You must have 150 hours of community service with 50 of those hours in service to the Biomedical Sciences Academy.
6. Compete at least once in both project-based clubs.

Biomedical Academy Classes	Biomedical Academy Requirements
• Principles of Biomedical • Human Body Systems • Medical Interventions • Biomedical Innovations	Science Courses (Honors, AP or AICE): • Biology • Chemistry • Anatomy and Physiology
Volunteer Hours	**Involvement**
Total: 150 hours 50 are Biomed related (12.5 per year). **How to get Biomed hours?** • Biomed Clubs • Field Trips • Blood Drives • Academy Ambassador • Academy Activities • Donations **Other hours:** Community involvement activities. School related activities volunteer time.	**Mandatory for all academy students to join every year:** • Red Cross Club **Compete at least in one of two project-based clubs:** • Health Occupations Students of America (HOSA) • UHS STEM Research Club **Additional required involvement:** • Blood Drives • Academy Activities • Scrub Days (Calendar will be provided).

Academy Communication: All academy related information (Due dates, clubs, blood drives, general announcements) will be posted on Parent Square App. Any other app or codes will be provided in class.

Probation: Students who do not meet academy expectations will receive a probation letter stating that failure to improve academic performance, conduct, or participation may result in removal from the academy.

Biomedical Sciences Academy suggested student schedule:

This schedule will comply with the Academy and School Graduation Requirements.

9th Grade	10th Grade	11th Grade	12th Grade
Principles of Biomedical Science (Honors) (Level 1)	Human Body Systems (Honors) (Level 2)	Medical Interventions (Honors) (Level 3)	Biomedical Innovations (Honors)(Level 4)
Biology (Honors, Pre-AICE, AICE, AP)	Chemistry (Honors, Pre-AICE, AICE, AP)	Anatomy and Physiology (Honors, AP, DSC) or 12th grade	Anatomy and Physiology (Honors, AP, DSC) or 11th grade
ELA 1 (Honors)	ELA 2 (Honors)	ELA 3 (Honors)	ELA 4 or AP English
Algebra 1 (Honors, Pre-AICE, AICE, AP)	Geometry 1 (Honors, Pre-AICE, AICE, AP)	Algebra 2 (Honors, Pre-AICE, AICE, AP)	Pre-Calculus or Statistics
Fine performing Arts, Speech and Debate, Practical Arts.	World History	U.S. History	U.S. Government Economics
Physical Education	Elective	Elective	Elective
Elective	Elective	Elective	Elective

New applicants: Students interested in joining the academy may apply during the second semester. First-semester grades, attendance, and conduct will be considered during the selection process. Prospect students may begin participating in volunteer and academy activities.

After reviewing and discussing the syllabus, complete the Syllabus Acknowledgement Quiz on Canvas.