

# **Health Science/HOSA Data**



From our **Program Guide** Courses/Credentials Offered:

Revised 11/8/2023

#### Health Science Cluster Program Guide

The Health Science cluster provides students with essential knowledge and skills for pursuing careers in the following five pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, and Biotechnology Research and Development. Rigorous and challenging content may include a variety of instructional strategies, work-based learning experiences, and simulation.

**Courses highlighted in yellow are shared with other clusters. See "Shared Courses" table on page 3 for add	ditional details.
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Courses ingin	Health Science Program					
Career	(Must teach three courses from this program list within two years)					
Pathway	The Health Science Program instructional content incorporates project- and problem-based healthcare practices and procedures to demonstrate					
Program	knowledge and skills fundamental to a variety of healthcare careers. Knowledge and skills are reinforced and enhanced through co-curricular activities					
	and participation in HOSA - Future Health Professionals and work-based learning opportunities that are age and grade appropriate.					
Course	Career Pathway Program Courses Career Readiness Indicator (CRI) In Demand Occupations					
Number		1 1	-			
14002G1001	Foundations of Health Science - Required prerequisite	BACE – Biotechnician Assistant	Clinical Laboratory			
1.420761000	course/Health Education substitute	Credentialing Exam	Technologists & Technicians			
14297G1000	Advanced Health Seminar	BLS Instructor	Dental Hygienists			
14999G1000	CTE Lab in Health Science	Certified Billing and Coding Specialist	Diagnostic Medical			
14054G1000	Dental Assisting	(CBCS)	Sonographers  Licensed Practical Nurses			
14149G1000 14055G1000	Diagnostic Services	Certified Clinical Medical Assistant (CCMA)	Medical Assistants			
	Emergency Services and Management	Certified EKG Technician (CET)				
14062G1005 19259G0500	Exercise Prescription Physiology  Family Wellness (1/2 credit) – Health Education substitute	Certified Electronic Health Records	Medical Equipment Preparers     Medical & Health Services			
15055G1000		Specialist (CEHRS)				
13055G1000	Forensic Science and Crime Scene Investigation - Science credit eligible	Certified Medical Administrative	Manager     Medical Secretaries			
14157G1000	Health Informatics	Assistant (CMAA)	Nursing Assistants			
14251G0500	Health Promotion and Wellness (1/2 credit)	Certified Nursing Assistant (CNA)	Nurse Anesthetists			
14298G1000	Health Science Internship*, 1 credit option (Content	Certified Pharmacy Technician (CPhT)	Nurse Practitioners			
1423001000	Standards 1, 3, 4, 5, 6, and 9), 11th or 12th grade	Certified Patient Care Technician (CPCT)	Occupational Therapy			
14298G2000	Health Science Internship*, 2 credit option (Content	Elanco Veterinary Medical Applications	Assistants			
	Standards 1-11). 11th or 12th	Certification	Ophthalmic Medical			
14299G1001	Human Body Structures and Functions - Science credit	Emergency Medical Dispatcher (EMD)	Technicians			
	eligible	Lifeguard Certification (American	Pharmacists			
14252G1001	Introduction to Biotechnology -Science credit eligible	Lifeguard Association or American Red	Pharmacy Technicians			
14152G1000	Introduction to Pharmacy	Cross)	<ul> <li>Phlebotomists</li> </ul>			
18105G1012	Introduction to Veterinary Sciences	<ul> <li>National Emergency Medical Responder</li> </ul>	<ul> <li>Physical Therapists</li> </ul>			
14062G1004	Kinesiology and Biomechanics	(EMR)	<ul> <li>Physical Therapy Assistants</li> </ul>			
14156G1000	Medical Coding	<ul> <li>National Emergency Medical Technician</li> </ul>	<ul> <li>Psychiatric Technicians</li> </ul>			
14154G1000	Medical Terminology	(EMT)	<ul> <li>Radiologic Technologists</li> </ul>			
14051G2000	Nurse Aide Training (11th or 12th grade only)	Public Safety Telecommunicator	<ul> <li>Registered Nurses</li> </ul>			
14254G1000	Nutrition in Healthcare		Respiratory Therapists			
14056G1000	Operating Room Foundations		<ul> <li>Speech-Language Pathologists</li> </ul>			
14002G1002	Orientation to Health Science		<ul> <li>Surgical Technologists</li> </ul>			
14051G1000	Patient Care Technician		<ul> <li>Veterinary Assistants &amp;</li> </ul>			
14152G1001	Pharmacy Technician		Laboratory Animal Caretakers			
17049G1000	Safety and Health Regulations	4				
14997G1000	Senior Career Pathway Project- Health Science	4				
14062G1002	Sports Medicine Advanced (11th or 12th grade)	4				
14062G1003	Sports Medicine Fundamentals	4				
14062G1001	Sports Medicine Intermediate	4				
14202G1000	Support Services	4				
14099G1000	Therapeutic Services	4				
18105G1022	Veterinary Science					

Successful completion of one credit (minimum) in Health Science coursework is required prior to placement of a student in a clinical/internship. A program receiving a waiver for the Foundations of Health Science prerequisite is **not** exempt from the requirement. Please refer to the Internship manual for forms and contracts to be used with LEA board approval.

#### **Health Science Middle School Program Courses**

The Health Science Middle School Program instructional content is designed to allow students to explore careers, terminology, basic skills, and technologies associated with each pathway in the Health Science career cluster. Knowledge and skills are reinforced and enhanced through participation in HOSA – Future Health Professionals and project-based learning opportunities that are age and grade appropriate.

Course	Course Name
Number	
22151G0608	Career Explorations
14001G0635	Health Explorations (35 instructional hour course) (Content Standards 1-4)
14001G0670	Health Explorations (70 instructional hour course) (Content Standards 1-6)
14001G0640	Health Explorations (140 instructional hour course) (All Content Standards)
14002G0670	Introduction to Careers in Healthcare (70 instructional hour course) (Content Standards 1-6)
14002G0608	Introduction to Careers in Healthcare (140 instructional hour course) (All Content Standards)
14001G0608	Medical Detectives (PLTW)

New Course of Study from the <u>2024-25 Program Guide</u> because teachers can pilot new courses then but they are required for 2025-2026:

Revised 1/01/2024

Career Pathway Program					
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations		
TBD	Foundations of Health Science – Required prerequisite course  Biotechnology I	BACE – Biotechnician Assistant Credentialing Exam     BLS Instructor	Clinical Laboratory Technologists     & Technicians     Dental Assistants		
TBD TBD TBD TBD	Biotechnology II Career Pathway Project in Health Science CTE Lab in Health Science Diagnostic Services	Certified Billing and Coding Specialist (CBCS) Certified Clinical Medical Assistant (CCMA) Certified EKG Technician (CET) Certified Electronic Health Records Specialist (CEHRS)	Certified Billing and Coding Specialist (CBCS)     Certified Clinical Medical Assistant	Certified Billing and Coding Specialist (CBCS)     Certified Clinical Medical Assistant	Dental Hygienists     Diagnostic Medical Sonographers     Licensed Practical Nurses     Medical Assistants
TBD 14055G1000 TBD	Emergency Medical Services Emergency Services and Management Family Wellness		Medical Assistants     Medical Equipment Preparers     Medical & Health Services     Manager		
15055G1000	Forensic Science and Crime Scene Investigation – Science Credit Eligible	Certified Medical Administrative Assistant (CMAA)	Manager     Medical Secretaries     Nursing Assistants		
TBD TBD TBD	Health Science Internship – 1 credit option Health Science Internship – 2 credit option Human Body Structures and Functions	Certified Nursing Assistant (CNA)     Certified Pharmacy Technician (CPhT)     Certified Patient Care Technician (CPCT)	Nurse Anesthetists     Nurse Practitioner     Occupational Therapists		
18105G1012 TBD TBD TBD TBD TBD TBD TBD 17049G1000 TBD TBD TBD TBD TBD	Introduction to Veterinary Science  Medical Mathematics Medical Terminology Nurse Aide Training Operating Room Essentials Patient Care Technician Pharmacy Technician Safety and Health Regulations Sports Medicine I Sports Medicine II Therapeutic Services Veterinary Science	Certified Patient Care Technician (CPCT) Elanco Veterinary Medical Applications Certification Emergency Medical Dispatcher (EMD) Lifeguard Certification (American Lifeguard Association or American Red Cross) National Emergency Medical Responder (EMR) National Emergency Medical Technician (EMT) Public Safety Telecommunicator	Elanco Veterinary Medical Applications     Certification     Emergency Medical Dispatcher (EMD)     Lifeguard Certification (American Lifeguard Association or American Red Cross)     National Emergency Medical Responder (EMR)     National Emergency Medical Technician (EMT)     Public Safety Telecommunicator	Occupational Therapy Assistant     Ophthalmic Medical Technician     Opticians, Dispensing     Pharmacists     Pharmacy Technicians     Phlebotomists     Physical Therapists     Physical Therapy Assistants     Psychiatric Technicians     Radiologic Technologists	

	Health Science Middle School Program Courses (NEW 2025-2026)				
Course	Course Name				
Number					
22151G0608	22151G0608 Career Explorations				
TBD	Health Science Discovery				
TBD	TBD Healthcare Career Exploration				
TBD	TBD Medical Laboratory Science				

#### Health Science Programs (2022-2023)- MAP of Programs

Health Science Program offered at 382 schools Project Lead the Way - Biomedical Sciences offered at 22 schools

#### Enrollment (2022-2023)

26,940 Enrolled in Health Science Program Courses

1,661 Enrolled in Project Lead the Way - Biomedical Sciences Program Courses

28,601 Enrolled in Health Science Cluster Courses

#### Students (2022-2023)

21,879 Unique Students in Health Science Program Courses

1,515 Unique Students in Project Lead the Way - Biomedical Sciences Program Courses

23,079 Unique Students in Health Science Cluster Courses

## Positive Placement (2021-2022)

3,004 of 3,205 for Health Science (93.73%)

134 of 139 for Project Lead the Way - Biomedical Sciences (96.40%)

3,138 of 3,344 for All Health Science Programs (93.84%)

## CRI obtainment from 2022-2023

	Health Science Cluster				
94	94 BLS Instructor with Healthcare Provider				
96	Certified Patient Care Technician (CPCT)	824			
97	Certified Nursing Assistant (CNA)	625			
99	Certified Medical Administrative Assistant (CMAA)	15			
100	100 Certified EKG Technician (CET)				
101	Certified Pharmacy Technician (CPhT)	58			
102	102 National Emergency Medical Responder (EMR)				
103	Lifeguard Certification	68			
104	104 National Emergency Medical Technician (EMT)				
205	Certified Clinical Medical Assistant (CCMA)	120			
225	Alabama Fire College Public Safety Telecommunicato	6			
244	244 Elanco Veterinary Medical Applications Certificati				

# **HOSA Membership**: Learn more at <a href="https://alabamahosa.org/">https://alabamahosa.org/</a>

12,270 members from 190 chapters throughout the state as of Jan 20,2024.

AL HOSA is the 4<sup>th</sup> largest charter in the International HOSA organization.

Led by state officer team, AL HOSA Executive Committee, & Advisory Board

HOSA-Future Health Professionals—2023-2024 Membership Year January 5, 2024 Report

Rank	HOSA	12-6-2023	1-5-2024	Difference	%
	Affiliate	Membership	Membership		Change
1	Texas HOSA	37,449	40,022	2,573	7%
2	Florida HOSA	14,477	16,813	2,336	16%
3	Georgia HOSA	14,386	15,997	1,611	11%
4	Alabama HOSA	11,865	12,153	288	2%
5	California HOSA	7,893	11,611	3,718	47%
6	Tennessee HOSA	9,821	10,590	769	8%
7	Arizona HOSA	10,706	10,338	-368	-3%
8	Ohio HOSA	7,806	9,166	1,360	17%
9	Kentucky HOSA	6,169	7,629	1,460	24%
10	North Carolina HOSA	6,812	7,321	509	7%
11	Michigan HOSA	5,849	6,894	1,045	18%
12	Oklahoma HOSA	5,842	6,039	197	3%
13	New Jersey HOSA	4,709	5,851	1,142	24%
14	Canada HOSA	3,137	4,476	1,339	43%
15	Mississippi HOSA	3.712	4.086	374	10%
16	South Carolina HOSA	3,669	3,809	140	4%
17	Pennsylvania HOSA	3,514	3,728	214	6%
18	Wisconsin HOSA	2,840	3,594	754	27%
19	Virginia HOSA	3,098	3,583	485	16%
20	Nevada HOSA	2,357	3,542	1,185	50%
21	Missouri HOSA	3,108	3,239	131	4%
22	Washington HOSA	2,972	3,145	173	6%
23	Illinois HOSA	2,869	3,051	182	6%
24	Colorado HOSA	2,606	3,012	406	16%
25	Arkansas HOSA	2,106	2,739	633	30%
26	Puerto Rico HOSA	1,596	2,496	900	56%
27	Indiana HOSA	2.070	2,284	214	10%
28	Utah HOSA	1,700	1,787	87	5%
29	Hawaii HOSA	1,478	1,462	-16	-1%
30	Minnesota HOSA	1,133	1,423	290	26%
31	New Mexico HOSA	2,419	1,191	-1,228	-51%
32	Nebraska HOSA	906	1,186	280	31%
33	Louisiana HOSA	889	1,132	243	27%
34	Kansas HOSA	929	1,072	143	15%
35	Oregon HOSA	724	1,009	285	39%
36	Idaho HOSA	834	976	142	17%
37	South Dakota HOSA	922	941	19	2%
38	Delaware HOSA	1,308	940	-368	-28%
39	Maryland HOSA	749	879	130	17%
40	New York HOSA	499	771	272	55%

41	West Virginia HOSA	616	745	129	21%
42	American Samoa	295	632	337	114%
	HOSA				
43	North Dakota HOSA	524	626	102	19%
44	Montana HOSA	523	541	18	3%
45	New Hampshire	466	495	29	6%
	HOSA				

Rank         HOSA Affiliate         12-6-2023 Membership         1-5-2024 Membership         Difference Change         %           46         Iowa HOSA         730         475         -255         -35%           47         Connecticut HOSA         390         446         56         14%           48         District of Columbia HOSA         157         419         262         167%           49         Vermont HOSA         198         220         22         11%           50         Rhode Island HOSA         147         181         34         23%           51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago HOSA         26         29         3         12%           54         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0						
46         Iowa HOSA         730         475         -255         -35%           47         Connecticut HOSA         390         446         56         14%           48         District of Columbia HOSA         157         419         262         167%           49         Vermont HOSA         198         220         22         11%           50         Rhode Island HOSA         147         181         34         23%           51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago         26         29         3         12%           64         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA	Rank	HOSA	12-6-2023	1-5-2024	Difference	%
47         Connecticut HOSA         390         446         56         14%           48         District of Columbia HOSA         157         419         262         167%           49         Vermont HOSA         198         220         22         11%           50         Rhode Island HOSA         147         181         34         23%           51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago         26         29         3         12%           HOSA         8         14         6         75%           54         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22		Affiliate	Membership	Membership		Change
48         District of Columbia HOSA         157         419         262         167%           49         Vermont HOSA         198         220         22         11%           50         Rhode Island HOSA         147         181         34         23%           51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago HOSA         26         29         3         12%           54         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	46	Iowa HOSA	730	475	-255	-35%
HOSA  49 Vermont HOSA  50 Rhode Island HOSA  51 Massachusetts HOSA  52 Alaska HOSA  53 Trinidad & Tobago HOSA  54 Malaysia HOSA  55 Tawain HOSA  56 Guatemala HOSA  57 Italy HOSA  58 China HOSA  198  220  22  11%  181  34  23%  182  173  -9  -5%  59  182  173  -9  -5%  180  180  180  181  181  181  181  18	47	Connecticut HOSA	390	446	56	14%
50         Rhode Island HOSA         147         181         34         23%           51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago         26         29         3         12%           HOSA         8         14         6         75%           54         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	48		157	419	262	167%
51         Massachusetts HOSA         182         173         -9         -5%           52         Alaska HOSA         146         160         14         10%           53         Trinidad & Tobago         26         29         3         12%           HOSA         8         14         6         75%           54         Malaysia HOSA         8         14         6         75%           55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	49	Vermont HOSA	198	220	22	11%
52       Alaska HOSA       146       160       14       10%         53       Trinidad & Tobago HOSA       26       29       3       12%         54       Malaysia HOSA       8       14       6       75%         55       Tawain HOSA       0       9       9       100%         56       Guatemala HOSA       14       9       -5       -36%         57       Italy HOSA       6       6       0       0         58       China HOSA       NA       NA       NA       NA         59       Germany HOSA       22       0       -22       -100%	50	Rhode Island HOSA	147	181	34	23%
53       Trinidad & Tobago       26       29       3       12%         HOSA       8       14       6       75%         54       Malaysia HOSA       8       14       6       75%         55       Tawain HOSA       0       9       9       100%         56       Guatemala HOSA       14       9       -5       -36%         57       Italy HOSA       6       6       0       0         58       China HOSA       NA       NA       NA       NA         59       Germany HOSA       22       0       -22       -100%	51	Massachusetts HOSA	182	173	-9	-5%
HOSA       8       14       6       75%         54       Malaysia HOSA       8       14       6       75%         55       Tawain HOSA       0       9       9       100%         56       Guatemala HOSA       14       9       -5       -36%         57       Italy HOSA       6       6       0       0         58       China HOSA       NA       NA       NA       NA         59       Germany HOSA       22       0       -22       -100%	52	Alaska HOSA	146	160	14	10%
55         Tawain HOSA         0         9         9         100%           56         Guatemala HOSA         14         9         -5         -36%           57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	53		26	29	3	12%
56     Guatemala HOSA     14     9     -5     -36%       57     Italy HOSA     6     6     0     0       58     China HOSA     NA     NA     NA     NA       59     Germany HOSA     22     0     -22     -100%	54	Malaysia HOSA	8	14	6	75%
57         Italy HOSA         6         6         0         0           58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	55	Tawain HOSA	0	9	9	100%
58         China HOSA         NA         NA         NA         NA           59         Germany HOSA         22         0         -22         -100%	56	Guatemala HOSA	14	9	-5	-36%
59 Germany HOSA 22 0 -22 -100%	57	Italy HOSA	6	6	0	0
,	58	China HOSA	NA	NA	NA	NA
60 Korea HOSA 1 0 -1 -100%	59	Germany HOSA	22	0	-22	-100%
	60	Korea HOSA	1	0	-1	-100%

NA=Not Available

	<b>HOSA Grand Total</b>	202,379	227,163	24,784	12%

