DISTRICT NAME: Kenai Peninsula School District

CTE Course Description and Standards Crosswalk

- **The information on page 1 must be entered directly into the EED CTE Web Portal (log in at https://www.eed.state.ak.us/tls/cte/perkins with your district credentials)**
- **Then this entire form can be submitted by using the *"Click here Provide Supporting Documentation"* link on the Web Portal, or by emailing it to ctegrants@alaska.gov.**

Basic CTE Course Information

Course Information	
Course Name	Introduction to Nautical Skills
Course Number	WW736
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS name put into the system.)	Agriculture, Food and Natural Resources
Occupational Standards	
Source of Occupational Standards	International Maritime Organization (IMO) Standards of Training & Certification for Seafarers (STCW) United States Coast Guard
Names/Numbers of Occupational Standards	IMO STCW 95 Table A-V1/1-4, USCG Table 10.910-2, USCG & IMO Service Regulations
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	Introduction to Nautical Skills is a 12-week class for high school juniors and seniors. It is taught by licensed captains from AVTEC's Maritime Training Center and is designed to introduce students to the maritime industry, providing them with a basis for working in a boating occupation.
Instructional Topic Headings (please separate each heading by a semi-colon)	Subjects covered in this course include: vessel terminology; safety; communications at sea; plotting your location with latitude and longitude; laying out a course line; time/distance/speed problems; knots and hitches; getting a job on a boat
Summative Assessments and Standards	
Technical Skills Assessment	Y

Course addresses Alaska GLEs	Y
Course addresses Employability Standards	Y
Course addresses Cultural Standards	Y
Course addresses All Aspects of Industry (AAI)	Y
Career & Technical Student Organization (CTSO)	
CTSO associated with this course	SkillsUSA
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	
Postsecondary Institution Name	
Postsecondary Course Name	
Postsecondary Course Number	
# of Postsecondary Credits	

Additional CTE Course Information

Author	
Course developed by	LA Holmes (AVTEC Instructor) and Dan Bohrnsen
Course adapted from	AVTEC “Introduction to Nautical Skills” class
Date of last course revision	New
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	Yes
Certificate, Credential, or License	
Industry-recognized skill certificate, credential, or state license that a student is eligible for upon successful completion of the course?	International Maritime Organization Knot Letter
Issuing body/organization/agency	AVTEC

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Alaska Reading, Writing, Math, & Science Standards	Alaska Employability Standards	Alaska Cultural Standards	All Aspects of Industry	Formative Assessment
Students will understand and identify Vessel Terminology, including: Deck, Bow, Stern, Bulwark, Hull, House, Keel, Gunwale/Gunnel, and the Weather Deck. Students will also identify room terminology.	IMO STCW 95 table A-VI/1-1 & A-VI/1-4	R4.2	A6	E	Principles of Technology	Lab
Students will use proper terminology in giving directions on a boat, and identify common equipment on deck as well as water-related terms.	IMO STCW 95 table A-VI/1-1 & A-VI/1-4		A6	D	Principles of Technology Management	Lab
Students will identify the types of vessels and navigation items commonly used in the marine industry.	IMO STCW 95 table A-VI/1-1 & A-VI/1-4	R4.2	A5	B,D,E	Management Technology Production Skills	Lab Report
Students will recognize primary causes of boat deaths, and identify the types of Personal Floatation Devices (PFD's).	IMO STCW 95 table A-VI/1-1 & A-VI/1-4	R4.2	A6	A,B	Health, Safety and Environment	Lab
Students will understand the importance of trip preparation and planning and identify the primary areas of planning, including: weather, fuel, float plan, equipment, Load property, survival gear and personal survival kits.	IMO STCW 95 table A-VI/1-1 & A-VI/1-4	R4.2 W4.2	A6	A,B	Health, Safety and Environment	Lab
Students will be able to identify and correctly demonstrate the ability to tie the following knots: Square, Bowline, Sheet bend, Double Becket Bend, Clove Hitch, Cat's Paw, Figure 8, Running Bowline, French Bowline, Carrick Bend, Round Turn & Two Half	American Merchant Seaman's Manual Ch 1		A2	B,D,E	Labor, Technology Production Skills, Community	Lab Observation

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Student Performance Standards **(Learner Outcomes or Knowledge & Skill Statements)**	**Specific Occupational Skills Standards**	**Alaska Reading, Writing, Math, & Science Standards**	**Alaska Employability Standards**	**Alaska Cultural Standards**	**All Aspects of Industry**	**Formative Assessment**
Hitches, Fisherman's Bend, Barrel Hitch and Timber Hitch.	Deck Exam Illustration Book - graph D030DG				Issues	
Students will understand the importance of communication in the marine industry, including: station bill, emergencies on a ship, types of radio calls, giving a May-Day call and spelling on the radio	IMO STCW 95 table A-VI/1-1 & A-VI/1-4 American Merchant Seaman's Manual Ch 13	*R4.2*	A6	D	Principles of Technology Management	Lab

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Student Performance Standards **(Learner Outcomes or Knowledge & Skill Statements)**	**Specific Occupational Skills Standards**	**Alaska Reading, Writing, Math, & Science Standards**	**Alaska Employability Standards**	**Alaska Cultural Standards**	**All Aspects of Industry**	**Formative Assessment**
Students will be able to identify and demonstrate charting procedure in the marine industry including: discussing various global 'projections' onto charts and the distortions that come with each; measuring latitude and longitude in degrees, minutes, and tenths; pinpointing a location on the chart when given latitude & longitude, and conversely finding latitude and longitude when given a location; using the terms meridian and line of parallel; finding and using chart symbols and abbreviations including depth in fathoms, sea bed characteristics, and features of aids to navigation; use of chart tools and compass rose to lay out a course (rhumb) line; use of time/distance/speed calculations on the nautical slide rule to solve for any of the three; dead reckoning (calculating one's future location on the globe when given your current location, direction, time, distance, and speed.)	American Merchant Seaman's manual Ch 16 and US Code of Federal Regulation Title 46 (shipping) Table 10.910-2	R4.2 W4.2	A6	D	Principles of Technology Management	Lab
Students will demonstrate the use of a Nautical Slide Rule to calculate speed (knots), distance and time.	US Code of Federal Regulation Title 46 (shipping) Table 10.910-2	M8.4.1				
Students will apply their knowledge of Dead Reckoning to chart the fix, draw a course line, work time, distance and speed and apply to course line.	US Code of Federal	M8.4.1	A6	D	Principles of Technology	Lab

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Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standards	Alaska Reading, Writing, Math, & Science Standards	Alaska Employability Standards	Alaska Cultural Standards	All Aspects of Industry	Formative Assessment
	Regulation Title 46 (shipping) Table 10.910-2				Management	
Students will identify and understand the importance of a Sea Service Form and a Merchant Mariners Credential.	USCG and IMO Service Regulations	R4.2 W4.2				
Students will research and identify maritime careers, structure of jobs & authority on ships and how to advance in the industry		R4.2				

Instructional Resources

List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)

- United States Code of Federal Regulation (CFR) title 46 (shipping)
- International Maritime Organization (IMO) Standards of Training & Certification for Seafarers (STCW)
- International Maritime Organization (IMO): http://www.imo.org/Pages/home.aspx
- The American Merchant's seaman's manual
- US Coast Guard License Examination Preparation Deck Exam Illustration Book
- Alaska Marine Safety Education Association, Marine safety Instructor Training Manual
- International Code of Signals
- Standard chart equipment includes: Charting triangles, compass, divider, straight edge, nautical slide rule