NAF Academy of Health Sciences Crosswalk HOSA Competitive Events Program and the National Health Science Standards

HOSA–Future Health Professionals
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Introduction
Part One

HOSA–Future Health Professionals is the largest student organization operating in schools for students enrolled in health science and biomedical science programs and those interested in pursuing careers in health professions. This professional student-led organization works closely with local and association leaders to build a pipeline to attract qualified students to the health industry. HOSA's purpose is to develop leadership and technical skill competencies through a program of motivation, awareness and recognition, which is an integral part of the instructional program. HOSA members develop, practice and refine their academic, technical, leadership, and teamwork skills to achieve seamless transition from education to careers.

NAF's Academy of Health Sciences brings industry-validated, career-focused curriculum and work-based learning experiences to high school students in nearly 100 high school career academies across the country. In 2011, NAF launched the Academy of Health Sciences (AOHS) in order to address the stark need for better prepared and trained healthcare professionals. The curriculum introduces students to health career possibilities through a series of career exploration courses. All courses use project-based learning techniques with an emphasis on strengthening literacy, project management, leadership, and team building skills while fostering creativity and innovation. The curricula is vetted by industry professionals to ensure content is current and relevant.

NAF Academy of Health Sciences courses include:

- Health Careers Exploration
- Foundations of Anatomy and Physiology 1 & 2
- Biotechnology, and
- Global Health.

NAF (www.naf.org) partners with Project Lead The Way (PLTW (www.pltw.org) and Paxton/Patterson (www.paxtonpatterson.com) to offer supplemental curriculum options for Academies of Health Sciences at an added cost. The PLTW Biomedical Science program offers courses in Principles of Biomedical Science, Human Body Systems, Medical Interventions, and Biomedical Innovation. The Paxton/Patterson Health Science Education curriculum offers a variety of integrated units including: Biomedical Engineering, Biotechnology R&D, Clinical Lab Practices, Dentistry, Emergency Medical Technician, Environmental Health & Safety, Forensics, Health Information Management, Medical Imaging, Mental Health, Nursing, Ophthalmology, Pharmacology, Speech Therapy, Sports Medicine, Therapeutic Services, and Veterinary Medicine. Academies may offer specialized courses, state-level certifications, special projects, or early college programs.

In addition to studying career-focused curricula and working on collaborative projects, AOHS students gain critical career knowledge through a series of work-based learning activities both inside and outside of the classroom including job shadowing events, mock interviews, résumé writing workshops, and the culminating experience—a paid internship. Business partners work with educators to provide these opportunities. By serving on advisory boards and as mentors, business partners provide a real world connection that helps students understand the pathways to career success.

NAFTrack Certification, NAF's student certification assessment system, validates successful course completion, projects, and internships. By receiving a passing score on end-of-course exams and satisfactory scores on culminating project and internship assessments, students earn NAFTrack Certification - signifying to postsecondary institutions and employers they are both college and career ready. With this credential, graduates can benefit from NAFTrack Certified Hiring, a new initiative with some of America's top companies that gives special consideration to these graduates for job opportunities and other career support. Additionally, select AP, IB, Cisco, and dual enrollment courses or third party curricula qualify for NAFTrack Certification.

HOSA–Future Health Professionals and **NAF's Academy of Health Sciences** are vested in a partnership to provide a variety of strategies to enhance student engagement and learning. This resource provides a customized crosswalk of the NAF AOHS courses to the HOSA Competitive Events Program. Each gray shaded box in the following crosswalk indicates a connection between content in a particular NAF course lesson and indicates an opportunity to include and reinforce knowledge and skills needed for successful preparation for specific HOSA competitive events**.** Competitive events are designed to provide a system for recognizing competencies developed through 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 standards of performance. This program is constantly expanding and improving through a series of health related competitive events.

Competition within a chartered association is held each spring to identify members eligible to advance to the HOSA International Leadership Conference held annually in June. Members participate in regional, chartered association, and international conferences and meet HOSA members and health professionals from across the state, nation and beyond. HOSA competitors 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 and practice and can transfer this learning to other settings.

Events are offered in six categories:

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

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

Health Careers and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Health Careers															
	Unit 1			Unit 2			Unit 3		Unit 4		Unit 5		Unit 6			
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15	Lesson 16
Health Science																
Dental Terminology																
Health Informatics																
Medical Terminology																
Medical Spelling																
Medical Math																
Medical Reading																
Knowledge Tests																
Behavioral Health																
Human Growth and Development																
Pathophysiology																
Medical Law and Ethics																
Pharmacology																

Health Careers and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Health Careers															
	Unit 1		Unit 2				Unit 3		Unit 4		Unit 5			Unit 6		
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15	Lesson 16
Nutrition																
Cultural Diversities & Disparities																
Health Professions																
Biomedical Laboratory Science																
Clinical Nursing																
Clinical Specialty																
Dental Science																
Home Health Aide																
Medical Assisting																
Nursing Assisting																
*Personal Care																
Pharmacy Science																
Physical Therapy																
Sports Medicine																

Health Careers and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Health Careers															
	Unit 1		Unit 2				Unit 3		Unit 4			Unit 5			Unit 6	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15	Lesson 16
Veterinary Science																

Emergency Preparedness																
CERT Skills																
CPR/First Aid																
EMT																
Epidemiology																
*Life Support Skills																
MRC Partnership																
Public Health																
Leadership																
Extemporaneous Health Poster																
Extemporaneous Writing																
Healthy Lifestyle																
*Interviewing Skills																
Job Seeking Skills																
Health Career Photography																
Organizational Leadership																
Prepared Speaking																
Researched Persuasive Writing and Speaking																
*Speaking Skills																

Teamwork																
Biomedical Debate																
Community Awareness																
Creative Problem Solving																
Forensic Science																
Health Career Display																
Health Education																
HOSA Bowl																
Medical Innovation																
Parliamentary Procedure																
Public Service Announcement																
Recognition																
Barbara James Service Award																
Health Care Issues Exam																
HOSA Happenings																
HOSA Service Project																
Outstanding State Leader																

Anatomy & Physiology 1 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 1												
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13
Health Science													
Dental Terminology													
Health Informatics													
Medical Terminology													
Medical Spelling													
Medical Math													
Medical Reading													
Knowledge Tests													
Behavioral Health													
Human Growth and Development													
Pathophysiology													
Medical Law and Ethics													
Pharmacology													
Nutrition													

Anatomy & Physiology 1 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 1												
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13
Cultural Diversity & Disparities													
Health Professions													
Biomedical Laboratory Science													
Clinical Nursing													
Clinical Specialty													
Dental Science													
Home Health Aide													
Medical Assisting													
Nursing Assisting													
*Personal Care													
Pharmacy Science													
Physical Therapy													
Sports Medicine													

Anatomy & Physiology 1 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 1												
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13
Veterinary Science													
Emergency Preparedness													
CERT Skills													
CPR/First Aid													
EMT													
Epidemiology													
*Life Support Skills													
MRC Partnership													
Public Health													
Leadership													
Extemporaneous Health Poster													
Extemporaneous Writing													
Healthy Lifestyle													

Anatomy & Physiology 1 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 1												
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13
*Interviewing Skills													
Job Seeking Skills													
Health Career Photography													
Organizational Leadership													
Prepared Speaking													
Researched Persuasive Writing and Speaking													
*Speaking Skills													
Teamwork													
Biomedical Debate													
Community Awareness													
Creative Problem Solving													
Forensic Science													
Health Career Display													
Health Education													

Anatomy & Physiology 1 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 1												
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12	Lesson 13
HOSA Bowl													
Medical Innovation													
Parliamentary Procedure													
Public Service Announcement													
Recognition													
Barbara James Service Award													
Health Care Issues Exam													
HOSA Happenings													
HOSA Service Project													
Outstanding State Leader													

Anatomy & Physiology 2 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 2								
	Lesson 14	Lesson 15	Lesson 16	Lesson 17 Midterm	Lesson 18	Lesson 19	Lesson 20	Lesson 21	Lesson 22 FINAL
Health Science									
Dental Terminology									
Health Informatics									
Medical Terminology									
Medical Spelling									
Medical Math									
Medical Reading									
Knowledge Tests									
Behavioral Health									
Human Growth and Development									
Pathophysiology									
Medical Law and Ethics									
Pharmacology									
Nutrition									

Anatomy & Physiology 2 and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Anatomy & Physiology 2								
	Lesson 14	Lesson 15	Lesson 16	Lesson 17 Midterm	Lesson 18	Lesson 19	Lesson 20	Lesson 21	Lesson 22 FINAL
Cultural Diversities & Disparities									
Health Professions									
Biomedical Laboratory Science									
Clinical Nursing									
Clinical Specialty									
Dental Science									
Home Health Aide									
Medical Assisting									
Nursing Assisting									
*Personal Care									
Pharmacy Science									
Physical Therapy									
Sports Medicine									
Veterinary Science									

Emergency Preparedness									
CERT Skills									
CPR/First Aid									
EMT									
Epidemiology									
*Life Support Skills									
MRC Partnership									
Public Health									
Leadership									
Extemporaneous Health Poster									
Extemporaneous Writing									
Healthy Lifestyle									
*Interviewing Skills									
Job Seeking Skills									
Health Career Photography									
Organizational Leadership									
Prepared Speaking									
Researched Persuasive Writing and Speaking									

*Speaking Skills									
Teamwork									
Biomedical Debate									
Community Awareness									
Creative Problem Solving									
Forensic Science									
Health Career Display									
Health Education									
HOSA Bowl									
Medical Innovation									
Parliamentary Procedure									
Public Service Announcement									
Recognition									
Barbara James Service Award									
Health Care Issues Exam									
HOSA Happenings									
National Service Project									
Outstanding State Leader									

Biotechnology and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Biotechnology Unit 1			Unit 2			Unit 3			Unit 4		Unit 5
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12
Health Science												
Dental Terminology												
Health Informatics												
Medical Terminology												
Medical Spelling												
Medical Math												
Medical Reading												
Knowledge Tests												
Behavioral Health												
Human Growth & Development												
Pathophysiology												
Medical Law & Ethics												
Pharmacology												
Nutrition												

Biotechnology and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Biotechnology Unit 1			Unit 2			Unit 3			Unit 4		Unit 5
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12
Cultural Diversities & Disparities												
Health Professions												
Biomedical Laboratory Science												
Clinical Nursing												
Clinical Specialty												
Dental Science												
Home Health Aide												
Medical Assisting												
Nursing Assisting												
*Personal Care												
Pharmacy Science												
Physical Therapy												
Sports Medicine												
Veterinarian Science												

Emergency Preparedness												
CERT Skills												
CPR/First Aid												
EMT												
Epidemiology												
*Life Support Skills												
MRC Partnership												
Public Health												
Leadership												
Extemporaneous Health Poster												
Extemporaneous Writing												
Healthy Lifestyle												
*Interviewing Skills												
Job Seeking Skills												
Health Career Photography												
Organizational Leadership												
Prepared Speaking												
Researched Persuasive Writing and Speaking												

*Speaking Skills												
Teamwork												
Biomedical Debate												
Community Awareness												
Creative Problem Solving												
Forensic Science												
Health Career Display												
Health Education												
HOSA Bowl												
Medical Innovation												
Parliamentary Procedure												
Public Service Announcement												
Recognition												
Barbara James Service Award												
Health Care Issues Exam												
HOSA Happenings												
HOSA Service Project												
Outstanding State Leader												

Global Health and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Global Health														
	Unit 1				Unit 2		Unit 3				Unit 4			Unit 5	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15
Health Science															
Dental Terminology															
Health Informatics															
Medical Terminology															
Medical Spelling															
Medical Math															
Medical Reading															
Knowledge Tests															
Behavioral Health															
Human Growth & Development															
Pathophysiology															
Medical Law & Ethics															
Pharmacology															

Global Health and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Global Health														
	Unit 1				Unit 2		Unit 3				Unit 4			Unit 5	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15
Nutrition															
Cultural Diversities & Disparities															
Health Professions															
Biomedical Laboratory Science															
Clinical Nursing															
Clinical Specialty															
Dental Science															
Home Health Aide															
Medical Assisting															
Nursing Assisting															
*Personal Care															
Pharmacy Science															
Physical Therapy															
Sports Medicine															

Global Health and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Global Health														
	Unit 1				Unit 2		Unit 3				Unit 4			Unit 5	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15
Veterinary Science															
Emergency Preparedness															
CERT Skills															
CPR/First Aid															
EMT															
Epidemiology															
*Life Support Skills															
MRC Partnership															
Public Health															
Leadership															
Extemporaneous Health Poster															
Extemporaneous Writing															
Healthy Lifestyle															

Global Health and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Global Health														
	Unit 1				Unit 2		Unit 3				Unit 4			Unit 5	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15
*Interviewing Skills															
Job Seeking Skills															
Health Career Photography															
Organizational Leadership															
Prepared Speaking															
Researched Persuasive Writing and Speaking															
*Speaking Skills															
Teamwork															
Biomedical Debate															
Community Awareness															
Creative Problem Solving															
Forensic Science															
Health Career Display															
Health Education															

Global Health and HOSA Competitive Events Crosswalk

HOSA Competitive Events	Global Health														
	Unit 1				Unit 2		Unit 3				Unit 4			Unit 5	
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7 Midterm	Lesson 8	Lesson 9	Lesson10	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15
HOSA Bowl															
Medical Innovation															
Parliamentary Procedure															
Public Service Announcement															
Recognition															
Barbara James Service Award															
Health Care Issues Exam															
HOSA Happenings															
HOSA Service Project															
Outstanding State Leader															

Event Guidelines. Each guideline contains the following information:

- Purpose
- Description of Event
- Dress Code
- Rules and Procedures
- Test Plan
- Official Reference Materials
- Required Personnel for Administration
- Facilities, Equipment and Materials to Conduct the Event/Activity
- Sample Test Questions—new test items or scenarios are developed annually
- Event Flow Chart

Health Science Events

Dental Terminology. Encourages students to improve their ability to identify, spell, define and apply the terminology and language of careers in the dental field, to include prefixes, suffixes, roots and anatomy, physiology, pathophysiology and occupations. Methodology: 100 multiple-choice item test; 90 minutes.

Health Informatics. Encourages students to explore the evolving field of health informatics and the required skills for a career in the field. Methodology: 75 multiple-choice item test; 90 minutes.

Medical Spelling. Encourages students to improve their ability to define and spell medical terms and terms associated with healthcare careers. Methodology: Round One—50-item written multiple-choice test; 60 minutes; Round Two—Spelldown with elimination when terms are misspelled.

Medical Terminology. Encourages students to improve their ability to identify, spell, define and apply the prefixes, suffixes, roots and anatomy, physiology, pathophysiology and healthcare careers. Methodology: 100 multiple-choice item test; 90 minutes.

Medical Math. Encourages students to improve their ability to identify, solve, and apply mathematical principles involving temperature, weights, and measures used in the healthcare delivery system. Methodology: 50 multiple-choice item test; 90 minutes.

Medical Reading. Encourages students to improve their reading comprehension, oral communication, and evaluate information. Methodology: Methodology: 50 multiple-choice item test; 60 minutes. Competitors will read five required books.

Knowledge Tests. Encourages students to explore and learn about selected healthcare careers and to assess knowledge in health-related areas. Methodology: 100 multiple-choice item test; 90 minutes. Knowledge Tests include: Behavioral Health, Human Growth and Development; Cultural Diversities & Disparities, Medical Law and Ethics; Nutrition; Pathophysiology; and Pharmacology.

Health Professions Events

Biomedical Laboratory Science. Provides students an opportunity to develop and demonstrate knowledge and skills in the medical laboratory and healthcare biotechnology careers. Methodology: Round One—50-item written multiple-choice test; 60 minutes; Round Two—Performance of a selected skill procedure(s) identified in a written scenario requiring the use of critical thinking skills.

Clinical Nursing. Provides students an opportunity to develop and demonstrate knowledge and skills in clinical nursing. Methodology: Round One—50-item written multiple- choice test; 60 minutes; Round Two—Performance of a selected skill procedure(s) identified in a written scenario which requires the use of critical thinking skills.

Clinical Specialty. Provides students an opportunity to develop and demonstrate knowledge and skills in a selected health profession. Methodology: This event will consist of two items: (a) development of a career portfolio, and (b) demonstration of a selected skill common to chosen health profession. The career portfolio requirement shows career understanding and documentation of a related work-based learning experience. The skill portion will consist of the digitally recorded demonstration of a skill-related to the chosen career.

Dental Science. Provides students an opportunity to develop and demonstrate knowledge and skills in dental careers. Methodology: 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.

Home Health Aide. Provides students an opportunity to develop and demonstrate knowledge and skills as a home health aide. Methodology: This event will consist of two rounds of competition. Round One will be 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.

Medical Assisting. Provides students an opportunity to develop and demonstrate knowledge and skills as a medical assistant. Methodology: This event will consist of two rounds of competition. Round One will be 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.

Nursing Assisting. Provides students an opportunity to develop and demonstrate knowledge and skills in nursing assisting. Methodology: This event will consist of two rounds of competition. Round One will be 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.

***Personal Care.** Provides students an opportunity to develop and demonstrate knowledge and skills in nursing assisting. Methodology: The competitive event will consist of an evaluation of student's performance of selected of skill procedure(s) identified in a written scenario.

Pharmacy Science. Provides students with an opportunity to develop and demonstrate knowledge and skills in pharmacy science. Methodology: This event will consist of two rounds of competition. Round One will be 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.

Physical Therapy. Provides students an opportunity to develop and demonstrate knowledge and skills in the area of physical therapy. Methodology: 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.

Sports Medicine. Provides students an opportunity to develop and demonstrate knowledge and skills in the area of sports medicine. Methodology: This event consists of two rounds of competition. Round One will be 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.

Veterinary Science. Provides students an opportunity to develop and demonstrate knowledge and skills in veterinary care. Methodology: This event consists of two rounds of competition. Round One will be 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.

Emergency Preparedness Events

CERT Skills. Provides students an opportunity to develop and demonstrate knowledge and skills they will need to respond to their community's immediate needs in the aftermath of a disaster, when emergency services are not immediately available. Methodology. This event consists of two rounds of competition for a 2-person team. Round One is a written, multiple-choice test of knowledge and understanding. Top scoring teams 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.

CPR/First Aid. Provides students an opportunity to develop and demonstrate knowledge and skills in team first aid and basic life support for healthcare providers. This event consists of two rounds of competition for a 2-person team. Round One is a written, multiple-choice test of knowledge and understanding. Top scoring teams 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.

Emergency Medical Technician. Provides students an opportunity to develop and demonstrate knowledge and skills as a team in emergency medical care. Methodology: This event will consist of two rounds of competition for a 2-person team. Round One is a written, multiple-choice test of knowledge and understanding. Top scoring teams will 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.

Epidemiology. Encourages students to study the effects of health and disease in populations, to improve their scientific literacy, and to provide insights into public health careers. Methodology: 75 multiple-choice item test; case study, 90 minutes.

***Life Support Skills.** Provides students an opportunity to develop and demonstrate knowledge and skills in basic life support. Methodology: The competitive event will consist of an evaluation of student performance of selected skill procedure(s) identified in a written scenario. The scenario requires the use of critical thinking skills.

MRC Partnership. The purpose of this event is to initiate, grow and maintain a partnership between a local chapter of the Medical Reserve Corps and HOSA. Methodology: The partnership will promote and support the mission of HOSA, the mission of the Medical Reserve Corps, and priorities of the United States Surgeon General. The event consists of the implementation and documentation of partnership activities that contribute to strong, healthy and prepared communities.

Public Health. Encourages students to work as a team to plan and teach others in their community about public health initiatives. Methodology: This event involves a team of 2-6 members who select a topic of public health concern and create an effective public health presentation to educate the public on the chosen topic. Specific topic selection will be based on a category announced annually.

Leadership Events

Extemporaneous Health Poster. Encourages students to improve their ability to analyze and interpret current health and HOSA-related issues and express and communicate this interpretation through development of a poster. Methodology: This event is in the form of an individual creation of a poster conducted in a setting with individual worktables and sufficient space for each competitor to carry out his/her form of artistic expression, to be completed within three (3) hours of work time.

Extemporaneous Writing. Encourages students to improve their ability to express themselves in writing. Methodology: Competitors report to the event where they are presented the topic. They will have one hour to type an essay on the topic.

Healthy Lifestyle. Provides students an opportunity to learn healthy living concepts and apply their learning to a personal healthy lifestyle goal. Methodology: This event consists of two rounds of competition. Round One will be a written, multiple choice test that will assess content knowledge of health literacy topics such as the physical benefits of exercise, healthy eating, and avoiding risky behaviors. The focus will be on the short- and long-term effects of healthy living on the function of the human body. Each competitor will set a personal goal and document his or her efforts in a personalized Healthy Lifestyle notebook. The time period will begin on or after September 1st of the competition year, and will conclude at the specific conference at which the event is held. (Competitors may continue to pursue their goal and add to their notebook until the annual national leadership conference.)

***Interviewing Skills.** Encourages students to develop and/or refine the skills necessary to apply for and obtain employment. Methodology: Competitors apply for any healthcare-related

position for which they are trained or are being trained. Competitors prepare a cover letter and resume. At the conference, competitors will complete a job application (at orientation) and participate in a job interview (assigned time received at orientation.)

Job Seeking Skills. Encourages students to develop and/or refine the skills necessary to apply for and obtain employment. Methodology: Competitors apply for any healthcare-related position for which they are trained or are being trained. Competitors prepare a cover letter and resume. At the conference, competitors will complete a job application (at orientation) and participate in a job interview (assigned time received at orientation.)

Health Career Photography. Encourages students to analyze health careers through the use of digital photography. Competitors use technology in editing and presenting digital pictures. Methodology: Competitors use digital photography to illustrate the health professions. Competitors photograph three different health professionals, edit the photos using computer software technology, and then present the three printed pictures to a panel of judges.

Prepared Speaking. Encourages students to improve their skills in speaking and their ability to organize and present facts (or information) about a topic related to a specific theme. Methodology: Competitors develop a speech related to a selected national topic.

Organizational Leadership. The purpose of the event is two-fold: 1) To assist chartered associations with selecting their Voting Delegates, if a method does not already exist and 2) To encourage HOSA members to develop and apply their knowledge of the organization and Parliamentary Procedure to represent their chartered associations at the International Leadership Conference as an official Voting Delegate.

Researched Persuasive Writing and Speaking. Encourages students to improve their skills in researching a health issue, preparing written documentation supporting a thesis, and presenting information orally. Methodology: Competitors write a paper and develop a speech in which they must take a stand, either in favor of or opposed to a health related issue. Two topic areas will be selected each summer and will be announced in HOSA publications. Competitors select one of the topics and develop a speech and written paper to reflect the position taken on the selected topic, either for or against, yes or no.

***Speaking Skills.** Encourages students to improve their skills in speaking and their ability to organize and present facts (or information) about a topic related to a specific theme. Methodology: Competitors develop a speech related to a selected national topic.

Teamwork Events

Biomedical Debate. Provides students with an opportunity to develop and demonstrate skills in debating a biomedical issue. Methodology: This event consists of a Round One written test and a Round Two debate round. The debate round follows a modified Lincoln-Douglas debate format. The topic for both rounds will be announced annually. Teams of 3-4 members will participate in the Round One written test. Teams with the highest average score from on the test qualify for the debate round. Debate round pairings and position (either the affirmative or negative) are based on random selection.

Community Awareness. Provides students opportunities to: (1) Develop a project to promote community awareness using health issues that may be of local, state, and/or national interest, (2) Assist communities to become more aware of the pros and cons of the health issue

selected, (3) Promote goodwill and public relations for local HOSA chapters and (4) Evaluate the effectiveness and impact of the project on the community. Methodology: A service project designed to raise community awareness of a health-related issue of local, state and/or national interest. The project, selected by the HOSA chapter, should be one that addresses one specific health issue, need or concern and makes a worthwhile contribution to the community. The project should have a direct relationship to the organization's purposes and to the course. Activities are planned to make the community aware of the health issue. The chapter documents each activity as it is planned, conducted and evaluated. When the project is completed, the chapter develops a portfolio that documents and explains the project and activities. A team of 2-4 competitors presents the chapter's project to a panel of judges in an interview, using the portfolio as documentation of their accomplishments.

Creative Problem Solving. 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's 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 30 minutes to analyze the problem. Selected resource materials related to the problem will be provided. At the end of the preparation time, teams have eight (8) minutes to present their solution to a panel of judges.

Forensic Science. Encourage students to analyze careers in forensic medicine and to work as a team to apply their knowledge and skills in creating a solution to a forensic medicine-related problem. Methodology: This event involves two rounds of competition. Round One consists of a written test to evaluate the team's understanding of forensic medicine. Top scoring teams advance to Round Two and will be given a case study related to forensic medicine. Teams have six (6) minutes to analyze a case study, which will include written information and may include physical evidence.

Health Education. Encourages students to work as a team to plan and teach health-related concepts. Methodology: Involves a team of 2-4 members who select a health-related concept or instructional objective, then 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, slides, overhead transparencies, or any other form of media. Teams will provide instruction to a selected group of learners.

Health Career Display. Encourages students to improve their ability to represent themselves and communicate career information to others. Methodology: Teams consisting of two (2) competitors develop a visual display of a specific career or cluster of careers in healthcare. The display allows students to express ideas through an artistic medium to highlight the benefits of a particular career focus. Students will also be judged on their ability to communicate career information to others (display) in Round One, then selected students will present themselves and communicate the career information to others (presentation) in Round Two.

HOSA Bowl. Motivates students to participate in teams and to test their knowledge on various topics and situations in health science, HOSA, and parliamentary procedure. Methodology: Teams consisting of 4 members each will take a written test in Round One. Top scoring teams advance to Round Two and compete by giving appropriate responses to items presented by a moderator. These items may be in the form of questions, incomplete statements, and/or definitions. Winners will be determined by a series of elimination rounds. The last remaining

team becomes the first-place winner of a section. Section winners play in final rounds to determine the top three teams.

Medical Innovation. Encourages HOSA members to create or improve upon up-and-coming technologies in health that relate to science, computers, engineering, biotechnology, math, and/or the delivery of healthcare, and to share their understanding with others. Teams consisting of two to four (2-4) competitors who develop a visual display and/or demonstration of an aspect of a medical innovation to be presented to the judges.

Parliamentary Procedure. Develops leadership skills by using parliamentary procedure to conduct a simulated business meeting. This event is based on team competition; therefore, members learn the importance of cooperation and working together through competitive performance. Methodology: This event will involve two rounds of competition. Round One will consist of a written test to evaluate the team's understanding of parliamentary procedure. The top scoring teams will advance to Round Two and will be given a secret problem with motions to perform during the meeting. The team has twelve (12) minutes preparation time prior to the nine (9) minute demonstration of the meeting. All team members must be involved in the meeting.

Public Service Announcement. Encourages students to analyze the general public's understanding of a healthcare issue, and to use technology to produce a public service announcement that informs the community about an important healthcare issue. Methodology: Teams consisting of three-six (3-6) members produce a 30-second Public Service Announcement (PSA).

Recognition Events

Barbara James Service Award. Encourages students to become contributing members of their communities by performing community service. Methodology: 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 whose commitment to community service is worthy of recognition. Reporting the activity occurs through an online submission process.

Health Care Issues Exam. Encourages students to investigate, analyze and apply their knowledge of current healthcare-related issues. Methodology: The format is a 50-item multiple-choice test and one essay question that will be graded only to break a tie. All questions will be written at a level to measure thinking skills. Competitors have 60 minutes to complete the test.

HOSA Happenings. Communicates information about the HOSA chapter in a manner that celebrates chapter members and their achievements, as well as shares information with readers that is health science-related. Methodology: Chapters tell the story of their HOSA–Future Health Professionals chapter, throughout the year, using a print newsletter, electronic newsletter, or website. For this recognition event, chapters will select one (1) newsletter (print or electronic) or a website, to be judged at the state level, and will follow the state's instructions for event submission. All submissions that reach a pre-determined standard will be awarded a Certificate of Excellence.

HOSA Service Project. Encourages students to provide community service through the adoption of goals and implementation of strategies related to the support of a national health care organization. Methodology: The HOSA National Service Project involves the sponsorship of a national healthcare organization by local HOSA chapters. Local chapters plan service

projects to support the selected organization. Chapters document their involvement and submit documentation to their state advisor by the state deadline to be eligible for national recognition.

Outstanding State Leader. This event is designed to honor one Outstanding State Leader from each HOSA state association in recognition of the member's commitment to HOSA and outstanding leadership of his/her state association. Each state will select one outstanding state leader to be recognized at the HOSA National Leadership Conference.

Introduction
Part Two

In 1995, the National Consortium for Health Science Education (NCHSE) released the National Health Science Standards. Over the past two decades, the work of NCHSE has continued to enhance and clarify the standards and objectives providing more detail and better definition to expectations for meeting the standards, developing content for curriculum design, and building a framework for measurement and certification of achievement. The guiding principle of this work: *if these standards were reviewed by to a classroom teacher or a health science student would they know what to teach or what they were expected to learn?*

The National Health Science Standards offer an answer to the question, "What does a worker need to know and be able to contribute to the delivery of safe and effective healthcare?" The standards represent core expectations most workers need to succeed in health professions. Benefits of having nationally validated healthcare standards include potential to forge strong links among various stakeholders. The foundation standards provide a common language, common goal, and a common reference point for educators, employers and consumers.

The standards allow:

- Students and parents to have clear direction to help set goals for future employment;
- Educators are able to design quality curriculum and instruction consistent with industry expectations; and
- Consumers and employers benefit from high quality, efficient healthcare delivery from well-trained worker.

Participation by states in a common health science education system organized around

the National Health Science Standards and recognized by the health industry and postsecondary partners will result in a continuous supply of many more, well-prepared students entering the workforce. Successful collaboration at the local level between middle and high schools, postsecondary partners and healthcare employers that includes open, ongoing lines of communication is the key to an effective, consistent health science career pathway.

NAF and HOSA–Future Health Professionals value the work of the National Consortium for Health Science Education. Both organizations serve on the NCHSE Board of Directors and align their programs with the standards to support consistency and a common framework in the preparation of future health professions. During NAF's curriculum development for the Academy of Health Sciences courses, the National Health Science Standards were included to provide an interconnecting structure to these nationally validated standards and a consistent point of reference.

This resource has been prepared as a collaborative effort of HOSA, NAF and the NCHSE. Part two outlines a crosswalk on the NAF Academy of Health Sciences courses to the National Health Science Standards.

NATIONAL HEALTH SCIENCE STANDARDS

https://www.healthscienceconsortium.org/wp-content/uploads/2019/05/NATIONAL_HEALTH_SCIENCE_STANDARDS_MAY_2019_FINAL.pdf

The National Health Science Standards provide a clear and consistent understanding of industry and postsecondary expectations for health science teachers and students. These standards are designed to provide the essential knowledge common across health professions to prepare and increase the number of students that are college and career ready.

Foundation Standard 1: Academic Foundation

Understand human anatomy, physiology, common diseases and disorders, and medical math principles.

Foundation Standard 2: Communications

Demonstrate methods of delivering and obtaining information, while communicating effectively.

Foundation Standard 3: Systems

Identify how key systems affect services performed and quality of care.

Foundation Standard 4: Employability Skills

Utilize employability skills to enhance employment opportunities and job satisfaction.

Foundation Standard 5: Legal Responsibilities

Describe legal responsibilities, limitations, and implications on healthcare worker actions.

Foundation Standard 6: Ethics

Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.

Foundation Standard 7: Safety Practices

Identify existing and potential hazards to clients, co-workers, and self. Employ safe work practices and follow health and safety policies and procedures to prevent injury and illness.

Foundation Standard 8: Teamwork

Identify roles and responsibilities of individual members as part of the healthcare team.

Foundation Standard 9: Health Maintenance Practices

Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.

Foundation Standard 10: Technical Skills

Apply technical skills required for all career specialties and demonstrate skills and knowledge as appropriate.

Foundation Standard 11: Information Technology Applications

Utilize and understand information technology applications common across health professions.

Health Careers and National Health Science Standards Crosswalk

National Health Science Standards

Lessons	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 1: Course .5		■			■	■															■						■
Lesson 2: History of Medicine & Health Care						■	■																				■
Lesson 3: Modern Health Careers Pathways						■	■	■																			■
Lesson 4: Prevention & Public Health						■								■													■
Lesson 5: Culminating Project Launch		■		■		■			■		■					■						■					■
Lesson 6: Connecting Nutrition & Health						■																	■				■
Lesson 7: Visiting the Doctor						■	■					■	■		■						■					■	■
Lesson 8: Symptoms & Tests						■				■												■		■			■
Lesson 9: Nursing and Care						■																		■			■
Lesson 10: Providing Patient Care						■										■	■	■	■	■					■		■
Lesson 11: Understanding Mental Health						■	■																				■
Lesson 12: Mental Health Professionals						■	■																				■

Health Careers and National Health Science Standards Crosswalk

Lessons	National Health Science Standards																										
	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 13: Working in a Dental Office																											
Lesson 14: Health Informatics																											
Lesson 15: Personal Career Planning																											
Lesson 16: Project Presentation & Course Closure																											

Anatomy & Physiology 1 and National Health Science Standards Crosswalk

Lessons	National Health Science Standards																										
	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 1: Course Introduction	■																										■
Lesson 2: Surfaces, Planes, and Directions	■			■														■									
Lesson 3: Biochemistry	■						■																				
Lesson 4: The Integumentary System		■																	■								
Lesson 5: The Skeletal System	■	■			■																						
Lesson 6: The Muscular System		■		■																			■				
Lesson 7: Midterm Exam	■	■																									
Lesson 8: The Nervous System	■	■		■																							
Lesson 9: The Brain	■			■																			■				
Lesson 10: The Senses	■	■																									
Lesson 11: The Endocrine System	■	■	■	■																							■
Lesson 12: The Course Project	■	■		■	■	■															■	■	■				■
Lesson 13: Final Exam				■																							

Anatomy & Physiology 2 and National Health Science Standards Crosswalk

Lessons	National Health Science Standards																										
	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 14: The Cardiovascular System	■	■																					■				
Lesson 15: The Respiratory System	■	■																■	■				■				
Lesson 16: The Immune System	■	■														■							■				
Lesson 17: Midterm Exam	■	■																									
Lesson 18: The Digestive System	■	■																					■				
Lesson 19: The Urinary System	■	■																■	■				■				
Lesson 20: The Reproductive System	■	■																■	■				■				
Lesson 21: Course Project	■	■		■		■															■	■	■				■
Lesson 22: Final Exam	■	■		■																							

Biotechnology and National Health Science Standards Crosswalk

Lessons	National Health Science Standards																									
	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 1: Course Introduction				■	■	■																					■
Lesson 2: What is Biotechnology?				■	■	■	■																				■
Lesson 3: Bioethics				■	■	■	■							■	■												■
Lesson 4: Introduction to the Laboratory				■	■	■															■	■					■
Lesson 5: Model Organisms, Ethnobotany, & Drug Development		■		■	■	■																					■
Lesson 6: Working with DNS in the Lab	■			■	■	■																					■
Lesson 7: Recombinant DNA	■	■		■	■	■						■	■		■						■					■	■
Lesson 8: Bacterial Transformation				■	■	■										■	■										■
Lesson 9: Industry, Academia, Government, and Regulation				■	■	■							■														■
Lesson 10: Bringing a Product to Market				■	■	■						■	■														■
Lesson 11: Careers in Biotechnology				■	■	■		■	■	■	■																■
Lesson 12 Culminating Project and Course Closure				■	■	■																■					■

Global Health and National Health Science Standards Crosswalk

Lessons	National Health Science Standards																										
	1.1	1.2	1.3	2.1	2.2	2.3	3.1	4.1	4.2	4.3	4.4	5.1	5.2	6.1	6.2	7.1	7.2	7.3	7.4	7.5	8.1	8.2	9.1	10.1	11.1	11.2	11.3
Lesson 1: Course Introduction		■																									
Lesson 2: What Is Health?		■	■																						■		
Lesson 3: Types of Disease and Injury		■														■							■				
Lesson 4: World Populations & Disease			■				■																		■		
Lesson 5: Human Rights, Ethics & Global Health													■	■	■												
Lesson 6: Health & Socioeconomic Development				■										■							■	■					
Lesson 7: Introduction to Health Determinants				■		■									■												
Lesson 8: Environmental Risk Factors		■				■									■	■							■				
Lesson 9: Nutritional Risk Factors		■	■												■												
Lesson 10: Behavioral Risk Factors				■											■								■				
Lesson 11: Community & Policy Health Interventions		■		■		■								■	■								■				
Lesson 12: Cooperative Efforts to Improve Public Health				■										■	■						■		■				
Lesson 13: Developing the Case for a Health Issue				■		■		■													■	■			■	■	
Lesson 14: Project Presentation				■		■		■			■										■	■			■	■	■
Lesson 15: Working in Global Health & Course Closure						■			■	■	■										■					■	

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