Health Science Career Pathways

Utah's Health Science Career Pathways have been developed to assist students select courses appropriate for their career interest in Health Care. The courses are listed by grade level to aid students, parent(s)/guardian(s), instructors and counselors develop the Student Education Occupation Plan (SEOP). The following sequence of courses are suggested for students interested in a Health Care Profession, and should be modified to accommodate specific student need and/or course availability. Additional information for Health Science and Technology (HST) Education can be obtained at www.usoe.k12.ut.us/ate/HST/hst.htm

Each pathway begins with the academic courses required for graduation. The academic courses listed are examples of common course selections. However, any number of course combinations are possible and will be determined by the SEOP.

Based on the student's career goals and college entrance requirements, the recommended electives may include additional academic courses such as foreign language, specific math, science and/or language arts; or additional Career and Technical Education (CTE) courses, such as Agriculture, Business, Family and Consumer Science, Health Science and Technology, Information Technology, Marketing, Technology Education, and/or Trade and Industry.

The total number of electives that a student will be able to obtain is determined by the school schedule structure and courses available within the region, district or school.

Each pathway offers a full range of career opportunities from entry level to management, including technical and professional careers. Pathways include:

Diagnostic Services – *create a picture of a patient's health at a single point in time.*

Therapeutic Services – *maintain or change the health status of the patient over time.*

Support Services - *provides a favorable environment for the delivery of health care.*

Biotechnology Research & Development – *uses scientific and technical advancements to enhance diagnostic and therapeutic abilities in health care.*

Health Informatics – *provides functions that support and document patient care.*

**Utah's Health Care Pathway Posters, Top Ten Health Care Career Guide and
a variety of other health care awareness and exploration resources
can be obtained at www.usoe.k12.ut.us/ate/HST/posters.htm**

Diagnostic Services Pathway
Create a picture of a patient's health at a single point in time.

Sample High School Schedule

9th Grade	10th Grade	11th Grade	12th Grade
Algebra	Geometry	Algebra 2	Calculus
			Math 1010 & 1050
English 9	English 10	English 11	Communications 1010
Earth Science	Biological Science	Chemistry 1010	Physics
Geography for Life	World Civilizations	U.S. History	Psychology 1010
Arts	Arts	Recommended Course	Recommended Course
Physical Education	Health & Physical Education	Recommended Course	Recommended Course
Computer Technology	Recommended Course	Recommended Course	Recommended Course

Health Professions Prerequisites – Concurrent Enrollment

Math 1010	Anatomy	Chemistry 1010
Communications 1010	Physiology	Psychology 1010

Recommended Courses

Introduction to Health Science	*Health Professions Essentials	Medical English
**Medical Terminology	**Biotechnology	Medical Math
**Medical Anatomy & Physiology	**Exercise Science / Sports Medicine	Foreign Language
**Advanced Health Science	Technology Education	

*   Skill Certificate Available
** Concurrent Enrollment and Skill Certificate Available

Recommended Health Technology Programs

Clinical Lab Science	*Optical Technician	*Phlebotomy Technician

*   Skill Certificate Available

Health Care Related Experiences

Health Occupations Students of America (HOSA)	Job Shadow	Clinical Rotation
Area Health Education Centers (AHEC)	Internship	Part-time Employment

Post High School Options

Certification	Associate Degree	Bachelor Degree	Graduate Degree	Other
Examples:	Examples:	Examples:	Examples:	Examples:
Clinical Lab Assistant	Clinical Lab Tech	Clinical Lab Scientist	Medical Technology	Apprenticeship
EKG Technician	Medical Lab Tech	Medical Technologist	Nuclear Medicine	Military Service
Phlebotomy Tech	Radiologic Tech	Nuclear Med Tech		
		Ultrasound Tech		

Sample Health Care Careers

Phlebotomist	Clinical Lab Technologist	Medical Technologist
Electrocardiographic (EKG) Tech	Mammographer Radiologic	Nuclear Medicine Technologist
Exercise Physiologist	Technologist	Pathologist
Geneticist	Radiologist	

Therapeutic Services Pathway
Maintain or change the health status of the patient over time.

Sample High School Schedule

9th Grade	10th Grade	11th Grade	12th Grade
Algebra	Geometry	Algebra 2	Calculus
			Math 1010 & 1050
English 9	English 10	English 11	Communications 1010
Earth Science	Biological Science	Chemistry 1010	Physics
Geography for Life	World Civilizations	U.S. History	Psychology 1010
Arts	Arts	Recommended Course	Recommended Course
Physical Education	Health & Physical Education	Recommended Course	Recommended Course
Computer Technology	Recommended Course	Recommended Course	Recommended Course

Health Professions Prerequisites – Concurrent Enrollment

Math 1010	Anatomy	Chemistry 1010
Communications 1010	Physiology	Psychology 1010

Recommended Courses

Introduction to Health Science	*Health Professions Essentials	Medical English – Medical Math
**Medical Terminology	**Intro to Emergency Medical Services	Nutrition
**Medical Anatomy & Physiology	**Exercise Science / Sports Medicine	Human Development
**Advanced Health Science	Family and Consumer Science	Foreign Language

*   Skill Certificate Available
** Concurrent Enrollment and Skill Certificate Available

Recommended Health Technology Programs

*Dental Assistant	*Nurse Assistant	*Pharmacy Technician
*Emergency Medical Technician	*Medical Assistant	*Surgical Technician

*   Skill Certificate Available

Health Care Related Experiences

Health Occupations Students of America (HOSA)	Job Shadow	Clinical Rotation
Area Health Education Centers (AHEC)	Internship	Part-time Employment

Post High School Options

Certification	Associate Degree	Bachelor Degree	Graduate Degree	Other
Examples:	Examples:	Examples:	Examples:	Examples:
Certified Nurse Asst	Dental Hygiene	Dietetics	Audiologist	Apprenticeship
Dental Assistant	Emergency Rescue	Exercise Science	Dentist	Military Service
EMT	Nursing (LPN)	Nursing (RN)	Pharmacist	
Medical Assistant	Paramedic	Radiation Therapist	Physical Therapist	
Surgical Technician	Physical Therapy Asst	Speech Pathology	Physician	

Sample Health Care Careers

Certified Nurse Assistant	Athletic Trainer	Audiologist
Emergency Medical Technician	Dental Assistant & Hygienist	Physician
Medical Assistant	Pharmacy Technician	Physical Therapist
Registered Nurse	Respiratory Therapist	Surgical Technologist

Health Informatics Pathway
Provide functions that support and document patient care.

Sample High School Schedule

9th Grade	10th Grade	11th Grade	12th Grade
Algebra	Geometry	Algebra 2	Calculus
			Math 1010 & 1050
English 9	English 10	English 11	Communications 1010
Earth Science	Biological Science	Chemistry 1010	Recommended Course
Geography for Life	World Civilizations	U.S. History	Psychology 1010
Arts	Arts	Recommended Course	Recommended Course
Physical Education	Health & Physical Education	Recommended Course	Recommended Course
Computer Technology	Recommended Course	Recommended Course	Recommended Course

Health Professions Prerequisites – Concurrent Enrollment

Math 1010	Anatomy	Chemistry 1010
Communications 1010	Physiology	Psychology 1010

Recommended Courses

Introduction to Health Science	Economics	Information Technology
**Medical Terminology	Statistics	Computer Applications
**Medical Anatomy & Physiology	Business	Physics
*Health Professions Essentials	Accounting	Foreign Language
Medical English – Medical Math	Marketing	

*   Skill Certificate Available

** Concurrent Enrollment and Skill Certificate Available

Recommended Health Technology Programs

*Medical Transcription   *Medical Office Administrative Assistant

*   Skill Certificate Available

Health Care Related Experiences

Health Occupations Students of America (HOSA)	Job Shadow	Clinical Rotation
Area Health Education Centers (AHEC)	Internship	Part-time Employment

Post High School Options

Certification	Associate Degree	Bachelor Degree	Graduate Degree	Other
Examples:	Examples:	Examples:	Examples:	Examples:
Medical Coder	Health Information	Epidemiologist	Biostatistics	Apprenticeship
Medical Office Asst	Technology	Health Promotion &	Health Care Adm	Military Service
Medical Transcription		Education	Public Health	

Sample Health Care Careers

Medical Biller	Data Analyst	Applied Researcher Community
Medical Coder	Epidemiologist	Health Care Administrator
Medical Information Technologist	Ethicist	Health Specialist
Medical Transcriptionist	Health Educator	Utilization Manager

Biotechnology Research and Development Pathway
Use scientific and technical advancements to enhance diagnostic and therapeutic abilities in health care.

Sample High School Schedule

9th Grade	10th Grade	11th Grade	12th Grade
Algebra	Geometry	Algebra 2	Calculus
			Math 1010 & 1050
English 9	English 10	English 11	Communications 1010
Earth Science	Biological Science	Chemistry 1010	Physics
Geography for Life	World Civilizations	U.S. History	Psychology 1010
Arts	Arts	Recommended Course	Recommended Course
Physical Education	Health & Physical Education	Recommended Course	Recommended Course
Computer Technology	Recommended Course	Recommended Course	Recommended Course

Health Professions Prerequisites – Concurrent Enrollment

Math 1010	Anatomy	Chemistry 1010
Communications 1010	Physiology	Psychology 1010

Recommended Courses

Introduction to Health Science	*Health Professions Essentials	Medical English
**Medical Terminology	**Biotechnology	Medical Math
**Medical Anatomy & Physiology	Agriculture	Statistics
**Advanced Health Science	Technology Education	Foreign Language

*   Skill Certificate Available
** Concurrent Enrollment and Skill Certificate Available

Recommended Health Technology Programs

Clinical Lab Science	*Pharmacy Technician

*   Skill Certificate Available

Health Care Related Experiences

Health Occupations Students of America (HOSA)	Job Shadow	Clinical Rotation
Area Health Education Centers (AHEC)	Internship	Part-time Employment

Post High School Options

Certification	Associate Degree	Bachelor Degree	Graduate Degree	Other
Examples:	Examples:	Examples:	Examples:	Examples:
Pharmacy Technician	Biotechnology	Biochemistry	Biostatistics	Apprenticeship
Quality Control	Technician	Medical Technology	Biotechnologist	Military Service
Technician	Medical Lab	Microbiology	Pharmacy	
	Technician			

Sample Health Care Careers

Biomedical Chemist	Microbiologist	Clinical Trials Researcher
Biostatician	Pharmacy Technician	Quality Control Technician
Genetics Lab Technician	Pharmacist	Toxicologist

Support Services Pathway
Provide a favorable environment for the delivery of health care.

Sample High School Schedule

9th Grade	10th Grade	11th Grade	12th Grade
Algebra	Geometry	Algebra 2	Calculus
			Math 1010 & 1050
English 9	English 10	English 11	Communications 1010
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Geography for Life	World Civilizations	U.S. History	Psychology 1010
Arts	Arts	Recommended Course	Recommended Course
Physical Education	Health & Physical Education	Recommended Course	Recommended Course
Computer Technology	Recommended Course	Recommended Course	Recommended Course

Health Professions Prerequisites – Concurrent Enrollment

Math 1010	Anatomy	Chemistry 1010
Communications 1010	Physiology	Psychology 1010

Recommended Courses

Introduction to Health Science	**Advanced Health Science	Trade & Industry
**Medical Terminology	Medical English – Medical Math	Nutrition
**Medical Anatomy & Physiology	Business & Marketing	Physics
*Health Professions Essentials	Family and Consumer Science	Foreign Language
**Intro to Emergency Medical Services	Technology Education	

*   Skill Certificate Available

** Concurrent Enrollment and Skill Certificate Available

Recommended Health Technology Programs

*Nurse Assistant	*Medical Assistant	*Surgical Technician

*   Skill Certificate Available

Health Care Related Experiences

Health Occupations Students of America (HOSA)	Job Shadow	Clinical Rotation
Area Health Education Centers (AHEC)	Internship	Part-time Employment

Post High School Options

Certification	**Associate Degree**	**Bachelor Degree**	**Graduate Degree**	**Other**
Examples:	Examples:	Examples:	Examples:	Examples:
Central Services	General Technology	Biomedical	Biomedical / Clinical	Apprenticeship
Transport Technician		Engineering	Engineering	Military Service
		Environmental Health		
		and Safety		

Sample Health Care Careers

Biomedical / Clinical Engineer Central	Facilities Manager	Hospital Maintenance Engineer
Services Technician	Food Service	Industrial Hygienist
Materials Management Assistant	Purchasing Agent	Transport Technician