



Foundational CTE Courses

Career Exploration (22151^), Employability (22152^), Entrepreneurship (12053^), Foundations of Technology (10004^), Leadership & Service (22101^)

Cluster Courses

Health Science Careers I – Exploration (14001^), Health Science Careers II - Engagement (14002^), Medical Terminology (14154^), MS PLTW Biomed (03071)

Pathway Courses

<i>Therapeutic Services Pathway</i>	<i>Diagnostic Services Pathway</i>	<i>Health Informatics Pathway</i>	<i>Support Services Pathway</i>	<i>Biotechnology Research & Development Pathway</i>
Gateway to Certified Nursing Assistant (14051) Introduction to Emergency Medical Services (14055) Introduction to Sports Medicine (14062^) PLTW Biomedical Sciences:	Introduction to Medical Diagnostics (14102^) PLTW Biomedical Sciences:	Introduction to Pharmacy Technician (14152) Introduction to Health Informatics (14157) PLTW Biomedical Sciences:		 PLTW Biomedical Sciences:
PLTW: Human Body Systems (03067)	PLTW: Medical Intervention (03068)	PLTW: Human Body Systems (03067)		PLTW: Biomedical Science (03066)

Dual Credit Courses

Visit <https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf> for a full list of dual credit courses in the Health Science Career Cluster.

Supporting Academic Courses

Biology (03051^), Biology - Advanced Studies (03052), AP Biology (03056^), AP Chemistry (03106^)
 Anatomy & Physiology (03053^), Anatomy (03054), Physiology (03055)

Capstone CTE Courses

Entrepreneurship Experience (80026), Senior Experience (80019^), Youth Apprenticeship (80020), Service Learning (22104), Youth Internships (80018^)

^Denotes course is available on the SD Virtual School (<http://www.sdvs.k12.sd.us/>)



Gateway to Certified Nursing Assistant

Career Cluster	Health Science
Course Code	14051
Prerequisite(s)	None
Credit	1.0
Program of Study and Sequence	Cluster course – Gateway to Certified Nursing Assistant – other pathway courses in the Therapeutic Services pathway or capstone experience
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Mentoring, Job Shadowing, Internship, Workplace Tours,
Industry Certifications	Certified Nursing Assistant
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; Therapeutic & Support Services Pathway Endorsement; *Health Science Education.
Resources	State and National Future Health Professionals (HOSA) Conference (Competitive Events), State and National Skills USA Conference, Certified Nursing Assistant Candidate Handbook, Omnibus Budget Reconciliation Act, South Dakota Board of Nursing, South Dakota Healthcare Association.

Important: In order for students to be able to sit for the CLNA Exam after this course it is highly encouraged that districts and teachers work with their local healthcare industry partners and the SD Board of Nursing to ensure that all criteria for eligibility are met. A licensed nurse will need to be involved in teaching this course in order to assure meeting industry certification requirements.

Course Description

Gateway to Certified Nursing Assistant is designed to empower high school students to take charge of and set a course for their future. It will prepare them to graduate with marketable skills and a real-world work connection. Students will be informed of the roles of the Certified Nursing Assistant focusing on direct patient care. After completing this portion for the Certified Nursing Assistant course, a student would need only to pass the state examinations in order to become a Certified Nursing Assistant. Clinical hours are required to meet certification requirements.

Program of Study Application

Gateway to Certified Nursing Assistant is the first pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses. Completion of Gateway to Certified Nursing Assistant would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

Course Standards

CNA 1: Discuss the Certified Nursing Assistant (CNA) certification process and roles of the CNA in the healthcare environment.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	CNA 1.1 Discuss laws and regulations that govern the work and certification of the nurse assistants.
One Recall	CNA 1.2 Identify the job duties and requirements of a nurse assistant.

CNA 2: Identify and implement principles related to infection control and basic safety/emergency situations.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	CNA 2.1 Demonstrate Certified Nursing Assistant's role in infection control procedures in reference to Centers for Disease Control, Occupational Safety Health Administration, and National Institute of Health.
Two Skill/Concept	CNA 2.2 Discuss and demonstrate safety/emergency protocols and procedures within the healthcare environment

CNA 3: Measure and record patient/resident's health-related vital data/statistics.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	CNA 3.1 Collect and document baseline information, including vital signs, height and weight.
Two Skill/Concept	CNA 3.2 Identify normal ranges for vital signs, and list factors which can affect vital signs.

CNA 4: Understand patient/resident's environment, basic human needs, and the importance of hygiene.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	CNA 4.1 Identify the importance of basic physical human needs of the patient/resident.
Two Skill/Concept	CNA 4.2 Identify the importance of the patient/resident's psychosocial needs.

CNA 5: Understand care involving cognitive impairment, mental illness, and death and dying.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	CNA 5.1 Identify effective strategies when caring for cognitively altered and mentally ill patients.
Two Skill/Concept	CNA 5.2 Summarize the basic needs and care during patient/resident's death and grieving process.



Health Science Careers I - Exploration

Career Cluster	Health Science
Course Code	14001
Prerequisite(s)	None
Credit	1.0
Program of Study and Sequence	Foundation Course – Health Science Careers I – Health Science Careers II or Medical Terminology – Pathway Course
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Job shadowing, mentoring, service learning, workplace tours
Industry Certifications	National Career Readiness Certificate (NCRC)
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; *Health Science Education
Resources	State and National Future Health Professionals, Conference, State and National Skills USA Conference

Course Description

Health Science Careers I explores the current interprofessional education (IPE) teamwork approach in health science and career options in an ever-expanding healthcare environment. Students in the course will evaluate unique abilities and explore personal career aspirations. In addition, the student will be exposed to legal, ethical, and safety implications inherent to providing high quality patient care.

Program of Study Application

Health Science Careers I is the first cluster course in the Health Science career cluster. Completion of Health Science Careers I: Exploration prepares a student to participate in Health Science Careers II or Medical Terminology and then pathway courses in any of the Health Science pathways: Biotech Research and Development, Therapeutic Services, Health Informatics, Diagnostics, or Support Services.

Course Standards

HSI 1: Understand the healthcare setting networks and roles and responsibilities.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HSI 1.1 Differentiate between private and public/government healthcare settings (managed care).
Two Skill/Concept	HSI 1.2 Collaborate and communicate effectively with colleagues, patients/residents, and/or family members.
Three Strategic Thinking	HSI 1.3 Identify positive and negative personal traits in a member of the healthcare setting.

HSI 2: Identify health science career pathways.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HSI 2.1 Identify and compare health science career pathways.
One Recall	HSI 2.2 Demonstrate knowledge of levels of education and credentialing requirements for a variety of health science careers of interest.
One Recall	HSI 2.3 Explore and demonstrate knowledge of employment opportunities, workplace environments, and career growth potential.

HSI 3: Examine legal/ethical responsibilities and limitations of the healthcare worker.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	HSI 3.1 Understand legal/ethical issues, religious and cultural diversity and their impacts on health care.
Two Skill/Concept	HSI 3.2 Explore scope of practice state-specific requirements and a variety of professional standards including the American Medical Association, American Nurse Association, American Dental Association.
Three Strategic Thinking	HSI 3.3 Examine the implications of Health Insurance Portability and Accountability Act (HIPAA) for healthcare professionals.
Four Extended Thinking	HSI 3.4 Analyze Patient/Residents' Bill of Rights and advanced directives.

HSI 4: Understand and demonstrate safety practices in the healthcare environment.

<i>Webb Level</i>	<i>Sub-indicator</i>
Four Extended Thinking	HSI 4.1 Apply principles of body mechanics and ergonomics.
Two Skill/Concept	HSI 4.2 Identify common safety hazards in the healthcare environment including patient/resident, community, and healthcare worker settings.



Health Science Careers II: Engagement

Career Cluster	Health Science
Course Code	14051
Prerequisite(s)	Health Science Careers I: Exploration
Credit	1.0
Program of Study and Sequence	Foundation Course – Health Science Careers I – Health Science Careers II – Medical Terminology or Pathway Course – Capstone Experience
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Workplace tours, job shadowing, mentoring, service learning, internship
Industry Certifications	First Aid, Cardiopulmonary Resuscitation (CPR), Automated External Defibrillator (AED) , Certified Nurse Assistant (CNA).
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; *Health Science Education
Resources	State and National Future Health Professionals (HOSA) Conference (Competitive events), State and National Skills USA Conference, American Red Cross, and American Heart Association.

Course Description

Health Science Careers II: Engagement will help a student discover and develop marketable and real-world skills that are essential to all health care workers. This course will cover real world skills such as infection control, disease, diagnosis, treatment, hands on skills, and documentation.

Program of Study Application

Health Science Careers II: Engagement is the second cluster course in the Health Science career cluster. Completion of Health Science Careers II: Engagement prepares a student to participate in Medical Terminology and/or a pathway courses in any of the Health Science pathways: Biotech Research and Development, Therapeutic Services, Health Informatics, Diagnostics or Support Services.

Course Standards

HS2 1: Identify and apply principles of infection control.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	HS2 1.1 Understand and Investigate the chain of infection.
Four Extended Thinking	HS2 1.2 Apply the prevention of pathogen transmission.

HS2 2: Discuss disease, diagnosis, and treatment.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	HS2 2.1 Differentiate disease concept with reference to Centers for Disease Control and National Institute of Health.
Three Strategic Thinking	HS2 2.2 Evaluate and assess patient/residents' health.
Two Skill/Concept	HS2 2.3 Examine current treatment modalities for conditions including but not limited to obesity, heart disease, cancer, and respiratory.

HS2 3: Demonstrate hands-on patient/residents' care skills.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HS2 3.1 Apply procedures for monitoring, measuring, and recording vital signs.
Two Skill/Concept	HS2 3.2 Apply First Aid/Cardiopulmonary Resuscitation (CPR), and Automated External Defibrillator (AED)
Four Extended Thinking	HS2 3.3 Demonstrate knowledge of direct patient/residents' care skills.

HS2 4: Demonstrate documentation standards and findings.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	HS2 4.1 Demonstrate use of technological documentation standards by entering data on the electronic medical record or paper.
Three Strategic Thinking	HS2 4.2 Differentiate between subjective and objective healthcare data to communicate patient/residents' status.

HS2 5: Utilize medical mathematics skills needed in healthcare work.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HS2 5.1 Apply mathematical computations related to healthcare procedures.
Three Strategic Thinking	HS2 5.2 Analyze diagrams, charts, graphs and tables to interpret healthcare data.



Introduction to Pharmacy Technician

Career Cluster	Health Science
Course Code	14152
Prerequisite(s)	Currently enrolled in 12th grade
Credit	1.0
Program of Study and Sequence	Cluster course – Gateway to Certified Nursing Assistant – Pharmacy Technician – other pathway courses in the Therapeutic Services pathway or capstone experience
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Work-Based Learning: Job Shadowing and Internship
Industry Certifications	Certified Pharmacy Technician (CPhT)
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	CTE certified with Health Science Endorsement
Resources	South Dakota Board of Pharmacy and local pharmacist.

Course Description

The Pharmacy Technician course prepares students to assist pharmacists. This includes learning about the roles and responsibilities of the Pharmacy Technician, safety measures, drug dosage calculations, and identification of various drugs and their effects on the human body. Students will also learn how to perform a wide range of duties in retail, hospital, and home care. The Pharmacy Technician course will equip the student to pass the national certification exam.

Program of Study Application

Pharmacy Technician is a pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses and/or Gateway to Certified Nursing Assistant. Participation in Pharmacy Technician would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

Course Standards

PhT 1: Understand the roles and responsibilities of the Pharmacy Technician and governing laws.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	PhT 1.1 Understand the roles and responsibilities of a pharmacy technician.
Two Skill/Concept	PhT 1.2 Interpret the laws and regulations involved in dispensing medication including controlled substances.
Two Skill/Concept	PhT 1.3 Apply the requirements for dispensing medication in accordance with Federal and South Dakota law.
One Recall	PhT 1.4 List the various types of reimbursement for prescription coverage.

PhT 2: Understand safety measures as they pertain to preparing prescriptions and maintaining inventory.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	PhT 2.1 Identify the steps involved in preparing and processing prescriptions.
Two Skill/Concept	PhT 2.2 Apply safety measures to prevent prescription errors and recognize the importance of reporting errors.
One Recall	PhT 2.3 Identify the process of maintaining pharmacy inventory.

PhT 3: Understand drug dosage calculations and preparation of prescriptions.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	PhT 3.1 Solve dimensional math problems.
Two Skill/Concept	PhT 3.2 Convert between metric and apothecary measurements.
One Recall	PhT 3.3 Calculate dosage.
One Recall	PhT 3.4 Identify characteristics of dosage forms.
One Recall	PhT 3.5 Identify common terminology and abbreviations related to pharmacy.

PhT 4: Identify various drugs and their effects on the human body.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	PhT 4.1 Define therapeutic effects of medications.
One Recall	PhT 4.2 Recognize common medications by brand and generic names.
One Recall	PhT 4.3 Identify the most common adverse effects of drugs.
One Recall	PhT 4.4 Identify common drug interactions of drugs.
One Recall	PhT 4.5 Identify monitoring parameters or labs for drug therapy.

Proposed



Introduction to Emergency Medical Services

Career Cluster	Health Science
Course Code	14055
Prerequisite(s)	Medical Terminology recommended
Credit	1.0
Program of Study and Sequence	Cluster course – Introduction to Emergency Medical Services – other pathway courses in the Therapeutic Services pathway or capstone experience
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Workplace tours, job shadowing, mentoring, service learning, internship
Industry Certifications	First Aid/Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)/First Aid through American Red Cross or American Heart Association as appropriate
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; Therapeutic & Support Services Pathway Endorsement; * Health Science Education
Resources	American Red Cross: www.redcross.org , American Heart Association www.heart.org

Important: In order for students to be able to sit for the EMT Exam after this course it is highly encouraged that districts and teachers work with their local healthcare industry partners and the SD Department of Health to ensure that all criteria for eligibility are met. Licensed personnel will need to be involved in teaching this course in order to assure meeting industry certification requirements.

Course Description

Introduction to Emergency Medical Services is designed to expose students to the various career opportunities in the Emergency Medical Services field. Emergency care services are necessary for the safety of the community. A network of services are coordinated to provide aid and medical assistance from primary response to definitive care, involving personnel trained in the rescue, stabilization, transportation, and advanced treatment of traumatic or medical emergencies. Potential career opportunities may include emergency medical dispatch, first medical responder, ambulance personnel, medium and heavy rescue equipment, and paramedic units. Upon completion of this course, students will be trained in First Aid, Cardiopulmonary Resuscitation (CPR) and Automatic External Defibrillator (AED).

Program of Study Application

Introduction to Emergency Medical Services is a pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses and/or Gateway to Certified Nursing Assistant. Introduction to Emergency Medical Services would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

Course Standards

EMS 1: Explore roles, responsibilities, and professionalism of Emergency Medical Services (EMS) personnel.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	EMS 1.1 Distinguish differences among careers within EMS and explain in detail the education level, credentialing/licensure requirements.
Three Strategic Thinking	EMS 1.2 Demonstrate emotional support to patient, bystanders, or other responders.
Three Strategic Thinking	EMS 1.3 Investigate medical and legal standards in correlation with the Health Insurance Portability & Accountability Act (HIPAA).
Four Extended Thinking	EMS 1.4 Apply concepts related to professional attitude and appearance.

EMS 2: Demonstrate skills in first aid, cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED) certification standards set by the American Heart Association or the American Red Cross.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	EMS 2.1 Understand how to perform First Aid for Students and/or CPR for Students and/or how to use an AED.

EMS 3: Determine the necessity of emergency medical care for a variety of patients with varied medical conditions.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	EMS 3.1 Identify emergency medical treatment protocol.

Proposed



Introduction to Health Informatics & IT

Career Cluster	Health Science
Course Code	14157
Prerequisite(s)	Recommend taking Medical Terminology first
Credit	1
Program of Study and Sequence	Cluster Course, Introduction to Health Informatics, Human Body Systems or Capstone Course
Student Organization	Future Health Professionals (HOSA), SkillsUSA
Coordinating Work-Based Learning	Guest speakers, project-based learning, community outreach, internships, field trips, and industry partnerships
Industry Certifications	National Career Readiness Certificate (NCRC)
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; Information Technology Cluster Endorsement; Networking Systems & Information Support Pathway Endorsement
Resources	

Course Description

Health Informatics & IT is a multidisciplinary approach to automated collection, using and sharing of personal and epidemiologic health information. The Health Informatics & IT course will introduce students to the necessary skills and knowledge to work in places such as medical groups, hospitals, clinics, health insurance organizations, research, hardware and software vendors, internet companies, and many others.

Program of Study Application

Introduction to Health Informatics & IT is the first pathway course in the Health Science career cluster, Health Informatics pathway. The course would follow participation in one or more cluster courses. Completion of Introduction to Health Informatics would prepare a student to participate in further pathway courses in the Health Informatics pathway or a capstone experience.

Course Standards

HI 1: Communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HI 1.1 Apply accuracy, effectiveness, and timeliness to the transfer of information.
Two Skill/Concept	HI 1.2 Summarize how legal and regulatory requirements apply to the transfer of information.
Two Skill/Concept	HI 1.3 Distinguish who in the organization needs information and when they need it.
Three Strategic Thinking	HI 1.4 Organize recorded information and other documents within the Health Insurance Portability and Accountability Act (HIPAA) protocols to ensure confidentiality and privacy.
One Recall	HI 1.5 Communicate information ensuring confidentiality of content is maintained.

HI 2: Describe the content and diverse uses of health information.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	HI 2.1 Interpret and extract information from medical records and documents.
Two Skill/Concept	HI 2.2 Collect appropriate, accurate information including proper codes to record charges for reimbursement.
One Recall	HI 2.3 Identify and apply accurate medical terminology.
Three Strategic Thinking	HI 2.4 Investigate the need for requesting further clarification when transcribing/transferring information that may be unclear.
Four Extended Thinking	HI 2.5 Analyze and apply information for regulatory and legal purposes.

HI 3: Demonstrate the use of systems used to capture, retrieve, and maintain confidential health information, including electronic health records, from internal and external sources.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	HI 3.1 Formulate and accurately document required information.
Two Skill/Concept	HI 3.2 Organize information that has been collected.
Three Strategic Thinking	HI 3.3 Differentiate the purposes and audiences for whom information is collected.
Two Skill/Concept	HI 3.4 Prepare accurate documentation for various audiences within legal and regulatory requirements, as requested.
One Recall	HI 3.5 Disseminate information to various audiences using systems and guidelines within the facility.
Two Skill/Concept	HI 3.6 Organize and maintain a records storage system within legal requirements and protocols.



Introduction to Medical Diagnostics

Career Cluster	Health Science
Course Code	14102
Prerequisite(s)	None
Credit	1.0
Program of Study and Sequence	Cluster course – Introduction to Medical Diagnostics – Medical Intervention or capstone experience
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Guest speakers, project-based learning, community outreach, internships, job shadowing, field trips, and industry partnerships
Industry Certifications	National Career Readiness Certificate (NCRC)
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; Diagnostic Services Pathway Endorsement; *Health Science Education
Resources	Local healthcare facility

Course Description

Diagnostic services create a picture of the health status of a patient at a single point in time. Introduction to Medical Diagnostics will address tests and evaluations that aid in the detection, diagnosis, and treatment of disease, injury, or other physical conditions.

Program of Study Application

Introduction to Medical Diagnostics is the first pathway course in the Health Science career cluster, Diagnostics pathway. The course would follow participation in one or more cluster courses. Completion of Introduction to Health Informatics would prepare a student to participate in Medical Intervention or a capstone experience.

Course Standards

IMD 1: Investigate Diagnostic Pathway careers.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	IMD 1.1 Compare and contrast scope of practice of diagnostic careers.
One Recall	IMD 1.2 Identify educational requirements for specific careers.
One Recall	IMD 1.3 Identify workforce needs and compensation.
One Recall	IMD 1.4 Identify licensure, registration, or certification requirements.

IMD 2: Recognize skills necessary to work in any healthcare facility.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	IMD 2.1 Summarize the Health Insurance Portability and Accountability Act (HIPAA) and how it provides confidentiality for healthcare information.
Two Skill/Concept	IMD 2.2 Demonstrate infection control standard precautions.
Two Skill/Concept	IMD 2.3 Apply and demonstrate professional appearance.

IMD 3: Understand the dynamics of a healthcare diagnostic workplace.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	IMD 3.1 Identify workplace equipment, protocol, and procedures.
Two Skill/Concept	IMD 3.2 Demonstrate professional communication and teamwork.
Four Extended Thinking	IMD 3.3 Apply professional level patient care and interaction scenarios.



Introduction to Sports Medicine

Career Cluster	Health Science
Course Code	14062
Prerequisite(s)	Recommended: Anatomy and Physiology
Credit	1.0
Program of Study and Sequence	Cluster course – Introduction to Sports Medicine – other pathway courses in the Therapeutic Services pathway or capstone experience
Student Organization	Future Health Professionals (HOSA); Family, Career and Community Leaders of America (FCCLA), or Skills USA
Coordinating Work-Based Learning	Workplace tours, job shadowing, mentoring, internship
Industry Certifications	First Aid/Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)/First Aid
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Cluster Endorsement; *Health Science Education; Therapeutic and Support Services Pathway Endorsement
Resources	American College of Sports Medicine http://acsm.org/about-acsm ; My Fitness Pal www.myfitnesspal.com ; Choose MyPlate www.myplate.gov ; Family, Career and Community Leaders of America (FCCLA) Sports Nutrition STAR event; HOSA and SkillsUSA, AHA, Red Cross

Course Description

Introduction to Sports Medicine is designed for students interested in fields such as athletic training, physical therapy, medicine, fitness, exercise physiology, kinesiology, nutrition and other sports medicine related fields. This class includes both classroom work and hands-on application in order to provide students with an avenue to explore these fields. Through these connections students will understand the importance that exercise, nutrition, treatment modalities, and rehabilitation play in athletic health. Students will study basic anatomy and the psychological impact of athletic injuries along with assessment and treatment techniques as they apply to athletic injuries.

Program of Study Application

Introduction to Sports Medicine is a pathway course in the Health Science career cluster, Therapeutic Services pathway. The course would follow participation in one or more cluster courses. Introduction to Sports Medicine would prepare a student to participate in further pathway courses in the Therapeutic Services pathway or a capstone experience.

Course Standards

ISM 1: Identify the fundamental aspects of medical terminology, the human body systems, kinesiology and careers related to sports medicine.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	ISM 1.1 Distinguish differences among careers within sports medicine and explain in detail the education level, credentialing/licensure requirements.
Two Skill/Concept	ISM 1.2 Interpret medical terms and abbreviations to communicate information.
One Recall	ISM 1.3 Identify basic structures and functions of human body systems.
Four Extended Thinking	ISM 1.4 Analyze basic concepts of kinesiology in relation to athletic performance.

ISM 2: Understand injury prevention principles and performance enhancement philosophies

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Planning	ISM 2.1 Develop a nutrition and hydration plan for an athlete that addresses personal healthy behaviors.
Two Skill/Concept	ISM 2.2 Describe injury prevention strategies.
Two Skill/Concept	ISM 2.3 Explore and identify safe training practices in sports management.
Three Strategic Thinking	ISM 2.4 Compare and contrast performance enhancement philosophies.

ISM 3: Explore and understand common sports injuries, injury management and treatment techniques.

<i>Webb Level</i>	<i>Sub-indicator</i>
Three Strategic Thinking	ISM 3.1 Recognize and explain common injuries and conditions that impact athletic performance.
Three Strategic Thinking	ISM 3.2 Apprise common sports injuries to differentiate treatment modalities.
Four Extended Thinking	ISM 3.3 Perform proper treatment techniques of common sports injuries through hands-on application.

ISM 4: Explore the psychological impact of injury and the healing process on an individual.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	ISM 4.1 Describe basic principles of sports psychology.
Three Strategic Thinking	ISM 4.2 Explain possible adaptations that can be made to exercise programs to account for different clients' needs.



Medical Terminology

Career Cluster	Health Science
Course Code	14154
Prerequisite(s)	None
Credit	1.0
Program of Study and Sequence	Foundation Course – Health Science Careers I: Exploration – Health Science Careers II: Engagement or Medical Terminology – Pathway Course
Student Organization	Future Health Professionals (HOSA), Skills USA
Coordinating Work-Based Learning	Mentoring, workplace tours, service learning
Industry Certifications	National Career Readiness Certificate (NCRC)
Dual Credit or Dual Enrollment	https://sdmylife.com/images/Approved-CTE-Dual-Credit.pdf
Teacher Certification	Health Science Career Cluster Endorsement; *Health Science Education
Resources	State and National Future Health Professionals (HOSA) Conference (Competitive Events), State and National Skills USA Conference

Course Description

Communication in the ever-expanding health care industry is a language unto itself. Medical Terminology consists of learning medically precise pronunciations, word clues, and terminology specific to human anatomy, physiology, disease, diagnosis and treatment. This medically integrated knowledge will be valuable for all levels of health care providers and members of the health care team. Medical Terminology is recommended for students in all health science pathways.

Program of Study Application

Medical Terminology is a second cluster course in the Health Science career cluster. Completion of Medical Terminology prepares a student to participate in Health Science Careers II and/or pathway courses in any of the Health Science pathways: Biotech Research and Development, Therapeutic Services, Health Informatics, Diagnostics or Support Services.

Course Standards

MT 1: Build and interpret medical terminology.

<i>Webb Level</i>	<i>Sub-indicator</i>
One Recall	MT 1.1 Decipher and create medical terms using word roots, prefixes, and suffixes.
One Recall	MT 1.2 Demonstrate the importance, and practice the correct spelling, of medical terminology.
Two Skill/Concept	MT 1.3 Communicate patient/residents' care information utilizing medical terminology.

MT 2: Demonstrate use of medical terminology in relation to the human body.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	MT 2.1 Utilize medical terminology associated with the human body and medical healthcare treatment.
Two Skill/Concept	MT 2.2 Understand body planes, directional terms, quadrants, and cavities using medical terminology.

MT 3: Utilize medical terminology to identify and interpret signs and symptoms of diseases and disorders.

<i>Webb Level</i>	<i>Sub-indicator</i>
Two Skill/Concept	MT 3.1 Utilize medical terminology to compare and contrast symptoms of diseases and disorders.
Two Skill/Concept	MT 3.2 Utilize medical terminology pertaining to diagnosis and treatment of diseases and disorders in patients/residents.

Proposed