

HOSA-PLTW MIDDLE SCHOOL CROSSWALK



Courtesy of Project Lead The Way

HOSA AND PLTW MIDDLE SCHOOL CROSSWALK

HOSA—Future Health Professionals is the largest student organization for those interested in pursuing careers in the health professions. The purpose of HOSA is to develop leadership and technical skills as an integral part of the instructional program. The competitive events program allows students to pursue academic, technical, and leadership and teamwork abilities through participation. The development of these skills leads to providing the pipeline for the health providers of the future. The organization serves three divisions: postsecondary, secondary and middle school. Beginning with the HOSA 2016 International Leadership Conference, competitive events were offered for the middle school division.



Courtesy of Project Lead The Way

Project Lead The Way's PLTW Gateway program, designed for grades six through eight, engages students in biomedical science, computer science, and engineering activities and career exploration. The program empowers students to build knowledge and skills in problem solving, critical and creative thinking, communication, collaboration, and perseverance. In the PLTW Gateway Medical Detectives unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

The three lessons of the Medical Detectives unit are designed to promote the investigation of the biomedical sciences:

Lesson 1 Disease Detectives

Lesson 2 Mysteries of the Human Body Systems

Lesson 3 Outbreak!

MIDDLE SCHOOL DIVISION HOSA COMPETITIVE EVENTS

Barbara James Service Award - The Barbara James Service Award is in memory of Barbara James, 1982-83 HOSA Inc. Board Chairman. Her leadership skills and contributions to HOSA exemplify the caring and compassion of HOSA members. This award seeks to recognize individual HOSA members who have a commitment to community service in health.

Dynamic Decisions. Encourages students to analyze the problem solving process and to work as a team to apply their problem solving skills in creating a solution to a hypothetical healthcare or HOSA-related problem. Methodology: Round One consists of a written test to evaluate the team understanding of problem solving processes and theories. Top scoring teams will advance to Round Two and will be given a potential problem related to HOSA, a healthcare issue or the healthcare community. Teams have 20 minutes to analyze the problem. Selected resource materials related to the problem will be provided. At the end of the preparation, the team will present their solution to the judges.

Exploring Medical Innovations. To encourage HOSA members to research and explore an existing medical innovation that is certain to have a dramatic impact on the future of health and or the delivery of healthcare, and to share their innovation understanding and outcomes with others. This event includes improved medical technology, innovative products, devices, medical apps and other inventions and findings that have influenced global healthcare.

Extemporaneous Health Poster: Competitors in this event have 3 hours to create a visual display of a secret health issue/topic using poster board and art supplies. The key focus is on the development of the secret topic (health issue) and the quality of information presented.

Foundations of Medical Terminology. To encourage HOSA members to improve their ability to identify, spell, define and apply the prefixes, suffixes, roots and anatomy, physiology, pathophysiology and occupations related to the health community. Methodology: 50-item multiple-choice test; 60 minutes.

Health Career Display - Teams consisting of two (2) competitors shall develop a visual display of a specific career or cluster of careers in health. The display allows the students to express ideas through an artistic medium to highlight the benefits of a particular career focus. The students may also be judged on their ability to present themselves and communicate the career information to others.

Health Career Exploration is a written test requiring competitors to apply, analyze, synthesize and/or evaluate information related to health careers. Competitors will recognize, identify, define, interpret and apply terms related to health careers. Written test will measure knowledge and understanding at the recall, application or analysis levels. Higher-order thinking skills will be incorporated as appropriate.

Health Career Preparation To encourage HOSA members to become familiar with the interview process; to practice and refine interview skills; to articulate through writing why they are interested in a healthcare career; and to gain confidence in speaking with professional judges about why healthcare is the right career fit for them. Methodology: Competitors shall develop a written statement of interest regarding why they are interested in pursuing a health care career and how HOSA can assist them on this path. Competitors will also participate in an interview with a panel of judges to share their interests and future goals.

Health Education is a team event of 2-4 members who select a health-related concept or instructional objective, prepare a lesson, provide instruction, and evaluate results. The instruction must include the use of presentation tools such as a student-made video, computer demonstration software, or any other form of media. Teams will provide instruction to a targeted group of learners during the school year, then present their work to a panel of judges.

HOSA Happenings - This is a multimedia chapter communication event. The goal is to communicate information about the HOSA chapter in a manner that celebrates the chapter members and their achievements, as well as shares health related information with readers. using whatever form of communication they choose (i.e.: print newsletter, electronic newsletter, website, blog, social media platform).

Healthy Lifestyle: This event involves setting a healthy lifestyle goal and documenting the process and steps towards achieving the goal. The event includes a 50 item Round One test and a notebook or portfolio with documentation.

Life Threatening Situations. Provides students an opportunity to develop and demonstrate knowledge and skills in handling emergency situations until trained assistance arrives. This event consists of two rounds of competition. Round One is a written, multiple-choice test of knowledge and understanding. Top scoring competitors advance to Round Two for the performance of selected skill procedure(s) identified in a written scenario. The scenario requires the use of critical thinking skills.

Math for Health Careers. Encourages students to improve their ability to identify, solve, and apply mathematical principles used in health care involving math essentials, measurement systems and conversions, calculations and interpreting medical information and data. Methodology: 35-item written test; 60 minutes.

Medical Reading: Competitors read the three selected books for the year. A 45 question multiple choice and one short essay tiebreaker test is taken. The questions will require the students to apply, analyze, synthesize, and evaluate information from reading the assigned books.

National Service Project - The HOSA National Service Project involves the sponsorship of a national health organization by local HOSA chapters. Local chapters plan service projects to support the selected organization. The current National Service Project is the National Pediatric Cancer Foundation.

Nutrition is a written test requiring competitors to apply, analyze, synthesize and/or evaluate information related to nutrition and health. Competitors will recognize, identify, define, interpret or apply terms related to nutrition. The written test will measure knowledge and understanding at the recall, application or analysis levels. Higher-order thinking skills will be incorporated as appropriate.

Prepared Speaking - Competitors develop a speech related to a selected national topic.
2019- 2020 Topic: Towards Tomorrow!

Public Health is an event that involves a team of 2-6 who create an effective, dynamic and creative public health presentation to educate the public on the chosen topic. The 2019-2020 topic is Know the Signs: Stop Opioids Before They Stop You! *Opioid abuse has reached epidemic proportions. According to the Substance Abuse and Mental Health Services Administration. "Drug overdose is the leading cause of accidental death in the United States, with 68,690 drug overdose deaths between March 2017 and March 2018. More than 46,000 of those deaths involved opioids."*

***Speaking Skills** - Competitors develop a speech related to a selected national topic. This event is for HOSA members who are classified under the Individuals with Disabilities Education Act Amendments of 1997 Public Law 105-17.
2019 - 2020 Topic: Towards Tomorrow!

HOSA and PLTW are vested in a national partnership to provide a variety of unique strategies to enhance student engagement and learning. The following resource provides a customized crosswalk of the PLTW Medical Detective lessons to the HOSA Middle School Competitive Events Program. Each "X" in the following crosswalk indicates a connection between content in a particular lesson and indicates an opportunity to include and reinforce knowledge and skills needed for successful preparation for specific HOSA competitive events.



HOSA–PLTW GATEWAY MEDICAL DETECTIVES CROSSWALK

Project Lead The Way		Medical Detectives		
Middle School				
Lessons:	1	2	3	
Barbara James Service Award				
Dynamic Decisions	X	X		X
Exploring Medical Innovations	X	X		X
Ext. Health Poster	X	X		X
Foundations of Medical Terminology	X	X		
Health Career Display	X	X		X
Health Career Exploration	X	X		X
Health Career Preparation	X	X		X
Health Education	X			X
HOSA Happenings				
Healthy Lifestyle	X			
Medical Reading	X	X		X
Life Threatening Situations				
Math for Health Careers	X	X		X

Project Lead the Way		Medical Detectives		
Middle School				
Lessons:	1	2	3	
National Service Project				
Nutrition				
Public Health	X	X	X	
Prepared Speaking	X	X	X	
Speaking Skills*	X	X	X	
National Service Project				

**Competitive events designated by an asterisk (*) are classified as special needs students with individualized education plans.*