



HOSA – PLTW CURRICULUM CROSSWALK

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Introduction

HOSA–Future Health Professionals is the largest student organization in America’s high schools for young people enrolled in health science and biomedical science programs and those interested in pursuing careers in health professions. HOSA–Future Health Professionals works closely with local and state leaders to build a pipeline to attract qualified students to the health industry. HOSA aims to develop leadership and technical skill competencies through a motivation, awareness, and recognition program, which is an integral part of the instructional program. HOSA–Future Health Professionals, a student-led organization, provides opportunities for students to develop, practice, and refine their academic, technical, leadership, and teamwork skills to transition from education to careers seamlessly.

Project Lead The Way (PLTW) Biomedical Science (BMS) Program is a sequence of high school courses aligned with appropriate national learning standards, which follows a proven hands-on, real-world problem-solving approach to learning. Students explore concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology, and public health. Through activities like dissecting a heart, students examine processes, structures, and interactions of the human body – often playing the roles of biomedical professionals. Students explore the prevention, diagnosis, and treatment of disease and work collaboratively to investigate and design innovative solutions to health challenges, such as fighting cancer with nanotechnology.

Throughout the BMS program, students acquire strong teamwork and communication practices and develop organizational, critical-thinking, and problem-solving skills. Along the way, they investigate a variety of careers in biomedical science. These courses complement traditional science and health science courses and can serve as the foundation for STEM-centered or specialized academies. The program is designed to prepare students to pursue postsecondary education and careers in biomedical science and health professions.

Educators value strategies to enhance and improve student learning and achievement. The HOSA Competitive Events Program is designed to provide a system for recognizing the competencies developed by members through health science and/or biomedical science classroom instruction, related job training, and HOSA-related activities. Professionals from the health community, appropriate to each event, evaluate individual members and teams according to set performance standards.

The HOSA Competitive Events Program provides a constantly expanding and improving series of healthcare-related competitive events. Competition within a state is held in the spring to identify members eligible for competition at the HOSA International Leadership Conference. Imagine the pride members feel when their names are called, and they stand on stage waiting to receive a medallion as a first-, second-, or third-place event winner.

Members participate in state and international conferences and meet HOSA members and health professionals from across the state and nation, as well as recently from other countries. Members who participate in the competitive events program are immediately recognized as professionals in training interested in pursuing careers in the health professions. The real benefit of the competitive events program is realized when students prepare for competition. Members gain confidence in their abilities when they improve their skills in preparation for competition and can transfer this learning to other settings.

HOSA's competitive events are aligned with the National Health Science Standards and helps students graduate career and college-ready.

Events are offered in six categories:

- Health Science
- Health Professions
- Emergency Preparedness
- Leadership
- Teamwork
- Recognition

In the listing of events by category, four exceptional competitive events are designated by an asterisk (*) for those classified as special needs students with individualized education plans.

Finally, HOSA and PLTW are vested in a partnership to provide a variety of unique strategies to enhance student engagement and learning. This resource offers a customized crosswalk of the PLTW Biomedical Science courses to the HOSA Competitive Events Program. Each “X” in the following crosswalk indicates a connection between content in a particular PLTW course unit and an opportunity to include and reinforce knowledge and skills needed for successful preparation for specific HOSA competitive events.

Project Lead The Way	Principles of Biomedical Science			
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4
Health Science				
Behavioral Health	X	X		
Biomedical Equipment Technician		X		X
Dental Terminology				
Healthcare Administration	X	X	X	
Health Informatics		X	X	X
Human Growth and Development		X		
Medical Law and Ethics	X	X		X
Medical Math	X	X		X
Medical Reading	X	X		
Medical Spelling	X	X	X	
Medical Terminology	X	X	X	
Nutrition	X	X	X	
Pathophysiology	X	X	X	X
Pharmacology	X	X		
World Health & Disparities				X
Health Professions				
Biotechnology	X	X	X	X
Clinical Laboratory Science	X	X	X	
Clinical Nursing		X	X	
Clinical Specialty		X		X
Dental Science				
Family Medicine Physician		X	X	X
Home Health Aide		X		
Medical Assisting		X		
Nursing Assisting		X	X	
Occupational Therapy				X
Patient Care Technician		X	X	X
Personal Care*		X		
Pharmacy Science		X	X	
Phlebotomy		X		
Physical Therapy		X		
Respiratory Therapy		X		
Sports Medicine		X		
Surgical Technologist		X		
Veterinary Science		X		
Emergency Preparedness				
CERT Skills		X	X	
CPR/First Aid		X	X	
EMT		X	X	
Epidemiology		X	X	
Life Support Skills*		X	X	
Mental Health Promotion		X		X
MRC Partnership			X	
Public Health			X	

Principles of Biomedical Science Cont'd

Project Lead The Way				
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4
Leadership				
Extemporaneous Writing- Health Policy		X		
Health Career Photography		X		
Healthy Living				
Interviewing Skills*				
Job Seeking Skills				
Prepared Speaking		X		
Research Poster				
Researched Persuasive Writing and Speaking		X		
Speaking Skills*		X		
Teamwork				
Biomedical Debate				X
Community Awareness				
Creative Problem Solving				X
Forensic Science	X			
Health Career Display		X		
Health Education		X		
HOSA Bowl				
Medical Innovation				X
Parliamentary Procedure				
Public Service Announcement				
Recognition				
American Red Cross Chapter Recognition				
American Red Cross Diversify the Blood Supply Video Challenge				
Barbara James Service Award				
Health Care Issues Exam	X	X	X	X
Health Literacy Ambassador		X	X	
HOSA Happenings				
HOSA Service Project				
Outstanding HOSA Achievement				
Outstanding HOSA Leader				

* Student must be classified under the provision of the 2004 reauthorized *Individuals with Disabilities Education Act (IDEA)* to participate.

Project Lead The Way		Human Body Systems			
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4	
Health Science					
Behavioral Health		X			
Biomedical Equipment Technician					
Dental Terminology					
Healthcare Administration					
Health Informatics					
Human Growth and Development		X		X	
Medical Law and Ethics	X	X	X	X	
Medical Math	X	X	X	X	
Medical Reading	X	X	X	X	
Medical Spelling	X	X	X	X	
Medical Terminology	X	X	X	X	
Nutrition		X	X	X	
Pathophysiology	X	X	X	X	
World Health & Disparities				X	
Health Professions					
Pharmacology		X	X		
Biotechnology		X	X	X	
Clinical Laboratory Science		X	X	X	
Clinical Nursing		X	X		
Clinical Specialty	X	X	X	X	
Dental Science					
Family Medicine Physician	X	X	X	X	
Home Health Aide					
Medical Assisting				X	
Nursing Assisting	X				
Occupational Therapy	X			X	
Patient Care Technician	X	X	X	X	
Personal Care*	X				
Pharmacy Science	X	X	X	X	
Phlebotomy					
Physical Therapy	X				
Respiratory Therapy			X		
Sports Medicine	X				
Surgical Technologist	X				
Veterinary Science					
Emergency Preparedness					
CERT Skills			X		
CPR/First Aid			X		
EMT			X		
Epidemiology			X		
Life Support Skills*					
Mental Health Promotion	X	X	X	X	
MRC Partnership					
Public Health	X	X	X	X	

Project Lead The Way	Human Body Systems			
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4
Leadership				
Extemporaneous Writing- Health Policy	X	X	X	X
Health Career Photography	X	X	X	X
Healthy Living	X	X	X	X
Interviewing Skills*	X	X	X	X
Job Seeking Skills	X	X	X	X
Prepared Speaking	X	X	X	X
Research Poster		X		
Researched Persuasive Writing and Speaking	X			
Speaking Skills*	X	X	X	X
Teamwork				
Biomedical Debate				X
Community Awareness				X
Creative Problem Solving	X	X	X	X
Forensic Science				
Health Career Display	X	X	X	X
Health Education	X	X	X	X
HOSA Bowl	X	X	X	X
Medical Innovation	X	X	X	X
Parliamentary Procedure				
Public Service Announcement				X
Recognition				
American Red Cross Chapter Recognition				
American Red Cross Diversify the Blood Supply Video Challenge				
Barbara James Service Award				
Health Care Issues Exam	X	X	X	X
Health Literacy Ambassador		X	X	X
HOSA Happenings				
HOSA Service Project				
Outstanding HOSA Achievement				
Outstanding HOSA Leader				

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Project Lead The Way	Medical Interventions			
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4
Health Science				
Behavioral Health			X	
Biomedical Equipment Technician				
Dental Terminology	X			X
Healthcare Administration				
Health Informatics				
Human Growth and Development		X		
Medical Law and Ethics	X	X	X	X
Medical Math	X	X	X	
Medical Reading	X	X	X	X
Medical Spelling	X	X	X	X
Medical Terminology	X	X	X	X
Nutrition				
Pathophysiology	X	X	X	X
Pharmacology	X			X
World Health & Disparities	X	X		
Health Professions				
Biotechnology	X	X	X	X
Clinical Laboratory Science	X	X	X	
Clinical Nursing				
Clinical Specialty	X	X	X	X
Dental Science				
Family Medicine Physician	X	X	X	X
Home Health Aide				
Medical Assisting		X		
Nursing Assisting		X		
Occupational Therapy	X		X	X
Patient Care Technician	X	X	X	X
Personal Care*		X		
Pharmacy Science	X			X
Phlebotomy		X		
Physical Therapy			X	X
Respiratory Therapy		X		
Sports Medicine				
Surgical Technologist				
Veterinary Science				
Emergency Preparedness				
CERT Skills				
CPR/First Aid				
EMT				
Epidemiology	X		X	
Life Support Skills*				
Mental Health Promotion			X	
MRC Partnership				
Public Health	X	X	X	X

Project Lead The Way	Medical Interventions			
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4
Leadership				
Extemporaneous Writing-Health Policy	X	X	X	X
Health Career Photography	X	X	X	X
Healthy Living	X	X	X	X
Interviewing Skills*			X	X
Job Seeking Skills			X	X
Prepared Speaking				
Research Poster				
Researched Persuasive Writing and Speaking	X			
Speaking Skills*	X	X	X	X
Teamwork				
Biomedical Debate	X	X		
Community Awareness	X	X	X	
Creative Problem Solving		X		X
Forensic Science				X
Health Career Display	X	X	X	X
Health Education	X		X	
HOSA Bowl	X	X	X	X
Medical Innovation	X	X	X	X
Parliamentary Procedure				
Public Service Announcement	X			X
Recognition				
American Red Cross Chapter Recognition				
American Red Cross Diversify the Blood Supply Video Challenge				
Barbara James Service Award				
Health Care Issues Exam	X	X	X	X
Health Literacy Ambassador	X	X	X	X
HOSA Happenings				
HOSA Service Project				
Outstanding HOSA Achievement				
Outstanding HOSA Leader				

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Project Lead The Way		Biomedical Innovation						
HOSA Competitive Events	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Health Science								
Behavioral Health	X	X			X			
Biomedical Equipment Technician			X					
Dental Terminology		X						
Healthcare Administration	X							X
Health Informatics								
Human Growth and Development		X						
Medical Law and Ethics	X				X		X	
Medical Math	X	X	X	X	X	X	X	X
Medical Reading	X	X	X	X	X	X	X	X
Medical Spelling	X	X	X	X	X	X	X	X
Medical Terminology	X	X	X	X	X	X	X	X
Nutrition								
Pathophysiology	X	X	X	X	X	X	X	X
Pharmacology			X					
World Health & Disparities					X			
Health Professions								
Biotechnology				X		X		X
Clinical Laboratory Science				X				X
Clinical Nursing	X	X						
Clinical Specialty	X		X	X	X		X	
Dental Science								
Family Medicine Physician	X		X	X	X		X	
Home Health Aide								
Medical Assisting		X					X	
Nursing Assisting	X	X					X	
Occupational Therapy	X		X					
Patient Care Technician	X	X	X				X	
Personal Care*	X	X					X	
Pharmacy Science	X	X					X	
Phlebotomy		X						
Physical Therapy	X							
Respiratory Therapy		X						
Sports Medicine								
Surgical Technologist		X						
Veterinary Science								
Emergency Preparedness								
CERT Skills	X							
CPR/First Aid								
EMT	X							
Epidemiology	X	X		X	X			
Life Support Skills*								
Mental Health Promotion					X			X
MRC Partnership								
Public Health			X	X	X			

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Project Lead The Way		Biomedical Innovation						
HOSA Competitive Events	Unit1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Leadership								
Extemporaneous Writing-Health Policy	X	X	X	X	X	X	X	
Health Career Photography	X		X	X	X		X	
Healthy Living				X	X			
Interviewing Skills*								X
Job Seeking Skills								X
Prepared Speaking	X	X	X	X	X	X	X	X
Research Poster								
Researched Persuasive Writing and Speaking	X							X
Speaking Skills*	X	X	X	X	X	X	X	X
Teamwork								
Biomedical Debate				X	X			X
Community Awareness				X	X			
Creative Problem Solving	X	X	X	X	X	X	X	X
Forensic Science	X						X	
Health Career Display	X		X	X	X		X	X
Health Education				X	X			
HOSA Bowl	X	X	X	X	X	X	X	
Medical Innovation	X	X	X	X	X	X		X
Parliamentary Procedure								
Public Service Announcement				X	X			
Recognition								
American Red Cross Chapter Recognition								
American Red Cross Diversify the Blood Supply Video Challenge								
Barbara James Service Award								
Health Care Issues Exam	X	X	X	X	X	X	X	X
Health Care Literacy		X			X			X
HOSA Happenings								
HOSA Service Project								
Outstanding HOSA Achievement								
Outstanding HOSA Leader								

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HOSA—Future Health Professionals Competitive Events Overviews

HOSA Handbook, Section B

Event Guidelines. Each guideline contains the following information:

- Purpose
- Description of Event
- Dress Code
- Rules and Procedures
- Test Plan
- Sample Test Questions—new test items or scenarios are developed annually.

Find information on the specific events @ hosa.org/guidelines

Contact Information

For additional information about HOSA and/or PLTW, please contact:

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