



FAIRBANKS NORTH STAR BOROUGH SCHOOL DISTRICT

CAREER & TECHNICAL EDUCATION CURRICULUM



Adopted April 3, 2018

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Acronyms

ABN	Alaska Board of Nursing
ACC	Alaska Core Competencies
AED	Automatic External Defibrillator
AHA	American Heart Association
AKCIS	Alaska Career Information System
BLS	Basic Life Support
CHEMS	Community Health Emergency Medical Services
CNA	Certified Nursing Assistant
CPR	Cardio Pulmonary Resuscitation
CTC	Community and Technical College
CTE	Career Technical Education
CTSO	Career Technical Student Organization
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
ETT	Emergency Trauma Technician
FEMA	Federal Emergency Management Agency
FNSBSD	Fairbanks North Star Borough School District
HIPAA	Health Insurance Portability and Accountability Act
HOSA	Health Occupations Students of America – Future Health Professionals
IFSAC	International Fire Service Accreditation Congress
NCHSE	National Consortium of Health Science Education
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NREMT	National Registry of Emergency Medical Technicians
OSHA	Occupational Safety and Health Administration
PLP	Personal Learning Plan
PLTW	Project Lead the Way
SEREMS	Southeast Region Emergency Medical Services
STEM	Science, Technology, Engineering, and Math
TSA	Technical Skills Assessment
UAF	University of Alaska Fairbanks
WS	Writing Standards

Explanation of Terms

General Terms and Definitions

Career Cluster: A career cluster is a structure for organizing and delivering quality CTE programs around occupations and broad industries.

Career Pathway: A career pathway is a strand of a career cluster that centers on a common set of academic, technical, and workplace skills and knowledge. It is a sector from the broader career cluster.

CTEPS: CTEPS stands for “Career and Technical Education Program of Study” which is also called *Program of Study* or POS. It is a coherent and aligned sequence of educational elements that begins at secondary school and continues without duplication or remediation into postsecondary education/training, and that leads to an industry recognized credential or certificate, or an associate or baccalaureate degree. (*See Program of Study*)

Program of Study (POS): A program of study is designed to provide successful student transitions between secondary and postsecondary education. A program of study is a comprehensive, structured approach for delivering academic and career and technical education to prepare students for postsecondary education and career success. (*See CTEPS*)

Sequence: A sequence is a group of courses that a student may take within a cluster, usually in a progression of foundational skills to more focused and higher level skills.

CTE Specific Terms

Career and Technical Student Organization (CTSO): A CTSO is an organization for students enrolled in a CTE program that engages in CTE activities as an integral part of the instructional program. Alaska has six (6) recognized CTOS: Business Professionals of America (BPA); Family, Career, and Community Leaders of America (FCCLA); Health Occupations Students of America (HOSA)- Future Health Professionals; DECA – an Association of Marketing Students; FFA – Agricultural Education; and SkillsUSA.

Concentrator: A secondary student who has earned two (2) credits in a single CTE pathway within those career clusters where 2 credit sequences are recognized by the State and its local eligible recipients, or where the student has documented proficiencies that are equivalent to this criteria.

Completer: A completer is a concentrator who meets the requirements for a career/technical education program in a specified area as established by the local school district’s state-approved plan for career and technical education.

Participant: A secondary student who has earned credit in one (1) or more approved course(s) in any career and technical education (CTE) program area.

Technical Skill Assessment (TSA): A TSA is a National, state, and/or local assessment that measures student attainment of technical skill proficiencies. Generally a TSA is produced by a recognized industry organization that determines proficiency according to industry standards. TSA's incorporate performance-based assessment items, to the greatest extent possible, where students must demonstrate the application of their knowledge and skills.

Tech Prep Agreement: A tech prep agreement is a written agreement between a secondary and a postsecondary program that allows a high school course taught by a high school teacher to qualify for postsecondary credit.

Curriculum Terms

Alaska Content Standards: Content standards are broad statements, adopted by the State Board of Education and Early Development, indicating what students should know and be able to do as a result of their public school experience.

Alaska Cultural Standards: The Alaska Cultural Standards for Students were developed by the Alaska Native Knowledge Network and adopted by the State Board of Education & Early Development in 1998. Cultural Standards are meant to enrich the Content Standards and provide guidelines for nurturing and building in students the rich and varied cultural traditions that continue to be practiced in communities throughout Alaska. The standards are broad statements of what students should know and be able to do as a result of their experience in a school that is aware of and sensitive to the surrounding physical and cultural environment.

Alaska Employability Standards: Alaska's Employability standards are to be used in conjunction with Alaska's academic content and performance standards to ensure Alaska's student have the skills and knowledge necessary to be good citizens, effective parents, productive workers, and most of all, life-long learners. Alaska's students are expected to learn how to learn and apply their skills and knowledge in a variety of settings to create a satisfying and productive life. These standards are designed to promote successful student transition from school to work.

Alaska Performance Standards / Grade Level Expectations (PSGLE's): Performance standards and GLE's are measureable statements of learning expectations, adopted by the State Board of Education and Early Development, indicating what students should know and be able to do as a result of their public school experience. Alaska has adopted Performance Standards in reading, writing, mathematics, and science.

All Aspects of Industry: All Aspects of Industry essentially provides a set of standards for all CTE courses. All Aspects of Industry defines nine aspects common to any business or enterprise: planning; management; finance; technical and production skills; principles of technology; labor issues; community issues; health, safety and environment; personal work habits.

Occupational Skills Standards: Occupational skills standards are developed by various industry, professional and educational associations. These standards describe the performance expectations for a worker in a specific occupational area. In Alaska, the list of organizations

with appropriate standards is pre-determined based on EED/CTE staff designations of Occupational Standards appropriate for each cluster & pathway.

Personal Learning Plan: A personal learning plan is developed by students – typically in collaboration with teachers, counselors, and parents – as a way to help them achieve short- and long-term goals, most commonly at the middle and high school levels. Students can chart a personal educational program that will allow them to achieve their educational and aspirational goals, while also fulfilling school requirements such as particular credit or course requirements for graduation. A personal learning plan also documents major learning accomplishments or milestones.

Student Performance Standards: Student performance standards are statements of the essential skills, knowledge, and tasks that FNSBSD students are expected to master in the course. These are developed at the district level.

Health Science Overview

The Fairbanks North Star Borough School District's Health Science Cluster may lead to careers in planning, managing and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development.

The following Programs of Study are suggestions to help guide the development of individual Personal Learning Plans. Each school will develop Programs of Study based on availability of courses. Course descriptions follow the Sample Programs of Study.

Many courses within this cluster are articulated for credit with University of Alaska Fairbanks/Community and Technical College through a Tech Prep agreement. This agreement allows students to earn postsecondary credit while taking a course from an approved high school instructor.

District Cluster Overview

Grade 9	Grade 10	Grade 11	Grade 12	Grade 13	Grade 14
Introductory Courses	Concentrator Courses	Capstone Courses	Post-Secondary		
<ul style="list-style-type: none"> • Introduction to Healthcare Occupations • First Aid/CPR & Health Careers Exploration • Principles of Biomedical Science A/B 	<ul style="list-style-type: none"> • Nutrition in Health Care • Medical Terminology 1A/1B • Law & Ethics for Health Professionals • Professionalism in Health Care • Math in Health Care • Human Body Systems A/B • Medical Interventions A/B 	<ul style="list-style-type: none"> • EMT 1A/1B* • Certified Nursing Assistant • CNA Clinical Experience* • Emergency Trauma Technician • Introduction to Exercise Science & Sports Medicine* • Pharmacy Technician* • Introduction to Fire Services 1A/1B* • Biomedical Innovations* 	<ul style="list-style-type: none"> • UAF/CTC 		
*Denotes a completer course for that sequence.					

Certification Options

Course	Certification	Issuing Organization	Course or Exam Age Restrictions
Certified Nursing Assistant & Certified Nursing Assistance Clinical Experience	Certified Nursing Assistant	State Board of Nursing	Students may take the CNA exam for their state license at 17 and must have no felony convictions. However, they will be unable to work in the health field until they turn 18.
Emergency Medical Technician 1A/1B	Emergency Medical Technician**	State of Alaska	Students must be 18 to be certified as an EMT. Students must be a high school graduate and 19+ years old to become licensed in Alaska as a Mobile Intensive Care Paramedic.
Emergency Trauma Technician	Emergency Trauma Technician**	State of Alaska	To become registered as an ETT, students must be at least 14 years old and have completed all the Alaska ETT requirements
First Aid/CPR & Health Careers Exploration	First Aid & CPR**	American Heart Association	
Pharmacy Technician	Pharmacy Technician Certification	Pharmacy Technician Certification Board (PTCB)	Students must be 18 to take the certification exam and have no felony convictions.
Introduction to Fire Services 1B	Red Card Certification	National Wildfire Coordinating Group	
**Denotes exams given by the FNSBSD at the end of the course.			

Career & Technical Education

Health Science Courses

Biomedical Innovations A

Course Information	
Course Name	BIOMEDICAL INNOVATIONS A
Course Number	CTEK133
Grade(s)	11-12
Length	One Semester
Credit	0.5
Prerequisites	<i>Principles of Biomedical Science A/B, Human Body Systems A/B, Medical Interventions A/B,</i> or Teacher Recommendation
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	None
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education (NCHSE) National Health Science Foundation Standards 1-11 Next Generation Science Standards Common Core Standards for English language arts and mathematics
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Biomedical Innovations A and B</i> is a yearlong Project Lead the Way course designed for 11 th and 12 th grade students to design innovative solutions for the health challenges of the 21 st century. Students will work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. In the first semester, students design and plan an independent project based upon interest and career planning. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry.
Instructional Topic Headings (please separate each heading by a semi-colon)	Project Dependent

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	Project Lead the Way (PLTW)
Course Adapted From	Project Lead the Way (PLTW)
Date of Previous Course Revision	Spring 2014
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will learn biomedical innovation is vital to treating disease and disability and to prolonging life in the face of illness and injury.	PLTW	HL- BRD 2	AS.SL.1	N.Q.1; S.IC.6	A1	2-3	Health/Safety	PLTW Assessments
Students will produce effective presentations of scientific material relies on accurate content, effective delivery, and if applicable, visuals that support the key points.	PLTW	HL- BRD 2, 5	AS.W.2; AS.SL.2	N.Q.1, N.Q .2	E3	4-5	Health/Safety	PLTW Assessments
Students will be able to use the Internet and print resources and evaluate for accurate terminology, content and reliability.	PLTW		AS.R.1; AS.SL.2	N.Q.2		2-3	Health/Safety	PLTW Assessments
Students will learn scientists use various statistical analysis methods to draw meaningful conclusions from experimental results.	PLTW	HL- BRD 2	AS.W.2	N.Q.2; S.IC.6	A1	2-3	Health/Safety	PLTW Assessments
Students will demonstrate the design process in a series of steps used to design a new product or system.	PLTW		AS.W.2; AS.W.10	N.Q.2; S.IC.6	A1; E3	2-3 4-5	Health/Safety	PLTW Assessments
Students will learn the field of environmental health focuses on the connections between human wellbeing and the conditions in the environment.	PLTW		AS.W.8	S.IC.6	A4-5	2-3	Health/Safety	PLTW Assessments
Students will explore how water can be contaminated by a wide variety of chemicals and biological agents that have health implications for humans and animals; such contaminants can be tested for using specific assays.	PLTW		AS.SL.2	N.Q.1			Health/Safety	PLTW Assessments
Students will learn the effect a chemical has on an organism is related to its dose and the resulting concentration of the chemical in the body.	PLTW		AS.W.8	N.Q.1	E3		Health/Safety	PLTW Assessments
Students will engage in experiments that are designed to find answers to testable questions.	PLTW	HL- BRD 2, 5	AS.W.8; AS.W.10	N.Q.1 N.Q.2	A4-5	4-5	Health/Safety	PLTW Assessments

Biomedical Innovations B

Course Information	
Course Name	BIOMEDICAL INNOVATIONS B
Course Number	CTEK134
Grade(s)	11-12
Length	One Semester
Credit	0.5
Prerequisites	<i>Biomedical Innovations A</i> or Teacher Recommendation
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA)
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education (NCHSE) National Health Science Foundation Standards 1-11 Next Generation Science Standards Common Core Standards for English language arts and mathematics
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Biomedical Innovations A</i> and <i>B</i> is a yearlong Project Lead the Way course designed for 11 th and 12 th grade students to design innovative solutions for the health challenges of the 21 st century. Students work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. During the second semester, students complete their independent project. Students are expected to present their work to an audience of STEM professionals.
Instructional Topic Headings (please separate each heading by a semi-colon)	Project Dependent

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	PLTW
Date of Previous Course Revision	Spring 2014
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will learn the field of environmental health focuses on the connections between human wellbeing and the conditions in the environment.	PLTW		AS.R.1				Health/Safety	PLTW Assessment
Students will understand the effect a chemical has on an organism is related to its dose and the resulting concentration of the chemical in the body.	PLTW		AS.R.1	S.IC.6			Health/Safety	PLTW Assessment
Students will learn Epidemiologists or other public health investigators analyze patient symptoms, results of diagnostic tests, and other clues relevant to person, place, and time of the outbreak to successfully pinpoint the specific nature of the disease as well as a source and use appropriate terminology.	PLTW	HL.2	AS.R.1, 10	S.IC.6	B3-4	2, 4	Health/Safety	PLTW Assessment
Students will understand public health intervention plans may include education efforts, screening and diagnosis, treatment, distribution of medication or vaccinations, research and safety precautions.	PLTW	HL.2	AS.R.1, 10		B3-4	1-2, 4	Health/Safety	PLTW Assessment
Students will learn that plasmids can be used to assemble recombinant DNA and clone a gene of interest.	PLTW	HL-BRD.2-3	AS.R.1				Health/Safety	PLTW Assessment
Students will explore external and internal investigations of the body during an autopsy allow forensic pathologists to determine the cause of death.	PLTW		AS.R.1			2, 4	Health/Safety	PLTW Assessment
Students will engage in a long-term medical project or research that requires planning in order to have the proper materials and to schedule the work to be completed in time.	PLTW	HL-BRD.2-3	AS.W.2; AS.R.1, 10	N.Q .1	B3-4	1-2, 4	Health/Safety	PLTW Assessment

Certified Nursing Assistant

Course Information	
Course Name	CERTIFIED NURSING ASSISTANT
Course Number	CTEK106
Grade(s)	11-12
Length	One Semester
Credit	0.5
Prerequisites	<i>Intro to Healthcare Occupations</i> , submission of CNA application, and teacher, counselor, or medical professional recommendation required
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Certified Nursing Assistant
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	<ol style="list-style-type: none"> 1. Alaska Board of Nursing: AAC Title 12, Chapter 044 2. National Consortium of Health Science & Technology Education (www.nchste.org) 3. Federal Regulations: 42 CFR 483.25 Title 42--Public Health, Chapter IV—Centers for Medicare and Medicaid Services, Department of Health and Human Services, Part 483--Requirements for States and Long Term Care Facilities
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> 1. Section 845 and 847: (http://touchngo.com/lglcntr/akstats/AAC/Title12/Chapter044/Section847.htm) 2. Accountability Criteria for National Health Care Cluster, Therapeutic Standards 1-6: (www.nchste.org/) 3. 488.152 (6) (b) 1-7 http://www.access.gpo.gov/nara/cfr/waisidx_02/42cfr483_02.html
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Certified Nursing Assistant</i> meets the educational requirements for certification of a CNA in the state of Alaska. Areas covered include safety, communication skills, growth and development, patient surgery preparation, vision and hearing problems, rehabilitation, care of the elderly, common health problems, sexuality, home health care, and basic emergency care. Students mastering the competencies of this course should be well prepared to take and pass the examination of Nursing Assistant Certification. Six 8-hour days of clinical work and weekly skills labs are required. Students may take the CNA exam for their state license at 17 years old and must have no felony convictions. However, students may be unable to work in the health field until they turn 18 years old.
Instructional Topic Headings (please separate each heading by a semi-colon)	Role of CNA, Basic Nursing Skills, Personal Care Skills, Safety for Client and CNA, Communication Skills, Hygiene and Restorative Care, Human Growth and Development

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	State of Alaska CNA exam
Course Addresses	Yes
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	State of Alaska and the Alaska Board of Nursing
Course Adapted From	Federal Regulations, Omnibus Budget Reconciliation Act (OBRA) 1987
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	Yes

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will understand and explain the role of CNA in health care system as a part of a health care team.	ABN 1C	HL-DIA 1	RLST 4, RSIT 4, S/L 1		B1	B2	Work Habits; Labor; Management	
Students will understand and demonstrate the ethical standards & legal issues concerning the CNA, as well as client rights and responsibilities.	ABN 1ABD	HL-HI 1	RLST 7, RSIT 6, L/S 6		B2	A2, 7	Health/Safety; Labor; Work Habits	
Students will competently demonstrate basic nursing skills: monitoring body function, vital signs, height and weight, collection of specimens, intake and output, near-death and postmortem care, record keeping, and recognizing abnormal changes.	ABN 2A-H	HL-DIA 1,5	RLST 3, S/L 6 LS 6		C4	A2	Health/Safety; Tech/Prod	
Students will competently demonstrate the personal care skills of bathing, oral hygiene, grooming, dressing, toileting, and assisting with eating.	ABN 3A-H	HL-SUP 1, 2, 3	S/L 6, RLST 3, WS 2		E4, 6	A2	Technology	
Students will demonstrate infection control, emergency procedures, and safe work place practices.	ABN 4A-G	HL-SUP 2, 5	RLST 3, RSIT 4, S/L 6		C4	A6	Health/Safety; Labor	
Students will demonstrate communication and interpersonal skills to include psychosocial needs, verbal & non-verbal, medical and nursing terminology, recording and reporting.	ABN 5A-E	HL-HI 1, 2, 3	RLST 6, RSIT 4, WS 2		E4, 6-7	A2	Tech/Prod; Technology; Work Habits	
Students will demonstrate hygiene and restorative care including activities of daily living, adequate nutrition, and the excretory system.	ABN A-F	HL-SUP 1, 2	RLST 3		C4	A2	Tech/Prod	
Students will demonstrate knowledge of human growth and development including basic needs, developmental needs, care of the cognitively impaired, cultural factors, sexuality, and the process of aging, death, and dying.	ABN 7A-H	HL, THR 3, 4	RLST 9, RSIT 7, LS 6		E3, 6	A2	Tech/Prod	

Certified Nursing Assistant: Clinical Experience

Course Information	
Course Name	CERTIFIED NURSING ASSISTANT: CLINICAL EXPERIENCE
Course Number	CTEK107
Grade(s)	12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Certified Nursing Assistant</i> (concurrent enrollment)
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Certified Nursing Assistant
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	<ol style="list-style-type: none"> Alaska Board of Nursing: AAC Title 12, Chapter 044, ABN (http://touchngo.com/lglcntr/akstats/AAC/Title12/Chapter044/Section847.htm) National Consortium of Health Science & Technology Education (NCHSTE) (www.nchste.org) Federal Regulations: 42 CFR 483.25 Title 42--Public Health, Chapter IV—Centers for Medicare and Medicaid Services, Dept. of Health and Human Services, Part 483--Requirements for States and Long Term Care Facilities, OBRA 1987: (www.access.gpo.gov/nara/cfr/waisidx_02/42cfr483_02.html)
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> Section 845 and 847 Accountability Criteria for National Health Care Cluster, Therapeutic (www.nchste.org) 488.152 (6) (b) 1-7
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Certified Nursing Assistant Clinical Experience</i> reviews the nursing skills necessary to assist the nurse and be an efficient health care team member. Students will demonstrate positive communication while providing physical and emotional care in a variety of health care settings. Content meets the skills training requirement to take the State of Alaska exam. Student must be in good physical condition, have a health care provider CPR card, and have immunizations appropriate for the clinical site. Students may take the CNA exam for their state license at 17 years old and must have no felony convictions. However, students may be unable to work in the health field until they turn 18 years old.
Instructional Topic Headings (please separate each heading by a semi-colon)	Hand Hygiene, Mouth/Denture Care, Catheter Care, Hand & Foot Care, Ostomy/Wound Care, Assist with Ambulation, Measure & Record Urinary Output, Transfer from Bed to Wheelchair, Make Occupied/Unoccupied Bed, Position Client on Side, Count/Record Vital

	Signs, Passive Range of Motion, Modified Bed Bath/Shampoo, Perianal Care for Incontinent Client, Death & Post-Mortem Care, Bed Pan, Feeding, Dressing
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Summative Assessments and Standards	
Technical Skills Assessment (TSA)	State of Alaska CNA exam
Course Addresses	Yes
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	State of Alaska and the Alaska Board of Nursing
Course Adapted From	Federal Regulations, Omnibus Budget Reconciliation Act (OBRA) 1987
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	Yes

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will demonstrate an understanding of the role of a Certified Nursing Assistant (CNA) as a member of a health care team in the health care system.	ABN 1C	HL-DIA 1	RLST 4, RSIT 4, S/L 1		B1	B2	Work Habits; Labor; Management	
Students will demonstrate an understanding of the ethical standards & legal issues concerning the CNA, as well as client rights and responsibilities.	ABN 1ABD	HL-HI 1	RLST 7, RSIT 6, L/S 6		B2	A2, 7	Health/Safety; Labor; Work Habits	
Students will demonstrate competency in the application of basic nursing skills: monitoring body function, vital signs, near-death and postmortem care, record keeping, and recognizing abnormal changes.	ABN 2A-H	HL-DIA 1,5	RLST 3, S/L 6 LS 6		C4	A2	Health/Safety; Tech/Prod	
Students will demonstrate competency in the personal care skills of bathing, oral hygiene, grooming, dressing, toileting, and assisting with eating.	ABN 3A-H	HL-SUP 1, 2, 3	S/L 6, RLST 3, WS 2		E4, 6	A2	Technology	
Students will demonstrate understanding and ability to apply proper procedures for infection control, emergencies, and safe work place practices.	ABN 4A-G	HL-SUP 2, 5	RLST 3, RSIT 4, S/L 6		C4	A6	Health/Safety; Labor	
Students will demonstrate communication and interpersonal skills that include psychosocial needs, medical and nursing terminology, recording and reporting.	ABN 5A-E	HL-HI 1, 2, 3	RLST 6, RSIT 4, WS 2		E4, 6-7	A2	Tech/Prod; Technology; Work Habits	
Students will demonstrate the ability to provide hygiene and restorative care including activities of daily living.	ABN A-F	HL-SUP 1, 2	RLST 3		C4	A2	Tech/Prod	
Students will apply their knowledge of human growth and development to address the patient basic needs, developmental needs, caring for the cognitively impaired.	ABN 7A-H	HL, THR 3, 4	RLST 9, RSIT 7, LS 6		E3, 6	A2	Tech/Prod	

Emergency Medical Technician (EMT) 1A

Course Information	
Course Name	EMERGENCY MEDICAL TECHNICIAN (EMT) 1A
Course Number	CTEK120
Grade(s)	12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Healthcare Occupations, Human Anatomy & Physiology</i>
Sequence or CTEPS	Emergency Medical Technician
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National EMS Educational Standards
Names/Numbers of Occupational Standards	EMS Systems, Research, Workplace Safety & Wellness, Documentation, Communications, Medical Legal/Ethics, A & P, Terminology, Pathophysiology, Life Span Development, Pharmacology, Airway Management, Medical & Trauma Assessment & Treatment, Shock & Bleeding Control, Obstetrics, Pediatrics, Geriatrics, Patients with Special Challenges, Operations, Vehicle Extrication, HazMat, Mass Casualty Incidents.
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course leads to eligibility for certification as an Alaska Emergency Medical Technician I and as an EMT Basic with the National Registry of Emergency Medical Technicians. Topics included in the course are: roles and responsibilities of the EMT, legal considerations of EMS, respiratory and cardiac emergencies, CPR, practical use of airway adjuncts, bleeding and shock, trauma management, medical emergencies and their management, environmental emergencies, emergency childbirth, pediatric emergencies, geriatric emergencies, exposure to hazardous situations, introduction to hazardous materials, psychiatric emergencies, patient packaging and triage, stabilization and transport of the sick and injured, and communications and report writing. Also included in the course is content from the Alaska EMT Skill Sheets, the Alaska Cold Injuries Guidelines, the Alaska Trauma Guidelines, and certain Alaska Statutes and regulations specifically related to Emergency Medical Services. Certification as an EMT-I with the Alaska Department of Health and Social Services requires the successful completion of written and practical examinations for certification. Students must be 18 years old to be certified as an EMT. Student must be a high school graduate and 19 or older to become licensed in Alaska as a Mobile Intensive Care Paramedic.
Instructional Topic Headings (please separate each heading by a semi-colon)	Roles and responsibilities of the EMT; legal considerations of EMS; respiratory and cardiac emergencies; CPR; practical use of airway adjuncts; bleeding and shock; trauma management, medical emergencies and their management, environmental emergencies; emergency childbirth; pediatric emergencies; geriatric emergencies; exposure to hazardous situations; introduction to hazardous materials; psychiatric emergencies; patient packaging and triage; stabilization and transport of the sick and injured and communications, including the Incident Command System and report writing. Also included in the course is content from the Alaska EMT Skill Sheets, the

	Alaska Cold Injuries Guidelines, the Alaska Trauma Guidelines, and certain Alaska Statutes and regulations specifically related to Emergency Medical Services.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	State of Alaska EMT 1 exam and practical skills exam. National Registry of Emergency Medical Technician (NREMT)
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Skills, National Consortium for Health Science Education, National EMS Education Standards
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbanks (UAF)- Community & Technical College (CTC)
Postsecondary Course Name	Emergency Medical Technician I
Postsecondary Course Number	EMS F170
Number of Postsecondary Credits	0 (see EMT 1B course description)
Author	
Course Developed By	State of Alaska CHEMS
Course Adapted From	US DOT
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the EMS system and the health occupations industry.	NREMT Systems; NCHSE: 3., 4.31, 4.32	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c	S-ID-9	B4; E4	A5; B1-5	Planning, MGT Labor	Essential Questions, workbooks and written exams
Understand how the EMS system works and how EMTs fit into the EMS organization	NREMT Systems; NCHSE: 3.11	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		E4 B2	A1; A7	Emergency Response Health/Safety labor	Written exam
Understand and demonstrate the importance of professionalism in the pre-hospital medical field	NREMT Systems; NCHSE: 4.12, 4.21,	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		E4		Work Habits Job preparation Health/Safety	Written exam and demonstration
Demonstrate knowledge of general safety standards for various clinical and industrial workplaces.	NREMT Safety; NCHSE 7.0	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		B2 E4	A 3, A 6	Labor H&S	Written exam and demonstration

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate understanding of how safety and first aid fit within all aspects of industry.	NREMT Safety; NCHSE 7.0	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		B2 E4	A2 A3 A6	Health/Safety Labor	Skills test Class Participation Written tests Demonstration
Students will maintain personal safety, evaluating the scene for hazards for patient and self.	NREMT Safety; NCHSE: 7.11-12, 7.21-22, 7.31, 7.41-42,	HL-SUP 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c	S-ID-9	B4; E4	A2	Health/Safety, Labor	Class Participation, Skills Check-off, Written Test
Explain the importance of well-being for pre-hospital medical care providers	NREMT Safety & Well being; NCHSE: 9.11-13	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		E4		Health/Safety Labor Work/habits	Essential questions, classroom discussion
Understand the legal and ethical issues as they pertain to pre-hospital care	NREMT Legal/Ethics; NCHSE: 5.11-5.12, 5.21-5.25 6.11-6.12, 6.21, 6.31-6.32	Health Science Career Cluster 1-6 HL-HI 1-3	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		C-3 E4		Health, Communications skills Work Habits	Written Exam

Emergency Medical Technician (EMT) 1B

Course Information	
Course Name	EMERGENCY MEDICAL TECHNICIAN (EMT) 1B
Course Number	CTEK121
Grade(s)	12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Healthcare Occupations, Human Anatomy & Physiology, and Emergency Medical Technician (EMT) 1A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science- Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	American Heart Association BLS CPR with AED and National EMS Educational Standards
Names/Numbers of Occupational Standards	EMS Systems, Research, Workplace Safety & Wellness, Documentation, Communications, Medical Legal/Ethics, A & P, Terminology, Pathophysiology, Life Span Development, Pharmacology, Airway Management, Medical & Trauma Assessment & Treatment, Shock & Bleeding Control, Obstetrics, Pediatrics, Geriatrics, Patients with Special Challenges, Operations: Vehicle Extrication, HazMat, Mass Casualty Incidents.
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course is a continuation of EMT 1A which leads to eligibility for certification as an Alaska Emergency Medical Technician-I and as an EMT-Basic with the National Registry of Emergency Medical Technicians. Topics included in the course are: roles and responsibilities of the EMT, legal considerations of EMS, respiratory and cardiac emergencies, CPR, practical use of airway adjuncts, bleeding and shock, trauma management, medical emergencies and their management, environmental emergencies, emergency childbirth, pediatric emergencies, geriatric emergencies, exposure to hazardous situations, introduction to hazardous materials, psychiatric emergencies, patient packaging and triage, stabilization and transport of the sick and injured and communications and report writing. Also included in the course is content from the Alaska EMT Skill Sheets, the Alaska Cold Injuries Guidelines, the Alaska Trauma Guidelines, and certain Alaska Statutes and regulations specifically related to Emergency Medical Services. Students must be 18 years old to be certified as an EMT. Students must be a high school graduate and 19 or older to become licensed in Alaska as a Mobile Intensive Care Paramedic.
Instructional Topic Headings (please separate each heading by a semi-colon)	Roles and responsibilities of the EMT; legal considerations of EMS; respiratory and cardiac emergencies; CPR; practical use of airway adjuncts; bleeding and shock; trauma management, medical emergencies and their management, environmental emergencies; emergency childbirth; pediatric emergencies; geriatric emergencies; exposure to hazardous situations; introduction to hazardous materials; psychiatric emergencies; patient packaging and triage; stabilization and transport of the sick and injured and communications, including the Incident Command System and report writing. Also included in the course is content from the Alaska EMT Skill Sheets, the Alaska Cold Injuries

	Guidelines, the Alaska Trauma Guidelines, and certain Alaska Statutes and regulations specifically related to Emergency Medical Services.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	State of Alaska EMT 1 exam and practical skills exam, and National Registry of Emergency Medical Technician (NREMT)
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Skills, National Consortium for Health Science Education, National EMS Education Standards
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbanks (UAF)- Community & Technical College (CTC)
Postsecondary Course Name	Emergency Medical Technician I
Postsecondary Course Number	EMS F170
Number of Postsecondary Credits	6 credits
Author	
Course Developed By	State of Alaska CHEMS
Course Adapted From	US DOT
Date of Previous Course Revision	June 5, 2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the EMS system and the health occupations industry.	NREMT Systems; NCHSE: 3, 4.31, 4.32	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c	S-ID-9	B4; E4	A5; B1-5	Planning, MGT Labor	Essential Questions, workbook and written exams
Demonstrate understanding of how safety and first aid fit within all aspects of industry.	NREMT Safety; NCHSE 7.0	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		B2 E4	A2 A3 A6	Health/Safety Labor	Skills test Class Participation Written tests Demonstration
Students will maintain personal safety, evaluating the scene for hazards for patient and self.	NREMT Safety; NCHSE: 7.11-12, 7.21-22, 7.31, 7.41-42,	HL-SUP 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c	S-ID-9	B4; E4	A2	Health/Safety, Labor	Class Participation, Skills Check-off, Written Test
Explain the importance of well-being for pre-hospital medical care providers	NREMT Safety & Wellbeing; NCHSE: 9.11-13	Health Science Career Cluster 1-6	Reading 1,2,4 Writing 2abde,4,10 Speaking/listening 1.a,b,c		E4		Health/Safety Labor Work/habits	Essential questions, classroom discussion

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Understand the legal and ethical issues as they pertain to pre-hospital care	NREMT Legal/Ethics; NCHSE: 5.11- 5.12, 5.21- 5.25 6.11-6.12, 6.21, 6.31- 6.32	Health Science Career Cluster 1-6 HL-HI 1-3	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c		C-3 E4		Health, Communicati ons skills Work Habits	Written Exam
Define the anatomical terms as they pertain to basic topographical anatomy and the systems of the body	NREMT A & P; NCHSE: 1.11- 13	HL-DIA 1-5	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c	F-IF-4	E4	A-6 A2	Health/Safety	Class participation Skills Checklist Written tests
Students will describe the basic anatomy and physiology of body systems and identify topographic terms.	NREMT A & P; NCHSE: 1.11-1.13	HL-DIA 1-5	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c	F-IF-4	B2-4	A6		Written Test, Student Presentations Class Participation
Demonstrate safety precautions and proper lifting and moving of patients.	NREMT Safety; NCHSE: 7.21-22	HL-THR 1-4	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c		C4	A-2 A-6	Health & Safety	Skills test, Essential Questions, Mock Skills Scenarios
Demonstrate the proper methods of airway maintenance and oxygen administration, including suctioning, inserting oropharyngeal and nasopharyngeal airways, and ventilation techniques.	NREMT Airway Mgt; NCHSE: 10.12	HL-THR 1-4	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c		B2-4	A-6	Technical Skills	Demonstration & written exam Skills tests

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain and demonstrate the assessment and treatment of acute trauma emergencies, including neurological, respiratory, and cardiovascular emergencies.	NREMT Trauma Assessment & Treatment NCHSE: 1.32, 1.33	HL-THR 1-4	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c	S-ID-9	D-6 B2-4	A-5 B-1	Technical Knowledge and Skills	Written Exam, practical skills
Compare and contrast the assessment and treatment of pediatric emergencies with adult and geriatric emergencies,	NREMT Pediatrics, Adults, Geriatrics	HL-THR 1-4	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c		B2-4 D-6	A-3 B-1	Technical Knowledge and Skills	Written Exam, practical skills
Operations: Vehicle Extrication, HazMat, Mass Casualty Incidents.	NREMT Operations	HL 3, 4	Reading 1,2,4 Writing 2abde,4,10 Speaking/list ening 1.a,b,c	S-ID-9	A4, 6 B3, 4 D5	AES- A2, 5,6 CRP 4,5,6,8,11	Principals of Technology Health, Safety and Environment	Written Exam

Emergency Trauma Technician

Course Information	
Course Name	EMERGENCY TRAUMA TECHNICIAN
Course Number	CTEK123
Grade(s)	9-12
Length	One Semester
Credit	0.5
Pre-requisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science- Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	SEREMS (2015), AHA, CPR, BLS, NCHSE: Foundation Standards May 2015
Names/Numbers of Occupational Standards	SEREMS 1-1 1-7, 1-2.1-11, 1-3.1-14, 1-4.1-2, 1-5.1-8, 2-1.1-26, 3-1.1-7, 4-1.1-15, 1-5.1-11, 5-2.1-4, 5-3.1-19, 6-1.1-4, 7-1.1-5, 8-1.1-4, 9-2.1-12, 10-1.1-10, 11-1.1-5, 12-1.1-6, NCHSE Foundation Standards: 1.11-13, 1.31-1.33, 2.11-2.15, 2.21-2.22, 2.31, 3.11, 4.21, 4.32, 5.11, 5.22, 7.11-7.12, 7.21-7.22, 7.31, 7.41-7.42, 7.51-7.52, 8.11, 8.23
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course introduces the students to emergency medical care for Alaskan first responders and prepares students for registration as an Emergency Trauma Technician (ETT) with the State of Alaska. Students will learn to provide assessment and care as a first responder to medical emergencies, illnesses or injuries. This level of training is the next step beyond initial first aid and CPR. This is the State of Alaska Health Department course wherein students may earn a certificate after successfully completing an exit exam. This class involves lecture, skills-based labs and case. Throughout the course, personal safety and well-being are stressed. Course includes content from the Alaska ETT Skill Sheets, Alaska Cold Injuries Guidelines, Alaska Trauma Guidelines, Alaska Burn Protocols, and Alaska statutes and regulations related to Emergency Medical Services. This course articulates into courses offered in Emergency Services program of study. To become registered as an ETT, student must be at least 14 years old and have completed all the Alaska ETT requirements.
Instructional Topic Headings (please separate each heading by a semi-colon)	Orientation to Industrial Safety; Wilderness and Emergency Services Professions; EMS Professions; Legal and Ethical issues; Controlling Infections; basic Structure and function of the Human Body; Airway; Oxygen Therapy and BLS; Basic Life Support Certification (BLS); Patient Assessment; Vital Signs, Trauma; Medical Emergencies; Pediatric Emergencies; Environmental Injuries; EMS Operations.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	BLS-CPR, ETT
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, National Consortium for Health Science Education-NCHSE
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbanks (UAF)- Community & Technical College (CTC)
Postsecondary Course Name	Emergency Trauma Technician
Postsecondary Course Number	EMS F152
Number of Postsecondary Credits	3 credits
Author	
Course Developed By	SEREMS
Course Adapted From	Alaska Emergency Trauma Technician
Date of Previous Course Revision	Spring 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the EMS system and the health occupations industry.	SEREMS 1-1.1, 10-1 NCHSE: 3.11, 4.31, 4.32	HS-1	RST.11-12.1,2,7 WHST.11-12.4,7, 10 L.11-12.2,3,6	S-ID.1-4	B: 4, E-4	A;5; B-1-5	Planning, MGt Labor	Essential Questions, Journals, Career Cards and written exam
Students will maintain personal safety, evaluating the scene for hazards for patient and self.	SEREMS 1-2.1 NCHSE: 7.11-12, 7.21-22, 7.31, 7.41-42,	HS-3	RST.11-12.2,2,4,7, WHST.11-12.4,7, 10 L.11-12.2,3,6	N-Q.2	B-2,4	A 2	Hlth, Sfty & Environ Labor	Essential Questions, Journaling, written tests, teacher observations and skills check-off
Understand how the EMS system works and how ETTs fit into the EMS organization	SEREMS: 1-1.1-7 NCHSE: 3.11	HS-4	RST.11-12.1,2,4,5,9,10 WHST.11-12.4,9, 10 L.11-12.2,3,6				Emergency Response	Written exam
Understand and demonstrate the importance of professionalism in the pre-hospital medical field	SEREMS: 1-1.3, 5, 6, 7	HS-5	RST.11-12.1,2,4,5,9,10 S				Job preparation	Written exam and demonstration

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain the importance of well-being for pre-hospital medical care providers	SEREMS 1-2.1-9 NCHSE: 9.11-13	HS-3	SL.11- 12.1,6				Health	Essential questions, classroom discussion
Understand the legal and ethical issues as they pertain to pre-hospital care	SEREMS: 1-3.1-14, NCHSE: 5.11-5.12, 5.21-5.25 6.11-6.12, 6.21, 6.31- 6.32	HS-5, 6	RST.11- 12.1,2,7 WHST.11- 12.4,9, 10 L.11- 12.2,3,6		C-3		Health, Communicat ions skills	Written Exam
Define the anatomical terms as they pertain to basic topographical anatomy and the systems of the body	SEREMS: 1-4.1-2 NCHSE: 1 .11-13	HL-THR 3	RST.11- 12.1,2,7 SL.11- 12.4,6 WHST.11- 12.4,9, 10 L.11- 12.2,3,6	G-CO.2 G-MG.1		A-6	Anatomy	Demonstration & written exam
Students will describe the basic anatomy and physiology of body systems and identify topographic terms.	SEREMS 1-5.1-8 NCHSE: 7.21-22	HL-THR 3	WHST.11- 12.4,9, 10 SL.11- 12.4,5,6 L.11- 12.2,3,6					Written Test, Student Presentations
Demonstrate safety precautions and proper lifting and moving of patients.	SEREMS 1-5.1-8 NCHSE: 7.21-22	HL-DIA 3	SL.11- 12.4,5,6			A-6	Health & Safety	Skills test, Essential Questions, Mock Scenarios

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate the proper methods of airway maintenance, including suctioning, inserting oropharyngeal and nasopharyngeal airways, and ventilation techniques.	SEREMS: 2-1.1-26 NCHSE: 10.12	HL-THR 4	WHST.11- 12.4,9 SL.11- 12.4,5 L.11- 12.2,3,6	N-Q.1-3 MP.6		A-6	Technical Skills	Demonstration & written exam
Demonstrate proper CPR techniques and knowledge as per the current protocols per the American Heart Association.	SEREMS: 3-1.1-7 NCHSE: 10.12	HL-THR 4	WHST.11- 12.4,9 SL.11- 12.4,5 L.11- 12.2,3,6	N-Q.1-3 F-BF.2 MP. 1 MP. 6		A-6	Health & Technical Skills	Written exam and skills test
Demonstrate the proper techniques of patient assessment on a trauma patient and medical patient	SEREMS: 4-1.1-15 NCHSE: 2 .11-15		SL.11- 12.4,5	MP.6		B-1	Technical Skills	Skills test
Demonstrate proper techniques for controlling hemorrhage and bandaging of wounds	SEREMS: 5-1.1-11 NCHSE:7.11, 7.21	HL-THR 4	SL.11- 12.4,5	MP.6		A-6	Technical Skills, Health/Safety	Demonstration
Demonstrate proper techniques for the treatment of shock and understand the mechanisms of shock.	SEREMS: 5-2.1-4 NCHSE 7.11, 7.21	HL-THR 4	SL.11- 12.4,5	MP.6		B-1 B-2 B-5	Technical Skills	Skills test
Demonstrate the proper techniques for assessing and treating musculoskeletal injuries including sprains, strains, dislocations, fractures and cramps.	SEREMS: 5-3.1-19, NCHSE: 7.11, 7.21	HL-THR 4	SL.11- 12.4,5	MP.1 MP.6		B-2	Technical Skills	Skills test

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain and demonstrate the assessment and treatment of medical emergencies, including seizures, strokes, asthma, poisoning, overdose, and environmental emergencies.	SEREMS: 6-1.1-4 NCHSE: 1.32, 1.33	HL-THR 4	WHST.11-12.4,9 L.11-12.2,3,6	MP. 1 MP.6	D-6	A-5 B-1	Technical Knowledge and Skills	Written Exam
Compare and contrast the assessment and treatment of pediatric emergencies with adult emergencies	SEREMS: 7-1.1-5	HL-THR 3	WHST.11-12.4,9 L.11-12.2,3,6	MP.1 MP. 6	D-6	A-3 B-1	Technical Knowledge and Skills	Written Exam
Demonstrate knowledge of general safety standards for various clinical and industrial workplaces.	AK EED Safety Manual	HS-3	WHST.11-12.4,9 L.11-12.2,3,6		A 1	A 3, A 6	Labor H&S	AK EED Safety Exam
Demonstrate understanding of how safety and first aid fit within all aspects of industry.	NCHSE Foundation 7	HS-3	RST.11-12.1,2,7 SL.11-12.4,6 WHST.11-12.4,9, 10 L.11-12.2,3,6					

First Aid/CPR & Health Careers Exploration

Course Information	
Course Name	FIRST AID/CPR & HEALTH CAREERS EXPLORATION
Course Number	CTEK136
Grade(s)	9-12
Length	One Semester
Credit	0.5
Pre-requisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science - Allied Health and Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium of Health Science Education
Names/Numbers of Occupational Standards	ACC 8 & 10, NCHSE 1-11
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Health Careers Exploration provides an overview of a wide variety of health career related jobs that are essential to the healthcare field. The course emphasizes basic first aid, CPR and AED use. Students will explore various health careers such as sports medicine, firefighting, dispatch and police, veterinary medicine, dental, psychology, optometry, chiropractic, massage therapy, nursing, medicine and forensics. This course will stress personal and interdisciplinary cooperation required to meet patient needs throughout all levels of healthcare. Upon satisfactory completion of the course, the student will be issued first aid and CPR/AED cards.
Instructional Topic Headings (please separate each heading by a semi-colon)	Demonstrate knowledge and skills of CPR for adults, children, and infants, including the use of an AED; Demonstrate knowledge and skills of First Aid for trauma, bleeding, shock, stroke, burns, diabetes, poisoning, seizures, hypothermia, frostbite, overheating, and insect stings; Demonstrate knowledge of general safety standards for various clinical and workplace areas; Develop a plan for personal emergencies and survival; Students will explore, compare and contrast various alternative and ancillary health care careers with respect to education, opportunities, and roles and responsibilities; Students will demonstrate understanding of the

	US Health Care System and the interdependence of careers and professionals; Students will demonstrate understanding of the legal and ethical responsibilities and limitations with regard to their scope of practice; Students will demonstrate employability and professionalism with respect to appearance, hygiene, skill competence, integrity, critical thinking, cooperation, and responsibility with a commitment to continuing improvement and growth. Students will properly assess and treat a medical and trauma patient. Students will successfully complete a resume, go through a job application process and end the course with a mock job interview to prepare them for employment in the workforce.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	AHA BLS-CPR and First Aid
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, National Consortium for Health Science Education
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbank- CTC
Postsecondary Course Name	First Aid & CPR for Healthcare Providers
Postsecondary Course Number	HLTH F122
Number of Postsecondary Credits	

Author	
Course Developed By	FNSBSD, AHA
Course Adapted From	N/A
Date of Previous Course Revision	June 5, 2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrates knowledge and skills of CPR	2.1, 7.2, 7.22, 8.11, 8.12, 8.2, 10.1-10-12, 11.21, 11,24, 11.25	HL HL-DIA	SL.11-12.1; 6 L.11-12.1	MP 4 MP6	A1 B3	CRP 2 CRP 4	Technology	Written test, practical skills
Demonstrate knowledge and skills of First Aid	1.13, 1.21, 7.1-7.22, 10.11, 10.12, 11.21, 11,24, 11.25	HL HL-DIA	SL.11-12.1; 6 L.11-12.1	MP 4 MP 6	A1 B3	CRP 2 CRP 4	Technology	Written test, practical skills
Demonstrate knowledge of general safety standards for self and patients	7.1-7.22, 7.3-52, 9.1	HL-3 HL-SUP	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1 B3	CRP 2 CRP 4	Health, Safety and Environment	Written test, practical skills
Develop a plan for personal emergencies and survival	7.2-7.52	HL-THR	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1 B3	CRP 1 - 9	Personal Work Habits	Classroom skills
Explore, compare and contrast various alternative and ancillary health care careers	2.1, 2.3 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A5	CRP 2	Technical and Production Skills	Projects, personalized learning

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate understanding of the US Health Care System	3.1, 3.11, 3.12, 3.13, 3.14	HL - 2 HL-HI	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A5	CRP 2 CRP 4 CRP 7	Technical and Production Skills	Workbooks, quizzes
Demonstrate employability and professionalism	2.1, 2.3, 4.1-4.12, 4.2-4.42, 9.1 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1	CRP 2 CRP 10	Personal Work Habits	Demonstration, observation, quizzes
Properly assess and treat a medical patient, to include vital signs	1.13, 1.21, 2.21, 2.1, 2.3, 10.11, 11.21, 11.24, 11.25	HL-DIA HL-THR	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10	MP 4 MP 6	A1 B3-4	CRP 1 - 9	Technical and Production Skills	Demonstration, practical skills, skills check-off
Properly assess and treat a trauma patient, to include documentation of patient care	1.13, 1.21, 2.21, 2.1, 2.3, 10.11, 11.21, 11.24, 11.25 ACC 8	HL-DIA HL-THR	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10	MP 4 MP 6	A1 B3-4	CRP 1 - 9	Technical and Production Skills	Demonstration, practical skills, skills check-off
Complete a resume	2.1, 2.3, 4.1-4.12, 4.2-4.42 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1 B	CRP 2 CRP 10	Personal Work Habits	Demonstration

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Complete a job application	2.1, 2.3, 4.3-4.42 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1 B	CRP 2 CRP 10	Personal Work Habits, Principles of Technology	Demonstration
Complete a mock job interview	4.1-4.12, 4.4, 4.41 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1 B	CRP 2 CRP 10	Personal Work Habits	Demonstration
Demonstrate understanding of the US Health Care System	3.1, 3.11, 3.12, 3.13, 3.14	HL - 2 HL-HI	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A5	CRP 2 CRP 4 CRP 7	Technical and Production Skills	Workbooks, quizzes
Demonstrate employability and professionalism	2.1, 2.3, 4.1-4.12, 4.2-4.42, 9.1 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10		A1	CRP 2 CRP 10	Personal Work Habits	Demonstration, observation, quizzes
Properly assess and treat a medical patient, to include vital signs	1.13, 1.21, 2.21, 2.1, 2.3, 10.11, 11.21, 11.24, 11.25	HL-DIA HL-THR	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11-12.1 - 10	MP 4 MP 6	A1 B3-4	CRP 1 - 9	Technical and Production Skills	Demonstration, practical skills, skills check-off

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Properly assess and treat a trauma patient, to include documentation of patient care	1.13, 1.21, 2.21, 2.1, 2.3, 10.11, 11.21, 11.24, 11.25 ACC 8	HL-DIA HL-THR	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11- 12.1 - 10	MP 4 MP 6	A1 B3-4	CRP 1 - 9	Technical and Production Skills	Demonstration, practical skills, skills check-off
Complete a job application	2.1, 2.3, 4.3- 4.42 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11- 12.1 - 10		A1 B	CRP 2 CRP 10	Personal Work Habits, Principals of Technology	Demonstration
Complete a mock job interview	4.1-4.12, 4.4, 4.41 ACC 10	HL	SL.11-12.1; 6 L.11-12.1; 2; 4; 6; RST.11- 12.1 - 10		A1 B	CRP 2 CRP 10	Personal Work Habits	Demonstration

Human Behavior in Health Care

Course Information	
Course Name	HUMAN BEHAVIOR IN HEALTH CARE
Course Number	CTEK137
Grade(s)	10-12
Length	1 semester
Credit	0.5
Prerequisites	Introduction to Healthcare Occupations
Sequence or CTEPS	Health Science - Allied Health & Pre-Nursing
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	HOSA – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education - NCHSE - Health Science Education Standards
Names/Numbers of Occupational Standards	NCHSE - National Health Science Standards – May 2015 Standards 1.2, 2, 3, 4, 5, 6, 7, 8, 9, and 11.
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Introduction to and discussion of general concepts in human behavior and specialized psychological issues when dealing with patients and loved ones in healthcare settings, including effects of illness on behavior, effects of traumatic events on health, Maslow’s hierarchy of needs and trends toward holistic care. Students will perform self-evaluations and survey other cultures to allow examination of perceptions, individual biases, beliefs and their impacts on behavior
Instructional Topic Headings (please separate each heading by a semi-colon)	Challenges and responsibilities; philosophy of individual worth; striving to understand human behavior; increased understanding of patient needs; increased coping skills with respect to illness and traumatic events; cultural and attitudinal impacts upon health and health care; cultural, heredity and environmental influences on behavior and health; increased effective communications, including verbal, non-verbal, listening, and written; identify characteristics and effects of depression, substance abuse, and complications of patients that may have chronic or co-morbid medical and psychiatric conditions; broadened views of behavioral health care and trends toward holistic health care.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	HIPAA
Course Addresses	N/A
Alaska ELA and Math Standards	Y
Alaska Cultural Standards	Y
All Aspects of Industry (AAI)	Y
Core Technical Standards	Y
Career Ready Practices	Y
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, National Consortium of Health Science Education-NCHSE
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	UAF - CTC
Course Adapted From	UAF-CTC
Date of Previous Course Revision	N/A
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	N

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Broadened view of the careers in the healthcare system and its roles & responsibilities, satisfactions and challenges, including all aspects of industry	NCHSE Standard 3, 4, 5, 6 & 7	HL 1, 2, 3, 4	RSI-1,2 RSLST-1,2 WSL 1-10	S-IC 6	A 1	A 5, 7 B 2	Labor Issues	Discussion Written test
Increased awareness of the philosophy of individual worth and its implications for health care providers, including respect for patients from all cultures, economic status and medical conditions	NCHSE Standard 1.2, 6	HL 4	RSI-1,2 RSLST-1,2 WSL 1-10		B, C, D, E	A 1	Personal Work Habits	Discussion Written test
Increased awareness of cultural and attitudinal impacts upon health and health care	NCHSE Standard 1.2, 3, 4 & 6	HL 5 & 6	RSI-1,2 RSLST-1,2 WSL 1-10		B, C, D, E	A1	Community Issues	Discussion Written test
Increased ability for developing client-practitioner rapport by understanding patient needs	NCHSE Standard 1.2, 4 & 11	HL 5 & 6	RSI-1,2 RSLST-1,2 WSL 1-10		D	A1	Personal Work Habits	Discussion Written test
Self-Assessments as found in AKCIS: personality, career preferences as well as beliefs, attitudes and biases to increase coping skills for illness, traumatic events and loss	NCHSE Standard 1.2, 9 & 11	HL 1 HL-DIA 4 & 5	RSI-1,2 RSLST-1,2 WSL 1-10	S-IC 6	C	B	Personal Work Habits	Self Assessment & Written test
Identify characteristics and effects of depression, substance abuse, and complications of patients that may have chronic or co-morbid medical and psychiatric conditions	NCHSE Standard 1.2, 1.32, 8, 10 & 11	HL-DIA 4 & 5 HL-THR	RSI-1,2 RSLST-1,2 WSL 1-10	S-MD-7	B	A	Tech & Production Skills	Discussion Written test
Increased effective communications, including verbal, non-verbal, listening, and written	NCHSE Standard 2 1.32& 11	HL-THR 1 & 2, HL-HI 1-3	RSI-1,2 RSLST-1,2 WSL 1-10		A 3, D	A	Tech & Production Skills	Discussion Book Report Written test
Broadening views of behavioral health care & trends toward holistic health care using theories of human behavior	NCHSE Standard 1.2, 8 & 11	HL-THR	RSI-1,2 RSLST-1,2 WSL 1-10		E	B2	Tech & Production Skills	Discussion Report on community services Written test

Human Body Systems A

Course Information	
Course Name	HUMAN BODY SYSTEMS A
Course Number	CTEK124
Grade(s)	9-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Principles of Biomedical Sciences or Biology</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science
Date of District Course Revision	Spring 2014
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Human Body Systems A and B</i> is designed for 10th, 11th or 12th grade students interested in Health Science. Students examine the interactions of human body systems as they explore identity, power, movement, protection and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.
Instructional Topic Headings (please separate each heading by a semi-colon)	Tissues, Human Body, Molecules and Cells, the Brain, Electrical Communication, Chemical Communication, Communication with the Outside World, Power, Food, Oxygen, Water, Joints and Motion, Muscles, Blood Flow, Exercise Physiology, the Skin, Bones, Lymph and Blood Cells, Health and Wellness

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	Yes
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	PLTW
Date of Previous Course Revision	Spring 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will describe the position of anatomical structures in relation to other structures or locations in the body and specify specific anatomical landmarks on the body.	PLTW	HL-BRD.1-4	WT.2			A2; B2	Tech/Prod	PLTW Assessments
Students will learn how structure and distribution of tissues in the body contribute to human identity.	PLTW	HL-BRD.1-4				A2; B2	Tech/Prod	PLTW Assessments
Students will identify the structures and purpose of DNA.	PLTW	HL-BRD.1-4	WT.2			A2; B2	Tech/Prod	PLTW Assessments
Students will identify types of communication that occur inside the human body and investigate the history of brain mapping technology, including the mapping of the motor cortex and the language centers of the brain.	PLTW	HL-BRD.1-4	WT.2	S-10.1-4	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will understand electrical communication in the body through the study of the structure and function of the nervous system.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will understand chemical communication in the body through the study of hormones.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will identify the structure and function of the human eye.	PLTW	HL-BRD.1-4	WT.2	G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will understand the roles of food, water and environmental factors in maintaining homeostasis.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will describe the process of digestion and analyze diets.	PLTW	HL-BRD.1-4	WT.2	G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of the role of oxygen in the human body.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments

Human Body Systems B

Course Information	
Course Name	HUMAN BODY SYSTEMS B
Course Number	CTEK125
Grade(s)	9-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Human Body Systems A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Human Body Systems A and B</i> is designed for 10th, 11th or 12th grade students interested in Health Science. Students examine the interactions of human body systems as they explore identity, power, movement, protection and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.
Instructional Topic Headings (please separate each heading by a semi-colon)	Tissues, Human Body, Molecules and Cells, the Brain, Electrical Communication, Chemical Communication, Communication with the Outside World, Power, Food, Oxygen, Water, Joints and Motion, Muscles, Blood Flow, Exercise Physiology, the Skin, Bones, Lymph and Blood Cells, Health and Wellness

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	Yes
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	PLTW
Date of Previous Course Revision	Spring 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will describe the position of anatomical structures in relation to other structures or locations in the body and specify specific anatomical landmarks on the body.	PLTW	HL-BRD.1-4	WT.2			A2; B2	Tech/Prod	PLTW Assessments
Students will learn how structure and distribution of tissues in the body contribute to human identity.	PLTW	HL-BRD.1-4				A2; B2	Tech/Prod	PLTW Assessments
Students will identify the structures and purpose of DNA.	PLTW	HL-BRD.1-4	WT.2			A2; B2	Tech/Prod	PLTW Assessments
Students will identify types of communication that occur inside the human body and investigate the history of brain mapping technology, including the mapping of the motor cortex and the language centers of the brain.	PLTW	HL-BRD.1-4	WT.2	S-10.1-4	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will understand electrical communication in the body through the study of the structure and function of the nervous system.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will understand chemical communication in the body through the study of hormones.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1	E3, 4	A2; B2	Tech/Prod	PLTW Assessments
Students will identify the structure and function of the human eye.	PLTW	HL-BRD.1-4	WT.2	G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will understand the roles of food, water and environmental factors in maintaining homeostasis.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will describe the process of digestion and analyze diets.	PLTW	HL-BRD.1-4	WT.2	G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of the role of oxygen in the human body.	PLTW	HL-BRD.1-4		G-CO-2 G-MG.1		A2; B2	Tech/Prod	PLTW Assessments

Introduction to Exercise Science & Sports Medicine 1A

Course Information	
Course Name	INTRODUCTION TO EXERCISE SCIENCE & SPORTS MEDICINE 1A
Course Number	CTEK110
Grade(s)	11-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Healthcare Occupations, Human Anatomy & Physiology, or Teacher Recommendation</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science- Allied Health & Pre-Nursing
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	AAOS, National Athletic Trainer's Association
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> 1. Standards 1-8 (www.bocalc.org/atc/docs/SI-MR-TAB4-354) 2. Domain 1 & 2 (http://www.fsbpt.org/download/Standards_of_Competence.pdf) 3. Standards & Objectives 1-10 (www.usoe.k12.ut.us/ate/Skills/hst/ExSci/ExSciStandards.pdf) 4. Foundation Standards (www.nchste.org)
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This two semester course is designed to teach students components of sports medicine including the exploration of therapeutic careers. Students will be able to understand and apply medical terminology and abbreviations, identify the anatomy and physiology of the human body, injury prevention, the healing process, rehabilitation techniques, therapeutic modalities, nutrition and sports psychology.
Instructional Topic Headings (please separate each heading by a semi-colon)	Students will explore therapeutic careers; Students will apply medical terminology; Students will review anatomy and physiology as it applies to the prevention and care of injuries; Students will apply injury prevention principles; Students will describe the injury and healing processes; Students will explain and administer therapeutic modalities and rehabilitation techniques; Students will explore various aspects of sport nutrition; Students will describe

	principles of sport psychology; Students will differentiate and examine performance enhancement philosophies.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	National Athletic Trainer's Association
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	C. Browder, J. Johnson, & L. Kaiser
Course Adapted From	Scott Snelson, State of Utah Curriculum
Date of Previous Course Revision	June 5, 2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the health occupations industry.	Found. Std. 4 Employability 4.4-4.42 USOE 01	HL 1, 2, 3, 4, 5, 6	RST.11-12 1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		B4 E4	CRP 1, 2, 3, 4, 8, 9	Planning Management Labor	Research Proj./Class present. Skills USA p.85 USOE 01.01
Students will understand and use medical terminology.	Found Std, 1 Academic 1.1-1.25 Found Std, 2 Communic. 2.25 -2.26 USOE 02	HL-THR 1, 2, 3, 4	RST.11-12 1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		E4		Tech/Prod	Spelling Bee Written Exam Skills USA (p. 79-80)
Students will demonstrate knowledge of legal, ethical and confidentiality issues surrounding the medical profession.	Found. Std, 6 Ethics 6.1-6.32	HL 5, 6	RST.11-12 1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		E4	CRP 4	Planning Tech/Prod Technology Labor	Written exam Class debate Skills USA (p. 85-87)

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will review and apply knowledge of anatomy and physiology as it applies to injury prevention and care.	USOE 03	HL-THR 1, 3, 4	RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6	MP4 MP6			Tech/Prod	Demo Written Exams
Students will demonstrate first aid skills to include assessment and management of injuries with documentation.	USOE 04	HL-THR 1, 3, 4		MP4 MP6			Tech/Prod Labor Health/Safety	USOE skill check 04.03
Students will demonstrate injury prevention principles through competent taping of commonly injured joints.	USOE 05			MP4 MP6			Tech/Prod Health/Safety	USOE skill check 05.02
Students will describe the injury and healing process.	USOE 06	HL-THR 1, 3, 4	RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6	MP4 MP6			Tech/Prod	Written Exam
Students will explain and administer therapeutic modalities and rehabilitation techniques.	USOE 07		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6	MP4 MP6			Tech/Prod	USOE skill check 07.01 Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will demonstrate knowledge of the various aspects of sport nutrition.	USOE 08		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6				Tech/Prod	Written Exam
Students will describe the principles of sport psychology.	USOE 09		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6				Management Tech/Prod	Written Exam
Students will describe how to assess strength and proper strength training techniques and explain performance enhancement philosophies.	USOE 10		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6	MP4 MP6			Tech/Prod	Written Exam

Introduction to Exercise Science & Sports Medicine 1B

Course Information	
Course Name	INTRODUCTION TO EXERCISE SCIENCE & SPORTS MEDICINE 1B
Course Number	CTEK111
Grade(s)	11-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Exercise Science & Sports Medicine 1A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science- Allied Health & Pre-Nursing
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	AAOS, National Athletic Trainer's Association
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> Standards 1-8 (www.bocalc.org/atc/docs/SI-MR-TAB4-354) Domain 1 & 2 (www.fsbpt.org/download/Standards_of_Competence.pdf) Standards & Objectives 1-10 (www.usoe.k12.ut.us/ate/Skills/hst/ExSci/ExSciStandards.pdf) Foundation Standards (www.nchste.org)
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course is a continuation of Introduction to Exercise Science and Sports Medicine and is designed to teach students components of sports medicine, including the exploration of therapeutic careers. Students will be able to understand and apply medical terminology and abbreviations, identify the anatomy and physiology of the human body, injury prevention, the healing process, rehabilitation techniques, therapeutic modalities, nutrition, and sports psychology.
Instructional Topic Headings (please separate each heading by a semi-colon)	Students will explore therapeutic careers; Students will apply medical terminology; Students will review anatomy and physiology as it applies to the prevention and care of injuries; Students will apply injury prevention principles; Students will describe the injury and healing processes; Students will explain and administer therapeutic modalities and rehabilitation

	techniques; Students will explore various aspects of sport nutrition; Students will describe principles of sport psychology; Students will differentiate and examine performance enhancement philosophies.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	National Athletic Trainer's Association
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A

Author	
Course Developed By	C. Browder, J. Johnson, & L. Kaiser
Course Adapted From	Scott Snelson, State of Utah Curriculum
Date of Previous Course Revision	June 5, 2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the health occupations industry.	Found. Std. 4 Employability 4.4-4.42 USOE 01	HL 1, 2, 3, 4, 5, 6	RST.11-12 1; 2; 10 WHST.11- 12.2.a-e; 11- 12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6		B4 E4	CRP 1, 2, 3, 4, 8, 9	Planning Management Labor	Research Proj./Class present. Skills USA p.85 USOE 01.01
Students will understand and use medical terminology.	Found Std, 1 Academic 1.1-1.25 Found Std, 2 Communication. 2.25 -2.26 USOE 02	HL-THR 1, 2, 3, 4	RST.11-12 1; 2; 10 WHST.11- 12.2.a-e; 11- 12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6		E4		Tech/Prod	Spelling Bee Written Exam Skills USA (p. 79-80)
Students will demonstrate knowledge of legal, ethical and confidentiality issues surrounding the medical profession.	Found. Std, 6 Ethics 6.1-6.32	HL 5, 6	RST.11-12 1; 2; 10 WHST.11- 12.2.a-e; 11- 12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6		E4	CRP 4	Planning Tech/Prod Technology Labor	Written exam Class debate Skills USA (p. 85-87)
Students will review and apply knowledge of anatomy and physiology as it applies to injury prevention and care.	USOE 03	HL-THR 1, 3, 4	RST.11-12 1; 2; 10 WHST.11- 12.2.a-e; 11- 12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.	MP4 MP6			Tech/Prod	Demo Written Exams

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will demonstrate first aid skills to include assessment and management of injuries with documentation.	USOE 04	HL-THR 1, 3, 4					Tech/Prod Labor Health/Safety	USOE skill check 04.03
Students will demonstrate injury prevention principles through competent taping of commonly injured joints.	USOE 05						Tech/Prod Health/Safety	USOE skill check 05.02
Students will describe the injury and healing process.	USOE 06	HL-THR 1, 3, 4	RST.11-12.1; 2; 10 WHST.11-12.2.a- e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6				Tech/Prod	Written Exam
Students will explain and administer therapeutic modalities and rehabilitation techniques.	USOE 07		RST.11-12.1; 2; 10 WHST.11-12.2.a- e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6				Tech/Prod	USOE skill check 07.01 Exam
Students will demonstrate knowledge of the various aspects of sport nutrition.	USOE 08		RST.11-12.1; 2; 10 WHST.11-12.2.a- e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11- 12.4a-d; 11-12.6				Tech/Prod	Written Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will describe the principles of sport psychology.	USOE 09		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6				Management Tech/Prod	Written Exam
Students will describe how to assess strength and proper strength training techniques and explain performance enhancement philosophies.	USOE 10		RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6				Tech/Prod	Written Exam
Students will understand how specific careers addressed in this course fit within all aspects of the health occupations industry.	Found. Std. 4 Employability 4.4-4.42 USOE 01	HL 1, 2, 3, 4, 5, 6	RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		B4 E4	CRP 1, 2, 3, 4, 8, 9	Planning Management Labor	Research Proj./Class present. Skills USA p.85 USOE 01.01
Students will understand and use medical terminology.	Found Std, 1 Academic 1.1-1.25 Found Std, 2 Communic. 2.25 -2.26 USOE 02	HL-THR 1, 2, 3, 4	RST.11-12.1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		E4		Tech/Prod	Spelling Bee Written Exam Skills USA (p. 79-80)

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will demonstrate knowledge of legal, ethical and confidentiality issues surrounding the medical profession.	Found. Std, 6 Ethics 6.1-6.32	HL 5, 6	RST.11-12 1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6		E4	CRP 4	Planning Tech/Prod Technology Labor	Written exam Class debate Skills USA (p. 85-87)
Students will review and apply knowledge of anatomy and physiology as it applies to injury prevention and care.	USOE 03	HL-THR 1, 3, 4	RST.11-12 1; 2; 10 WHST.11-12.2.a-e; 11-12.4 SL.11-12.4; 5 L.11-12.1 a-b; 11-12.2 a-b; 11-12.4a-d; 11-12.6				Tech/Prod	Demo Written Exams

Introduction to Fire Services 1A

Course Information	
Course Name	INTRODUCTION TO FIRE SERVICES 1A
Course Number	CTEK126
Grade(s)	11-12
Length	One Semester
Credit	0.5
Prerequisites	One Math Credit and One Science Credit
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science- Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education (NCHSE), National Fire Protection Association (NFPA), and Universal Building Code
Names/Numbers of Occupational Standards	NCHSE Foundation Standard 2, 4, 5, 6, 7, 9
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course provides an overview of career opportunities in fire protection and related fields. Topic areas include an introduction to the philosophy and history of fire protection/services, fire departments as part of local government, laws and regulations, affecting fire services, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, fire protection systems, National Incident Management System (NIMS), Incident Command System, rescue practices, and fire strategy and tactics.
Instructional Topic Headings (please separate each heading by a semi-colon)	Students will describe and understand the fire and emergency services vocabulary and terminology; Students will have an understanding of employment opportunities within emergency services; Students will prepare a professional resume, cover letter, and job application; Students will demonstrate knowledge of the 5 types of building construction; Students will understand the science of fire as outlined by NFPA 1001 including scientific terminology, fire behavior, the physics of fire, and fire control; Students will have a basic understanding of emergency services supervision and management; Students will practice effective communication techniques including proper use and understanding of radio

	equipment, transmitting messages, progress reports, and methods of communications; Students will have an understanding of the Incident Management System; Students will understand how the fire service functions within local and state government; Student will demonstrate selected IFSAC state of Alaska firefighter I skills including hose, ropes and knots, personal protective equipment, forcible entry, fire extinguishers, property conservation, and equipment maintenance.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	FEMA (ICS 100)
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	UAF
Postsecondary Course Name	Principles of Emergency Services
Postsecondary Course Number	FIRE F101
Number of Postsecondary Credits	3 credits

Author	
Course Developed By	J. George, J. Johnson, L. Kaiser
Course Adapted From	UAF Community & Technical College
Date of Previous Course Revision	May 2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Describe and understand the fire and emergency services vocabulary and terminology	NCHSE 2.1, 2.3,	LW-EFM 1	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CPR 4	Technical and Production Skills	Quizzes, Written Exam
Understand employment opportunities within emergency services	NCHSE 4.1, 4.2, 4.3, 4.4	LW-EFM 8	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4 CRP 10	Labor Issues	Guest Speaker Summary
Understand the science of fire as outlined by NFPA 1001 including scientific terminology, fire behavior, the physics of fire and fire control	NCHSE 7.2-7.5	LW-EFM 4	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6	MP 4, 5, 6	B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes
Demonstrate knowledge of the five types of building construction	Universal Building Code	LW-EFM 1	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4	Health, Safety, and Environment Technical and Production Skills	Quizzes, Written Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Have a basic understanding of emergency services supervision and management	NCHSE 4.1--4.42	LW-EFM 2; 4; 7; 8; 11; 13; 14	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11- 12.2; 6		B2	CRP 2 CRP 4 CRP 12	Technical and Production Skills Management	Quizzes, Written Exam
Practice effective communication techniques including proper use and understanding of radio equipment, transmitting messages, progress reports and methods of communications	NCHSE 11.3	LW-EFM 1; 3	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11- 12.2; 6		B2	CRP 2 CRP 4 CRP 11	Principals of Technology Technical and Production Skills	Demonstration, Practical Skills
Have an understanding of the Incident Management System	NCHSE 8.2	LW-EFM 9; 11	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11- 12.2; 6		B2	CRP 2 CRP 4 CRP 12	Management Technical and Production Skills	FEMA ICS 100b
Understand how the fire service functions within local and state government	NCHSE 2.1	LW-EFM 7	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11- 12.2; 6		B2	CRP 2 CRP 4	Business Planning Finance Management	Guest Speaker Summary
Demonstrate selected IFSAC state of Alaska firefighter I skills including hose, ropes and knots, personal protective equipment, forcible entry, fire extinguishers, property conservation and equipment maintenance	NCHSE 2.1, 10.1	LW-EFM 3	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11- 12.2; 6		B2	CRP 2 CRP 4	Technical and Production Skills	Demonstration, practical skills, practical skills exam

Introduction to Fire Services 1B

Course Information	
Course Name	INTRODUCTION TO FIRE SERVICES 1B
Course Number	CTEK127
Grade(s)	11-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Fire Services 1A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Sciences- Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education and National Fire Protection Association
Names/Numbers of Occupational Standards	NCHSE Foundation Standard 2, 4, 5, 6, 7, 9
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course is a continuation of Intro to Fire Services 1A, which provides an overview of career opportunities in fire protection and related fields. Topic areas include an introduction to the philosophy and history of fire protection/services, fire departments as part of local government, laws and regulations, affecting fire services, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, fire protection systems, National Incident Management system (NIMS), Incident Command System, rescue practices, and fire strategy and tactics.
Instructional Topic Headings (please separate each heading by a semi-colon)	Students will describe and understand the fire and emergency services vocabulary and terminology; Students will have an understanding of employment opportunities within emergency services; Students will demonstrate knowledge of the 5 types of building construction; Students will understand the science of fire as outlined by NFPA 1001 including scientific terminology, fire behavior, the physics of fire, and fire control; Students will have a basic understanding of emergency services supervision and management; Students will have an understanding of the Incident Management System; Students will participate in a variety of hands-on activities to include but not limited to water rescue, ice rescue, combat challenges,

	search and rescue and understand the appropriate, associated equipment; Students will understand how the fire service functions within local and state government; Student will demonstrate selected IFSAC state of Alaska firefighter I skills including hose, ropes and knots, personal protective equipment, forcible entry, fire extinguishers, property conservation, and equipment maintenance.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	Water Wise (www.amsea.org/training)
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A

Author	
Course Developed By	J. George, J. Johnson, L. Kaiser
Course Adapted From	UAF Community & Technical College
Date of Previous Course Revision	May 2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Describe and understand the fire and emergency services vocabulary and terminology	2.1, 2.3,	LW-EFM 1	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CPR 4		Quizzes, Written Exam
Understand employment opportunities within emergency services	4.1, 4.2, 4.3, 4.4	LW-EFM 8	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4 CRP 10	Principals of Technology, Labor Issues	
Understand the science of fire as outlined by NFPA 1001 including scientific terminology, fire behavior, the physics of fire and fire control	7.2-7.5	LW-EFM 4	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6	MP 4, 5, 6	B2	CRP 2 CRP 4	Health, Safety and Environment	Quizzes
Demonstrate knowledge of the five types of building construction		LW-EFM 1	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4	Principals of Technology	Quizzes, Written Exam
Have a basic understanding of emergency services supervision and management	4.1--4.42	LW-EFM 2; 4; 7; 8; 11; 13; 14	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4 CRP 12	Personal Work Habits	Quizzes, Written Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Practice effective communication techniques including proper use and understanding of radio equipment, transmitting messages, progress reports and methods of communications	11.3	LW-EFM 1; 3	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4 CRP 11	Principals of Technology, Personal Work Habits	Demonstration, Practical Skills
Have an understanding of the Incident Management System	8.2	LW-EFM 9; 11	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4 CRP 12	Technology Production Skills	FEMA ICS 200b
Understand how the fire service functions within local and state government	2.1	LW-EFM 7	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4	Personal Work Habits, Technology Production Skills	
Demonstrate selected IFSAC state of Alaska firefighter I skills including hose, ropes and knots, personal protective equipment, forcible entry, fire extinguishers, property conservation and equipment maintenance	2.1, 10.1	LW-EFM 3	SL.11-12.1; 4; 5 L.11-12.2; 6 RST.11-12.1 WHST.11-12.2; 6		B2	CRP 2 CRP 4	Principals of Technology, Personal Work Habits	Demonstration, practical skills, practical skills exam

Introductions to Healthcare Occupations

Course Information	
Course Name	INTRODUCTION TO HEALTHCARE OCCUPATIONS
Course Number	CTEK135
Grade(s)	9-12
Length	One Semester
Credit	0.5
Prerequisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science-Allied Health & Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium Health Science Education - NCHSE Health Science Standards, Alaskan Core Competencies-ACC
Names/Numbers of Occupational Standards	NCHSE 1-11, ACC 1, 4, 8, 9 & 10
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Students explore a variety of health related careers and a basic overview of the following areas: roles and responsibilities of health care workers, job and educational opportunities, medical terminology, medical math, legal and ethical issues, confidentiality, personal safety and infection control, problem solving, basic medical skills, and anatomy and physiology related to emergency care.
Instructional Topic Headings (please separate each heading by a semi-colon)	Employability Skills and Career Investigations; Careers and Trends in the Health Care System; Legal and Ethical Responsibilities; Body Systems, Growth, Development & Diseases; Personal and Workplace Safety; Medical Terminology; Communication; Medical Math; Professionalism

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	Blood Borne Pathogens, Career Safe Online-Healthcare
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, NCHSE, ACC
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	UAF/Community & Technical College (CTC)
Postsecondary Course Name	Introduction to Health Careers
Postsecondary Course Number	HEALTH 105
Number of Postsecondary Credits	2 credits
Author	
Course Developed By	UAF- CTC
Course Adapted From	UAF- CTC
Date of Previous Course Revision	June 5, 2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate employability and professionalism with respect to appearance, hygiene, skill competence, critical thinking, cooperation, and responsibility with a commitment to continuing improvement and growth.	NCHSE 4, 8 ACC 1	CRP 3	RST.11-12.1,2,7 WHST.11-12.4,7, 10 L.11-12.2,3,6		A1, 7	E4	Planning; Tech and Prod; Prin of Tech; Labor	Observations Projects
Explore, compare and contrast potential health science career with respect to education and opportunities.	NCHSE 4.4 ACC 10	HS-1;	RST.11-12.1,2,7 WHST.11-12.4,7, 10 L.11-12.2,3,6		A5, B1-5	B4, E4	Planning; Mgt.; Labor	Career Report classroom Presentation
Demonstrate understanding of the US health care system and the interdependence of careers and professionals	NCHSTE 3	HS-2; HS-4;	RST.11-12.1,2,4,5,9,10 WHST.11-12.4,9, 10 L.11-12.2,3,6	S-ID.1-4	A5	E3	Planning	Classroom Discussion Written Exam
Demonstrate understanding of the legal and ethical responsibilities and limitations with regard to their duties and client rights.	NCHSE 5, 6 ACC 9	CRP 9; HS-5; HS-6;	RST.11-12.1,2,7 WHST.11-12.4,9, 10 L.11-12.2,3,6		A1, 7	E4	Planning; Tech and Prod; Prin of Tech; Labor	Classroom Discussion Written Exam
Demonstrate appropriate communication: verbal, nonverbal, written, using medical terminology as appropriate, being culturally sensitive.	NCHSE 2 ACC 1.B	CRP 4; HL-THR 1, 2;	RST.11-12.1,2,7 WHST.11-12.4,9, 10 L.11-12.2,3,6 SL.11-12.1,6	N-Q.2	A2	E4	Tech & Prod	Observations Classroom Activities Written Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Use math skills to measure and perform calculations.	NCHSE 1.3	HL-THR 3		N-Q.2	A2	E4	Tech & Prod	Classroom Projects Written Exam
Exhibit knowledge of basic human anatomy and physiology, growth, development, wellness and disease.	NCHSE 1.1	HL-THR 4	RST.11- 12.1,2,7 SL.11-12.4,6 WHST.11- 12.4,9, 10 L.11-12.2,3,6	G-CO.2 G-MG.1	A2	B2, E4	Tech & Prod	Classroom Projects, Activities Written Exam
Utilize workplace-safety and disease prevention practices in the classroom.	NCHSE 7 ACC 4	HS-3;	RST.11- 12.2,2,4,7, WHST.11- 12.4,7, 10 L.11-12.2,3,6	N-Q.2	A2	E4	Labor; Health Safety; Env	Observations Classroom Activities and Projects Written Exam
Promotes healthy behaviors and prevention of disease	NCHSE 9 4 K	HL 4			C 3	CRP 1, 3	Personal Work Habits, Health Safety & Env	Classroom Activities and Projects Written Exam

Law & Ethics for Health Professionals

Course Information	
Course Name	LAW & ETHICS FOR HEALTH PROFESSIONALS
Course Number	CTEK119
Grade(s)	10-12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Healthcare Occupations</i> or Teacher Recommendation
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science - Allied Health & Pre- Nursing
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education-NCHSE
Names/Numbers of Occupational Standards	NCHSE Foundation Standards 1 - 11
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course has been designed to introduce the health care student to the complex issues the health care profession deals with on a personal, organizational, and systemic level. This course will initiate and encourage discussion of medical law, while taking into consideration the spiritual, ethical, moral, cultural and personal beliefs of both the medical professional and the clients.
Instructional Topic Headings (please separate each heading by a semi-colon)	Topics may include: Introduction to Ethics; Contemporary Ethical Dilemmas; End-of-Life Dilemmas; Health Care Ethics Committee; Development of Law; Introduction to Law; Government Ethics and the Law; Organizational Ethics and the Law; Health Care Professionals Legal-Ethical Issues; Physician Ethical and Legal Issues; Employee Rights and Responsibilities; Patient Consent: Patient Abuse; Patient Rights and Responsibilities.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	HIPAA, FEMA IS 106.17 Workplace Violence Awareness
Course Addresses	Yes
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, National Consortium for Health Science Education (NCHSE)
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	UAF-CTC
Course Adapted From	UAF-CTC
Date of Previous Course Revision	2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate appropriate methods of delivering and obtaining information, while communicating effectively.	NCHSE 2.1	HL 5 HL 6 HL-DIA 1 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 E	CRP 1 CRP 2 CRP4 CRP 5 CRP 9 CPR 12	Health, Safety, and Environment; Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe the responsibilities of consumers within the healthcare system (such as: self-advocacy, patient compliance, provider and consumer obligations).	NCHSE 3.12	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6	MP4 MP6	A1 B E	CRP 1 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety, and Environment; Labor Issues; Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Identify the impact of emerging issues on healthcare delivery systems (such as: technology, epidemiology, bioethics, socioeconomics) and how they affect services performed and quality of care.	NCHSE 3.13	HL 5 HL 6 HL-BRD 6	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		B E	CRP1 CRP 2 CRP4 CRP 5 CRP 9 CRP 11 CRP 12	Health, Safety and Environment, Principals of Technology, Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Summarize professional standards as they apply to hygiene, dress, language, confidentiality and behavior.	NCHSE 4.12	HL 2 HL 4	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 C3	CRP 3	Personal Work Habits; Labor Issues; Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe the legal responsibilities, limitations, and implications on healthcare worker actions.	NCHSE 5	HL 5 HL 5	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 11 CRP 12	Health, Safety and Environment, Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Describe standards for the safety, privacy and confidentiality of health information (HIPAA, privileged communication).	NCHSE 5.21	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 11 CRP 12	Health, Safety and Environment; Community Issues; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Describe advance directives.	NCHSE 5.22	HL 5 HL 6 HL-DIA 4 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6	MP4 MP6	B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Summarize the essential characteristics of a patient's basic rights within a healthcare setting.	NCHSE 5.23	HL 5 HL 6 HL-DIA HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Define informed consent.	NCHSE 5.24	HL 5 HL 6 HL-DIA 4 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain laws governing harassment and scope of practice.	NCHSE 5.25	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 B	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Summarize accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.	NCSHE 6	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Differentiate between ethical and legal issues impacting healthcare.	NCHSE 6.11	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1 B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 11 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Identify ethical issues and their implications related to healthcare (such as: organ donation, in vitro fertilization, euthanasia, scope of practice, ethics committee).	NCHSE 6.12	HL 5 HL 6 HL-BRD 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6	MP4 MP6	A1 B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Discuss religious and cultural values as they impact healthcare (such as: ethnicity, race, religion, gender).	NCHSE 6.21	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6	MP4 MP6	A1 B E	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets
Identify methods of maintaining privacy and confidentiality of health information related to information technology applications.	NCHSE 11	HL 5 HL 6 HL-HI	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1	CRP 1 CRP 2 CRP 4 CRP 5 CRP 9 CRP 11 CRP 12	Health, Safety and Environment; Technical and Production Skills; Labor Issues	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Identify employability skills, levels of education, credentialing requirements, and employment trends related to careers in the health science pathways.	NCHSE 4	HL 1	SL11-12.1; 2; 4; 5; 6 L.11-12.1; 2; 4; 6 RH.11-12.1; 4; 7 RST.11-12.1; 2; 7 WHST.11-12.2; 2; 4; 6		A1	CRP 10	Technical and Production Skills; Health, Safety and Environment	Classwork

Math in Health Care

Course Information	
Course Name	MATH IN HEALTH CARE
Course Number	CTEK112
Grade(s)	10-12
Length	One Semester
Credit	0.5 (Cross-credited with Mathematics)
Pre-requisites	<i>Algebra I</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science - Allied Health & Pre-Nursing
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Council of Teachers of Mathematics (NCTM) National Consortium for Health Science Education (NCHSE) Health Science Foundation Standards
Names/Numbers of Occupational Standards	NCTM Grades 9-12; Curriculum & Evaluation Standards for School Mathematics, 1-13; NCHSE 1-11
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course provides a practical application of mathematics in health care including arithmetic review, decimals, fractions, percent, ratio, proportion, and metric measurement, and mathematical applications in medical careers including measurement instruments, graphs, charts, and medication dosage calculations.
Instructional Topic Headings (please separate each heading by a semi-colon)	Whole numbers; Fractions; Decimals; Ratio & Proportion; Percents; Combined Applications; Pre-Algebra Basics; Metric System; Drug Labels; Apothecary Measurement & Conversion; Dosage Calculations; Parenteral Dosage; Intravenous Fluid Administration; Dosage by body weight; Mathematical Application in Medical Measurement Equipment and Careers.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	HOSA - Medical Math Test
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, National Consortium for Health Science Education (NCHSE)
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	UAF/Community & Technical College (CTC)
Postsecondary Course Name	Mathematics in Health Care
Postsecondary Course Number	HEALTH F116
Number of Postsecondary Credits	3 credits
Author	
Course Developed By	UAF-CTC and Victor Zinger
Course Adapted From	UAF-CTC
Date of Previous Course Revision	2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand how specific careers addressed in this course fit within all aspects of the health occupations industry	NCHSE 4.4-4.42	CRS-HL 1-2	RSI 1, 4, 7 WSL 1-10 SLS 1-4 LS 1-6 WSL 6, 7 & 10		B4, E4	A5, B1-5	Planning Labor	Written Test Career Report
Students will demonstrate proficiency in basic mathematical computations.	NCHSE 1.1-1.25 NCTM Std. 1, 4, 5, 6	CRS-HL-BRD 2	RSI 1, 4, 7 RSLST 3,4,7 &10	N-Q 1-3 A-APR 1-6 A-CED 1 A-REI 1 & 3	E4	A2	Tech/Prod	Class Activities Written Test
Students will read and write charts and reports using health care terminology, symbols and abbreviations.	NCHSE 2.2-2.26 4.23; NCTM Std. 6, 9, 10, 12, 13	CRS-HL DIA 1-5	LS-1-6 RSLST 3,4,7 &10	N-Q 1-3 S-ID 1 & 7	E4	A2	Tech/Prod	Written Test, Charting Skills
Students will solve practical health care problems by choosing appropriately from a variety of mathematical techniques.	NCHSE 1.1-1.25; NCTM Std. 1, 4, 5, 6, 9, 10, 11, 12, 13	CRS-HL-BRD 2	RSI 1, 4, 7 RSLST 3,4,7 &10	N-Q 1-3 A-APR 1-6 A-CED 1 A-REI 1 & 3	B4, E4	A2	Tech/Prod	Class Activities Written Test
Students will demonstrate the ability to perform mathematical computations using medical equipment and terminology.	NCHSE 1.1-1.25; NCTM Std. 1, 4, 5, 6	CRS-HL-BRD 2 DIA 1-5	RSI 1, 4, 7 RSLST 3,4,7 &10	N-Q 1-3 A-APR 1-6 A-CED 1 A-REI 1 & 3	B4, E4	A2	Tech/Prod	Written Test Equipment use
Students will use the appropriate techniques to calculate dosages and intravenous flow rates.	NCHSE 1.1-1.25; NCTM Std. 1, 4, 5, 6, 9	CRS-HL-BRD 2 DIA 1-5 THR-3	RSI 1, 4, 7 RSLST 3,4,7 &10	N-Q 1-3 A-SSE.1 A-APR 1-6	B4, E4	A2	Tech/Prod	Written Test, Equipment use

Medical Interventions A

Course Information	
Course Name	MEDICAL INTERVENTIONS A
Course Number	CTEK131
Grade(s)	10-12
Length	One Semester
Credit	0.5
Prerequisites	<i>Principles of Biomedical Science A and B</i> , or Teacher Recommendation
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education (NCHSE)
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Medical Interventions A and B</i> is a year-long Project Lead the Way course designed for 11th-12th grade students to investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.
Instructional Topic Headings (please separate each heading by a semi-colon)	Homeostasis; Infectious Agents; Medical Terminology; Antibiotics; DNA; Gene Therapy.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska

Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	FNSBSD Curriculum
Date of Previous Course Revision	Spring 2014
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will identify medical interventions that maintain health and homeostasis in the body.	PLTW		AS.R.1	N.Q.2		1-2, 4	Health/ Safety	PLTW Assessments
Students will use a variety of methods to detect and/or identify infectious agents.	PLTW	HL-BRD 2-3	AS.R.1	N.Q.3	B3-4		Health/ Safety	PLTW Assessments
Students will learn and apply appropriate terminology for the medical field.	PLTW		AS.R.10; AS.SL.1	S.IC.6		2, 4	Health/ Safety	PLTW Assessments
Students will explore why antibiotics disrupt the pathways that bacteria use to survive.	PLTW	HL 2	AS.R.1	N.Q.1		2, 4-5	Health/ Safety	PLTW Assessments
Students will be able to describe how bacterial cells use multiple pathways to gain resistance to antibiotics.	PLTW	HL-BRD 2-3	AS.R.7; AS.SL.1	N.Q.2	B3-4	2, 4-5	Health/ Safety	PLTW Assessments
Students will learn why problems with one or more structures within the ear cause various types of hearing loss.	PLTW		AS.R.1			2	Health/ Safety	PLTW Assessments
Vaccines are medical interventions that activate the immune system to recognize a disease antigen and produce antibodies necessary to defend the body.	PLTW		AS.R.10				Health/ Safety	PLTW Assessments
Genetic testing is the use of molecular methods to determine if someone has a genetic disorder, will develop one or is a carrier of a genetic illness and involves sampling a person's DNA and examining the chromosomes or genes for abnormalities.	PLTW	HL-BRD 3	AS.R.10				Health/ Safety	PLTW Assessments
Gene therapy is a type of disease treatment in which faulty genes are replaced by functional copies.	PLTW		AS.R.10	N.Q.1			Health/ Safety	PLTW Assessments

Medical Interventions B

Course Information	
Course Name	MEDICAL INTERVENTIONS B
Course Number	CTEK132
Grade(s)	10-12
Length	One Semester
Credit	0.5
Prerequisites	<i>Medical Interventions A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	Nationals Consortium for Health Science Education (NCHSE)
Names/Numbers of Occupational Standards	National Health Science Standards
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Medical Interventions A and B</i> is a year-long Project Lead the Way course designed for 11th-12th grade students to investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.
Instructional Topic Headings (please separate each heading by a semi-colon)	Lancer; X-rays; Medical Terminology; Diagnostic Tests.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW Assessments
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	FNSBSD Curriculum
Date of Previous Course Revision	Spring 2014
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Students will understand cancer is a term used for more than 100 different diseases in which cell regulation genes are mutated causing the cells to reproduce out of control.	PLTW		AS.R.1	N.Q.1		2, 5	Health/ Safety	PLTW Assessments
Students will learn how X-rays, CT scans, and MRI scans are used to create pictures of the inside of the body to diagnose and treat many disorders.	PLTW		AS.R.10; AS.W.8		B3-4	2	Health/ Safety	PLTW Assessments
Students will understand and use medical terminology used to identify behavioral, biological, environmental, and genetic risk factors.	PLTW	HL-BRD 2-3	AS.R.10		B3-4	2, 5	Health/ Safety	PLTW Assessments
Students will identify behavioral, biological, environmental, and genetic risk factors that increase the chance that a person will develop cancer.	PLTW	HL 2	AS.R.10; AS.W.8	N.Q.1	B3-4	2	Health/ Safety	PLTW Assessments
Students will review molecular diagnostic tests, such as marker analysis, and be able to detect inherited genetic mutations associated with certain cancers and can be used to predict risk for developing those cancers.	PLTW	HL 2	AS.R.10; AS.W.8	N.Q.1	B3-4	2	Health/ Safety	PLTW Assessments
Students will explore various methods used to treat cancer and safety concerns that apply to each method.	PLTW		AS.R.10			2, 4	Health/ Safety	PLTW Assessments
Students will understand the field of pharmacogenetics, which investigates how genetic variations correlate with responses to specific medication and strives to develop medical treatments tailored to the individual.	PLTW	HL 2	AS.R.1		B3-4	2, 4	Health/ Safety	PLTW Assessments
Students will identify the methods used to diagnose and treat diabetes, which has changed dramatically over the last 200 years, including the use and production of insulin.	PLTW	HL 2	AS.R.10; AS.SL.1		B3, 4	2, 4	Health/ Safety	PLTW Assessments
Students will learn how recombinant DNA technology allows scientists to custom-design bacteria that can produce a variety of important protein products, including insulin.	PLTW	HL-BRD 2-3	AS.R.1; AS.R.10			2	Health/ Safety	PLTW Assessments
Students will understand how amino acid interactions affect the structure and function of proteins.	PLTW	HL-BRD 2-3	AS.R.10			2	Health/ Safety	PLTW Assessments

Medical Terminology 1A

Course Information	
Course Name	MEDICAL TERMINOLOGY 1A
Course Number	CTEK102
Grade(s)	10-12
Length	One Semester
Credit	0.5 (Cross-credited with science)
Prerequisites	<i>Introduction to Healthcare Occupations</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science-Allied Health & Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium of Health Science & Technology Education (NCHSTE) (www.nchste.org); Alaska Core Competencies-ACC
Names/Numbers of Occupational Standards	Foundation Standard 1: Academic Foundation 1.1 - 1.33; Foundation Standard 2: Communications 2.2; Foundation Standard 4: Employability Skills Career Decision- Making 4.31 and 4.32
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Medical Terminology 1A introduces the building blocks of medical terminology, including word parts (combining forms, prefixes, and suffixes), how medical terms are formed, anatomical positions and planes, and correct pronunciation of medical terms and how medical terminology applies to human anatomy, physiology, and pathology. Content will be presented by body systems focusing on word construction, common diseases and conditions, surgical procedures, therapeutic treatments, medical record practice, case studies, and careers.
Instructional Topic Headings (please separate each heading by a semi-colon)	Basics and the body (medical terms, pronunciation, spelling, medical word parts, combining forms, prefixes, suffixes, anatomical position, anatomical planes); Medical word parts, anatomy and physiology, diseases and conditions, diagnostic tests and procedures, surgical procedures and therapeutics, common medical abbreviations, careers to consider for body systems.

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	NCHSE- Health Science Assessment
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, NCHSE Standards, Alaska Core Competencies
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	UAF Community & Technical College (CTC)
Postsecondary Course Name	Medical Terminology
Postsecondary Course Number	HEALTH F100
Number of Postsecondary Credits	None (Must also complete Medical Terminology 1B)
Author	
Course Developed By	UAF-CTC
Course Adapted From	UAF-CTC Allied Health
Date of Previous Course Revision	2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Identify basic levels of organization of the human body.	NCHSE 1.11	HL 1	RST.11-12.1; 2; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Identify body planes, directional terms, cavities, and quadrants.	NCHSE 1.12	HL 1	RST.11-12.1; 2 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Analyze basic structures and functions of human body systems (skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, nervous, special senses, endocrine, digestive, urinary, and reproductive).	NCHSE 1.13	HL 1	RST.11-12.1; 2; 5; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe common diseases and disorder of each body system.	NCHSE 1.21 ACC 1, 4, 8	HL 1	RST.11-12.1; 2; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Demonstrate competency in basic math skills and mathematical conversions as they relate to healthcare.	NCHSE 1.31	HL 1		MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.	NCHSE 1.32	HL 1		MP4 MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Demonstrate use of the 24-hour clock/ military time.	NCHSE 1.33	HL 1		MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Use of common roots, prefixes, and suffixes to communicate information.	NCHSE 2.21	HL 1	RL 11-12.4 L 11-12.4.a-d		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Interpret medical abbreviations to communicate information.	NCHSE 2.22	HL 1	RL 11-12.1 RL 11-12.4		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Utilize proper elements of written and electronic communication (spelling, grammar, and formatting).	NCHSE 2.31	HL 1	W 11-12.2a-f W 11-12.4 SL 11-12.5 L 11-12.a-b		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Research levels of education, credentialing requirements, and employment trends in health professions.	NCHSE 4.31 ACC 10	HL 1	RL 11-12.1 RI 11-12.7 SL 11-12.4		B2, E4	CRP 10	Technology Production Skills	Classwork
Distinguish differences among careers within health science pathways (diagnostic services, therapeutic services, health informatics, support services, or biotechnology research and development).	NCHSE 4.32 ACC 10	HL 1	RL 11-12.1 RI 11-12.7		A2, B1, B2, B4	CRP10	Technology Production Skills	Classwork

Medical Terminology 1B

Course Information	
Course Name	MEDICAL TERMINOLOGY 1B
Course Number	CTEK103
Grade(s)	10-12
Length	One Semester
Credit	0.5 (Cross-credited with science)
Prerequisites	Medical Terminology 1A
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science-Allied Health & Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education (NCHSTE) http://www.nchse.org ; Alaska Core Competencies (ACC)
Names/Numbers of Occupational Standards	Foundation Standard 1: Academic Foundation 1.1 - 1.33; Foundation Standard 2: Communications 2.2; Foundation Standard 4: Employability Skills Career Decision- Making 4.31 and 4.32
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Medical Terminology 1B reviews the building blocks of medical terminology, including word parts (combining forms, prefixes, and suffixes), how medical terms are formed, anatomical positions and planes, and correct pronunciation of medical terms and how medical terminology applies to human anatomy, physiology, and pathology. Content continues where Medical Terminology 1A ended on body systems with focus on word construction, common diseases and conditions, surgical procedures, therapeutic treatments, medical record practice, case studies, and careers.
Instructional Topic Headings (please separate each heading by a semi-colon)	Basics and the body (medical terms, pronunciation, spelling, medical word parts, combining forms, prefixes, suffixes, anatomical position, anatomical planes); Medical word parts, anatomy and physiology, diseases and conditions, diagnostic tests and procedures, surgical procedures and therapeutics, common medical abbreviations, careers to consider for body systems.
Summative Assessments and Standards	

Technical Skills Assessment (TSA)	NCHSE- Health Science Assessment
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, NCHSE Standards, Alaska Core Competencies
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbanks- CTC
Postsecondary Course Name	Medical Terminology
Postsecondary Course Number	HEALTH F100
Number of Postsecondary Credits	3 credits (Earned after successful completion of Medical Terminology 1A and 1B with a grade of C or higher.)
Author	
Course Developed By	UAF-CTC
Course Adapted From	UAF-CTC Allied Health
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Identify basic levels of organization of the human body.	NCHSE 1.11	HL 1	RST.11-12.1; 2; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Identify body planes, directional terms, cavities, and quadrants.	NCHSE 1.12	HL 1	RST.11-12.1; 2 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Analyze basic structures and functions of human body systems (skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, nervous, special senses, endocrine, digestive, urinary, and reproductive).	NCHSE 1.13	HL 1	RST.11-12.1; 2; 5; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe common diseases and disorder of each body system.	NCHSE 1.21 ACC 1, 4, 8	HL 1	RST.11-12.1; 2; 10 WHST.11-12.2a-e		B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Demonstrate competency in basic math skills and mathematical conversions as they relate to healthcare.	NCHSE 1.31	HL 1		MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results.	NCHSE 1.32	HL 1		MP4 MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate use of the 24-hour clock/ military time.	NCHSE 1.33	HL 1		MP6	B2, E4	CRP 2	Technology Production Skills	Quizzes, Observations , Classwork, Exit Tickets
Use of common roots, prefixes, and suffixes to communicate information.	NCHSE 2.21	HL 1	RL 11-12.4 L 11- 12.4.a-d		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations , Classwork, Exit Tickets
Interpret medical abbreviations to communicate information.	NCHSE 2.22	HL 1	RL 11-12.1 RL 11-12.4		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations , Classwork, Exit Tickets
Utilize proper elements of written and electronic communication (spelling, grammar, and formatting).	NCHSE 2.31	HL 1	W 11- 12.2a-f W 11-12.4 SL 11-12.5 L 11-12.a-b		B2, E4	CRP 2 CRP 4	Technology Production Skills	Quizzes, Observations , Classwork, Exit Tickets
Research levels of education, credentialing requirements, and employment trends in health professions.	NCHSE 4.31 ACC 10	HL 1	RL 11-12.1 RI 11-12.7 SL 11-12.4		B2, E4	CRP 10	Technology Production Skills	Classwork
Distinguish differences among careers within health science pathways (diagnostic services, therapeutic services, health informatics, support services, or biotechnology research and development).	NCHSE 4.32 ACC 10	HL 1	RL 11-12.1 RI 11-12.7		A2, B1, B2, B4	CRP10	Technology Production Skills	Classwork

Nutrition in Health Care

Course Information	
Course Name	NUTRITION IN HEALTH CARE
Course Number	CTEK1044
Grade(s)	9-12
Length	One Semester
Credit	0.5
Prerequisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science-Allied Health & Pre-nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	http://nutrition.eatsmart.org/pages/allotment ; National Health Science Standards; USDA Dietary Guidelines; New Food Guide Plate
Names/Numbers of Occupational Standards	Foundation Standard 1: Academic Foundation Foundation Standard 2: Communications Foundation Standard 6: Ethics Foundation Standard 7: Safety Practices Foundation Standard 8: Teamwork Foundation Standard 9: Health Maintenance Practices
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Nutrition in Health Care is an introduction to the scientific principles of nutrition and their relationship to the life cycle. This course will focus on the importance nutrition plays in personal health, and how to objectively evaluate nutritional intake using scientifically sound resources. Students will analyze their own diets, the basic chemistry of nutrients, digestion and assimilation of food and the relationship of diet to health and/or chronic disease. Coursework will emphasize teamwork, appreciation of cultural diversity, food safety, healthy snack choices and meal planning in order to take control of the student's diet and health as well as provide a foundation for a career in healthcare.
Instructional Topic Headings (please separate each heading by a semi-colon)	May include: Overview of Nutrition and Health; Digestion and Absorption, Carbohydrates, Lipids, Protein, Energy Balance and Body Composition; Weight Management; The Vitamins; Water and the Minerals; Nutrition through the Lifespan: Pregnancy and Lactation; Nutrition

	through the Lifespan: Infancy, Childhood, and Adolescence; Nutrition through the Lifespan: Later Adulthood; Nutrition Care and Assessment; Nutrition Intervention and Diet-Drug Interactions; Enteral and Parenteral Nutrition Support; Nutrition in Metabolic and Respiratory Stress; Nutrition and Upper Gastrointestinal Disorders; Nutrition and Lower Gastrointestinal Disorders; Nutrition and Liver Diseases; Nutrition and Diabetes Mellitus; Nutrition and Cardiovascular Diseases, Nutrition and Renal Diseases; Nutrition, Cancer, and HIV Infection.
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Summative Assessments and Standards

Technical Skills Assessment (TSA)	N/A
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes

Employability Standards

Source of Employability Standards	N/A
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Tech Prep

Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A

Author	
Course Developed By	S. Coronel, A. Gelvin, M. Sawchuk
Course Adapted From	FNSBSD Health Sciences
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain how each of the dietary ideals can be used to plan a healthy diet, and how the Dietary Guidelines and USDA Food Intake Patterns help make diet planning easier.	NCHSE 9.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4 CRP 7	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Compare the information on food labels to make selections that meet specific dietary and health goals.	NCHSE 9.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8	MP 4	B2	CRP 2 CRP 4 CRP 7	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe the process of human digestion.	NCHSE 1.13j	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Identify the types and roles that carbohydrates, lipids, and proteins play in relationship to body function.	NCHSE 1.13	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11- 12.1; 2; 4; 6; 7; 9; 10 WHST.11- 12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Explain how an excess of any of the three energy-yielding nutrients contributes to body fat and how an inadequate intake of any of them shifts metabolism.	NCHSE 1.13	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11- 12.1; 2; 4; 6; 7; 9; 10 WHST.11- 12.2; 4; 5; 6; 8	MP 1 MP 4 MP 6	B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Discuss the genetic and environmental causes of obesity.	NCHSE 1.2 NCHSE 9.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11- 12.1; 2; 4; 6; 7; 9; 10 WHST.11- 12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
List the primary characteristics, functions, and sources of vitamins, water and minerals.	NCHSE 1.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Describe appropriate nutritional needs at each stage of the lifespan.	NCHSE 1.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8	MP 4 MP 6	B2	CRP 2 CRP 4	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Identify nutritional needs for individuals with medical conditions.	NCHSE 1.2	HL-DIA 2 HL-THR 1 HL-THR 2 HL-THR 3 HL-THR 4	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8	MP 4 MP 6	B2	CRP 2 CRP 4 CRP 7	Technical and Production Skills	Quizzes, Observations, Classwork, Exit Tickets
Identify career opportunities within the field of nutrition science (Registered Dietitian, Diabetes Educator, Oncology Nutrition Educator, Nutrition Therapist in Eating Disorders, Nutraceuticals and Pharmaceuticals, Public Health Researcher, and Nutritionist)	NCHSE 4.1	HL 1	SL.11-12.1; 2; 4; 5 L.11-12.1; 2; 4; 6 RST.11-12.1; 2; 4; 6; 7; 9; 10 WHST.11-12.2; 4; 5; 6; 8		B2	CRP 2 CRP 4 CRP 10	Technical and Production Skills	Classwork

Pharmacy Technician

Course Information	
Course Name	PHARMACY TECHNICIAN
Course Number	CTEK130
Grade(s)	12
Length	One Semester
Credit	0.5
Pre-requisites	<i>Introduction to Healthcare Occupations</i> or Teacher Recommendation
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science-Allied Health & Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium of Health Science Education
Names/Numbers of Occupational Standards	National Consortium for Health Science Education-NCHSE 1-11
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Pharmacy Technician introduces pharmacy practice and the technician's role in various pharmacy settings. The course emphasizes the history of pharmacy, pharmacy law and ethics, pharmacy technology, symbols, dosage forms and the hundred most frequently prescribed drugs. This course teaches basic pharmacology, the science of medication actions, sources, chemical properties, classification, uses, therapeutic effect, side effects, adverse effects and routes of administration. Students with an interest in becoming a certified nursing assistant, medical assistant, psychologist, dental technician, nurse, dentist, physician, emergency medical technician, paramedic or pharmacist, especially a pharmacy technician will find this course beneficial. Students must be 18 years old to take the certification exam and have no felony convictions.
Instructional Topic Headings (please separate each heading by a semi-colon)	Demonstrate knowledge of the basic history of the development and use of medicine and the definition of Pharmacology; Demonstrate understanding of the U.S. Health Care system of modern pharmacology, current drug regulations and control, and financial processes; Demonstrate understanding of the dynamic that exists between pharmacists and technicians and their patients; Demonstrate understanding of the legal and ethical responsibilities and limitations, with regard to their duties, patient privacy and HIPAA regulations; Demonstrate understanding of basic medical and pharmacy terminology, abbreviations, drug classifications, and prescription processing; Students will solve practical prescription

	calculation problems by choosing appropriately from a variety of mathematical techniques; Demonstrate knowledge and understanding of drug routes, techniques of drug administration, patient education, and special needs populations; Demonstrate understanding of Pharmacy environments, inventory management and financial aspects of the Pharmacy.
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	Pharmacy Technician Exam
Course Addresses	N/A
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	Alaska Employability Standards, NCHSE

Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Anchorage – Community & Technical College
Postsecondary Course Name	Introduction to Pharmacy
Postsecondary Course Number	PHAR A101
Number of Postsecondary Credits	3 credits
Author	
Course Developed By	UAA
Course Adapted From	UAA-CTC
Date of Previous Course Revision	June 5, 2012

Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate basic knowledge of the basic history of the development and use of medicine and the definition of pharmacology	2.2	HL	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4		A1 B2	CRP 2 CRP 4	Principals of Technology	Quizzes, written exam, State of Alaska Exam
Demonstrate understanding of the US Healthcare system of modern pharmacology, current drug regulations and control, and financial processes	2.2, 3.14	HL	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4		A1 B2	CRP 2 CRP 4	Principals of Technology, Finance	Quizzes, written exam, workbook, State of Alaska Exam
Demonstrate understanding of the dynamic that exists between pharmacists and technicians their patients	2.1, 23	HL HL-THR	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4		A1 B2	CRP 2 CRP 4	Technology Production Skills	Quizzes, written exam
Demonstrate understanding of the legal and ethical responsibilities and limitations with regard to their duties, patient privacy and HIPAA regulations.	2.2	HL HL-HI	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4		A1 B2	CRP 2 CRP 4	Health, Safety and Environment	Quizzes, written exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Demonstrate understanding of basic medical and pharmacy technology, abbreviations, drug classifications and prescription processing	1.31, 2.2	HL	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4	MP4 MP5 MP6	A1 B2	CRP 2 CRP 4 CRP 11	Principals of Technology	Quizzes, written exam, labs, State of Alaska Exam
Students will solve practical prescription calculation problems by choosing appropriately from a variety of mathematical techniques	1.31, 2.3	HL HL-DIA HL-THR	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4	MP4 MP5 MP6	A1 B2	CRP 2 CRP 4	Principals of Technology, Personal Work Habits	Written exam, labs, State of Alaska Exam
Determine knowledge and understanding of drug routes, techniques of drug administration, patient education and special needs populations	2.3	HL HL-THR	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4	MP4 MP5 MP6	A1 B2	CRP 2 CRP 4	Health, Safety and Environment, Personal Work Habits	Quizzes, workbook, written exam, State of Alaska Exam
Demonstrate understanding of pharmacy environments, inventory management and financial aspects of the pharmacy	2.3, 3.14	HL	SL.11-12.1; 4; 5; 6 L.11-12.1; 2; 3; 4; 6 RST.11-12.2; 3; 4 WHST.11-12.2; 4		A1 B2	CRP 2 CRP 4	Finance	Demonstration, written exam State of Alaska Exam

Principles of Biomedical Sciences A

Course Information	
Course Name	PRINCIPLES OF BIOMEDICAL SCIENCES A
Course Number	CTEK114
Grade(s)	9-12
Length	One Semesters
Credit	0.5
Prerequisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	<ol style="list-style-type: none"> 1. National Consortium of Health Science & Technology Education (NCHSTE) 2. Center for Disease Control (CDC) – National Health Education Standards (NHES) 3. Project Lead the Way (PLTW)
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> 1. NCHSTE 1.13, 1.21 – 1.23, 6.3 – 6.32 2. CDC – NHES for Adolescent and School Health: 1.12.1–1.12.9, 2.12.2, 2.12.10, 6.12.2–6.12.4, 8.12.4 3. PLTW
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Principles of Biomedical Science</i> provides an introduction to the biomedical sciences through hands-on projects and problems. The course investigates the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases. It is designed to provide an overview of the Biomedical Sciences program and lay the scientific foundation for subsequent courses.
Instructional Topic Headings (please separate each heading by a semi-colon)	Investigating a Crime Scene; DNA Analysis; The Findings; What is Diabetes; The Science of Food; Life with Diabetes; Sickle Cell Disease; It's in the Genes; Chromosomes; Inheritance; Heart Disease; Heart Structure; The Heart at Work; Heart Dysfunction; Heart Intervention; Infectious Disease; Post Mortem

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW assessments
Course Addresses	Yes
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	PLTW
Date of Previous Course Revision	Spring 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will develop an understanding of HIPPA.	NCHSTE 1.1-11.22	ST.3, HL-BRD.1			B3	A2, 6	Management; Health/Safety	PLTW Assessments
Students will create a drawing of a human heart to demonstrate their understanding of the cardiac system.	NCHSTE 1.1-1.23	HS.1	R. KI.3	G-SRT.2	B2; E4	A2	Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of the structure of food by building molecular models.		HL-BRD.2	R.KI.2	G-SRT.2		A2	Tech/Prod	PLTW Assessments
Students will gain the ability to create a meal plan for a diabetic person based on their understanding of the disease.	NHES 1.12.8–6.12.4; 8.12.4	HL-HI.1	R.IK.8, 9	N-Q.1,2,3	B3	A1-2	Tech/Prod	PLTW Assessments
Students will identify the genetic causes and symptoms of Sickle Cell Disease.	PLTW	HL-BRD.3	R.IK.7, 9				Tech/Prod	PLTW Assessments
Students will explain the connection between cholesterol and heart disease.	NHES 1.12.1–1.12.9	HL-HI.2	W.2		B3		Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of bacteria and viruses by creating a scaled model of a virus.	NCHSTE 1.1-1.23	HL-BRD.2, 3		G-SRT.2		A2, 6	Tech/Prod; Health/Safety	PLTW Assessments
Students will research, categorize and summarize medical interventions on a disease.	PLTW	HL-BRD.5, 6	W.6-9, R.IK.7, 9	N-Q.1,3			Tech/Prod; Health/Safety	PLTW Assessments
Students will prepare a grant proposal requesting funds for a research project.	PLTW	HL-BRD.5, 6	W.6-9, R.IK.7, 9	N-Q.1,3		B5	Management; Tech/Prod	PLTW Assessments

Principles of Biomedical Sciences B

Course Information	
Course Name	PRINCIPLES OF BIOMEDICAL SCIENCES B
Course Number	CTEK115
Grade(s)	9-12
Length	One Semesters
Credit	0.5
Pre-requisites	<i>Principles of Biomedical Sciences A</i>
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Biomedical Science
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	<ol style="list-style-type: none"> 1. National Consortium of Health Science & Technology Education (NCHSTE) 2. Center for Disease Control (CDC) – National Health Education Standards (NHES) 3. Project Lead the Way (PLTW)
Names/Numbers of Occupational Standards	<ol style="list-style-type: none"> 1. NCHSTE 1.13, 1.21 – 1.23, 6.3 – 6.32 2. CDC – NHES for Adolescent and School Health: 1.12.1–1.12.9, 2.12.2, 2.12.10, 6.12.2–6.12.4, 8.12.4 3. PLTW
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	<i>Principles of Biomedical Science</i> provides an introduction to the biomedical sciences through hands-on projects and problems. The course investigates the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases. It is designed to provide an overview of the Biomedical Sciences program and lay the scientific foundation for subsequent courses.
Instructional Topic Headings (please separate each heading by a semi-colon)	Investigating a Crime Scene; DNA Analysis; The Findings; What is Diabetes; The Science of Food; Life with Diabetes; Sickle Cell Disease; It's in the Genes; Chromosomes; Inheritance; Heart Disease; Heart Structure; The Heart at Work; Heart Dysfunction; Heart Intervention; Infectious Disease; Post Mortem

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	PLTW assessments
Course Addresses	Yes
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	N/A
Postsecondary Institution Name	N/A
Postsecondary Course Name	N/A
Postsecondary Course Number	N/A
Number of Postsecondary Credits	N/A
Author	
Course Developed By	PLTW
Course Adapted From	PLTW
Date of Previous Course Revision	Spring 2013
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Alaska Employability Standards	All Aspects of Industry/ Systems	Assessments
Students will develop an understanding of HIPPA.	NCHSTE 1.1-11.22	ST.3, HL-BRD.1			B3	A2, 6	Management; Health/Safety	PLTW Assessments
Students will create a drawing of a human heart to demonstrate their understanding of the cardiac system.	NCHSTE 1.1-1.23	HS.1	R. KI.3	G-SRT.2	B2; E4	A2	Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of the structure of food by building molecular models.		HL-BRD.2	R.KI.2	G-SRT.2		A2	Tech/Prod	PLTW Assessments
Students will gain the ability to create a meal plan for a diabetic person based on their understanding of the disease.	NHES 1.12.8–6.12.4; 8.12.4	HL-HI.1	R.IK.8, 9	N-Q.1,2,3	B3	A1-2	Tech/Prod	PLTW Assessments
Students will identify the genetic causes and symptoms of Sickle Cell Disease.	PLTW	HL-BRD.3	R.IK.7, 9				Tech/Prod	PLTW Assessments
Students will explain the connection between cholesterol and heart disease.	NHES 1.12.1–1.12.9	HL-HI.2	W.2		B3		Tech/Prod	PLTW Assessments
Students will demonstrate knowledge of bacteria and viruses by creating a scaled model of a virus.	NCHSTE 1.1-1.23	HL-BRD.2, 3		G-SRT.2		A2, 6	Tech/Prod; Health/Safety	PLTW Assessments
Students will research, categorize and summarize medical interventions on a disease.	PLTW	HL-BRD.5, 6	W.6-9, R.IK.7, 9	N-Q.1,3			Tech/Prod; Health/Safety	PLTW Assessments
Students will prepare a grant proposal requesting funds for a research project.	PLTW	HL-BRD.5, 6	W.6-9, R.IK.7, 9	N-Q.1,3		B5	Management; Tech/Prod	PLTW Assessments

Professionalism in Health Care

Course Information	
Course Name	PROFESSIONALISM IN HEALTH CARE
Course Number	CTEK116
Grade(s)	10-12
Length	One Semester
Credit	0.5
Prerequisites	None
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the system.)	Health Science - Allied Health & Pre-Nursing, Emergency Services
Date of District Course Revision	Spring 2018
Career & Technical Student Organization (CTSO)	
CTSO Embedded in this Sequence	Health Occupations Students of America (HOSA) – Future Health Professionals
Occupational Standards	
Source of Occupational Standards	National Consortium for Health Science Education - NCHSE Alaskan Core Competencies - ACC
Names/Numbers of Occupational Standards	NCHSE 1-11, ACC 1, 9 & 10
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Professionalism in Health Care stresses the importance of professional employability skills in health care, including communication skills, good character, work ethic, personal image, cultural competence, and career development.
Instructional Topic Headings (please separate each heading by a semi-colon)	The health care industry and your role; work ethic and performance; personal traits of the health care professional; relationships, teamwork and communication skills; cultural competence and patient care; professionalism and personal life; the practicum experience; employment, leadership and career development

Summative Assessments and Standards	
Technical Skills Assessment (TSA)	HIPAA
Course Addresses	N/A
Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Career Ready Practices	Yes
Employability Standards	
Source of Employability Standards	National Consortium for Health Science Education (NCHSE); Alaska Core Competencies (ACC)
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	2017
Postsecondary Institution Name	University of Alaska Fairbanks (UAF)- Community & Technical College (CTC)
Postsecondary Course Name	Professional Skills for the Workplace
Postsecondary Course Number	HLTH F110
Number of Postsecondary Credits	2 credits
Author	
Course Developed By	UAF-CTC
Course Adapted From	UAF-CTC
Date of Previous Course Revision	2012
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
Explain why professionalism is important in health care and how to identify a health care professional	NCHSE 4.12 ACC 9, 10	HL 2	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 1,2,3	A 1- 3 CRS 8	Plan, Mgt, Labor	Class activities written test
Describe the healthcare industry, and the role you play.	NCHSE 3.1	HL 2	RSI-1, 2 RSLST- 1,2 WSL 1- 10	S-IC.6.	B 1,2,3	A 5 CR S 5	Plan, Mgt, Labor	Class activities written test
Describe the characteristics and behaviors that demonstrate a strong work ethic and commitment to your job.	NCHSE 4.2	HL 6	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 1,2,3	A 1 CR S 1	Personal Work Habits	Class activities written test
Discuss the importance of one's reputation, character, values, morals, ethics, and other personal traits.	NCHSE 4.1 ACC 9	HL 5, 6	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 1,2,3	A 1- 3 CRS 1	Personal Work Habits	Class activities written test
Outline the elements of effective interpersonal relationships, teamwork, and working well with others.	NCHSE 8.1, 8.2 ACC 1	HL 4	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 1,2,3	A 1 C RS 12	Tech, Prod	Class activities written test
Discuss cultural competence and customer service as related to patient care	NCHSE 6.2 ACC 1	HL 6	RSI-1, 2 RSLST- 1,2 WSL 1- 10		E. 1, 4, 6, 7	A 1 CR S 1, 4	Personal Work Habits	Class activities written test
Explain how their personal image and personal skills affect their professional reputation.	NCHSE 4.1 ACC 9, 10	HL 4	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 1,2,3	B 1 CR S 9	Personal Work Habits	Performance evaluation, written test

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Common Core Technical Standards	Alaska ENG/LA Standards	Alaska Math Standards	Alaska Cultural Standards	Career Ready Practices	All Aspects of Industry	Formative Assessments
List the factors involved in professional growth and advancement, and apply the career planning components of a resume, application and cover letter/personal essay for a mock interview	NCHSE 2.1, 2.3, 11.2, 11.3 ACC 10	HL 1	RSI-1, 2 RSLST- 1,2 WSL 1- 10	S-IC.6.	B 3,4	A 3 CR S 4, 7, 10	Plan, Mgt,	Resume, app, mock interview
Assess their own personal levels of professionalism and identify strengths, weaknesses, and plans for improvement including keeping PLCP up to date in AKCIS	NCHSE 4.3, 4.4 ACC 10	HL 1	RSI-1, 2 RSLST- 1,2 WSL 1- 10	S-IC.6. S- MD.7.	B 3,4	B 1- 7 CRS 11	Plan, Mgt, Personal Work Habits	AKCIS Portfolio & PLCP
Apply course concepts in developing and strengthening professional traits and behaviors.	NCHSE 4.1-4 ACC 10	HL-THR 1, 2	RSI-1, 2 RSLST- 1,2 WSL 1- 10		B 2	B 1- 7 CRS 2-3	Plan, Mgt, Personal Work Habits	Teacher Observation, Presentation

