

CTE Course Description and Standards Crosswalk

Course Information

Course Name	Introduction to Aviation Technology
Course Number	86720
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Aviation Technology
Date of district Course Revision	March 2014

Career & Technical Student Organization (CTSO)

CTSO embedded in this sequence	SkillsUSA
--------------------------------	-----------

Occupational Standards

Source of Occupational Standards	Federal Aviation Administration
Names/Numbers of Occupational Standards	FAR 1-1399, (2014); AIM (2013)

Registration Information

Course Description (brief paragraph – as shown in your student handbook or course list)	Designed as an exploratory class, this course prepares students for an entry level position in the air transportation industry, by introducing them to a wide variety of available career options. This course is designed to be "hand-on", covering the basic elements of Piloting, Air Traffic Control, and Aviation Administration.
Instructional Topic Headings (please separate each heading by a semi-colon)	<p>Demonstrate an understanding of the history of aviation and its contribution to current events.</p> <p>Demonstrate a working knowledge of forces that act on an aircraft in flight</p> <p>Demonstrate a working knowledge of safety as it relates to flight operations.</p> <p>Demonstrate the ability to use the aeronautical chart legend, identify and interpret contour lines, topographical features, airspace and airport symbols.</p> <p>Decode METARs (routine aviation observations), TAFs (terminal aerodrome forecasts), and ATIS (automatic terminal information service).</p> <p>Participate in discussions with guest speakers from a variety of career fields, to include branches of the military, ROTC, CAP, FAA.</p>

Summative Assessments and Standards

Technical Skills Assessment (TSA)	No
Course addresses:	
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	State of Alaska
-----------------------------------	-----------------

Tech Prep

Current Tech Prep Articulation Agreement?	No
---	----

DISTRICT NAME: Mat-Su Borough School District

(Y/N)	
Date of Current Agreement	
Postsecondary Institution Name	
Postsecondary Course Name	
Postsecondary Course Number	
# of Postsecondary Credits	

Additional CTE Course Information

Author	
Course developed by	Ben Eveland
Course adapted from	UAA, Anchorage School District, Kenai Peninsula School District
Date of previous course revision	2011, 2005, 2002
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 Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Demonstrate an understanding of the history of aviation and its contribution to current events	FAR AIM	TD-OPS 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 9; 10 WHST.9- 12.9	S-IC.6 S-MD.6&7	A3, B2, B4	A2, A5	Planning Community Technology	CAP Based Exam Class Discussion
Demonstrate a working knowledge of forces that act on an aircraft in flight	FAR 91	TD-OPS 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9-	A-SSE.4 S-ID.9	B2, B4	A2, A5	Technical Skills	CAP Based Exam Hands-on experiment Class project

DISTRICT NAME: Mat-Su Borough School District

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
			12.1; 3; 4; 5; 7; 9; 10					
Demonstrate a working knowledge of safety as it relates to flight operations.	AIM 6, 7 FAR 91, 71	TD 2, 4, 5 TD-OPS 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 7; 9; 10	A-SSE.4 A-CED.4 A-REI.1 S-ID.9 S-IC.6	A1, A4, A6, B2, B4	A2, A5, A6	Technical Skills Health & Safety	CAP Based Exam
Demonstrate the ability to use the aeronautical chart legend, identify and interpret contour lines, topographical features, airspace and airport symbols.	FAR 71 AIM 1, 2, 3, 9	TD-OPS 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 7; 9; 10	S-IC.6	A7, B2, B4	A2, A5, A6	Technical Skills	CAP Based Exam Class Discussion Simulator Demo
Understand and use a chart plotter to plan flight course, distance and time between points on a navigational chart.	FAR 71 AIM 1, 5, 9	TD-OPS 1, 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 7; 9; 10	N-Q.1 N-Q.2 N-Q.3 A-CED.4 A-REI.1 G-CO.4 G-CO.5 S-ID.1 S-IC.6	B2, B4	A2, A5, A6	Technical Skills	CAP Based Exam Class Discussion Hands-on group activities

DISTRICT NAME: Mat-Su Borough School District

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
			10					
Demonstrate the ability to plot a flight plan on a navigational chart.	FAR 71 AIM 1, 5, 9	TD-OPS 1, 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 7; 9; 10	N-Q.1 N-Q.2 N-Q.3 A-CED.4 A-REI.1 G-CO.4 G-CO.5 S-ID.1 S-IC.6	B2, B4	A2, A5, A6	Technical Skills	CAP Based Exam Class Discussion Hands-on group activities
Apply and navigate an assigned mission on a flight simulator.	FAR 71 AIM 1, 5, 9	TD-OPS 1, 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 3; 4; 5; 7; 9; 10	N-Q.1 N-Q.2 N-Q.3 A-CED.4 A-REI.1 G-CO.4 G-CO.5 S-ID.1 S-IC.6	A7, B2, B4	A2, A5, A6, A7	Technical Skills	Simulator Demo
Develop an understanding on basic weather theory, meteorology, atmosphere and global weather patterns.	AIM 7	TD-OPS 1, 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d; 4 L.9- 12.4.a-d; 6 RST.9- 12.1; 4; 5; 7; 10	N-Q.1 A-SSE.4 A-CED.4 A-REI.1 S-IC.6 S-ID.9	B2, B4	A2, A5	Technical Skills	CAP Based Exam Class Discussions Simulator Demo
Participate in discussions with guest speakers from a variety of career fields, to		TD 1, 6 TD-OPS	SL.9- 12.1.a-d	S-IC.6 S-MD.6	B2, B3, B4	A2, A5, B2, B4	Community Work	Class discussion

DISTRICT NAME: Mat-Su Borough School District

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
include branches of the military, ROTC, CAP, FAA, etc.		1, 2, 3 TD-SYS 1, 2, 3	L.9- 12.4.a-d; 6	S-MD.7			Habits	Observation
Encourage participation in CSTO (SkillsUSA), including employability skills.	SkillsUSA EAP 1, 2, 3, 4	TD 1, 6 TD-OPS 1, 2, 3 TD-SYS 1, 2, 3	SL.9- 12.1.a-d L.9- 12.4.a-d; 6 WHST.9- 12.4; 5; 6; 8; 9	S-IC.6 S-MD.6 S-MD.7	B2, B3, B4	A2, A5, B2, B4	Community Work Habits	SkillsUSA

Instructional Resources

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

Aviation Fundamentals, Jeppesen Sanderson

FAR/AIM

E6B Flight Computer and Plotter

Sectional chart and Alaska Supplement

The Institute for Workforce Education (IWE)

http://www.ix.org/iwe/Resources/All_Aspects.doc

<http://www.nasa.gov>

<http://www.aviationnow.com>

<http://www.aviationweather.com>

<http://www.boeing.com>

<http://www.avweb.com>

All Aspects of Industry

The Nine Aspects of Industry

<http://www.isd742.org/stw/aspects%20of%20industry.pdf>

L:\CTE\CTE_OFFICE\Curriculum\2013 Review\Aviation\New folder\Intro to Aviation Technology.docx

Form #05-13-028

Alaska Department of Education and Early Development

DISTRICT NAME: Mat-Su Borough School District

Occupations Skills/Standards:

Federal Aviation Administration
www.faa.gov/

Standards for Technological Literacy

ITEA International Technology Education Association
ISBN 1-887101-02-0