

CTE Course Description and Standards Crosswalk

Course Information

Course Name	Greenhouse Production
Course Number	81020
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Horticulture
Date of district Course Revision	October 2014

Career & Technical Student Organization (CTSO)

CTSO embedded in this sequence	FFA
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Occupational Standards

Source of Occupational Standards	FFA, Agriculture, Food and Natural Resources;
Names/Numbers of Occupational Standards	Agribusiness Systems (ABS), Plant Systems (PS), Life-knowledge and Cluster Skills(CS)

Registration Information

Course Description (brief paragraph – as shown in your student handbook or course list)	Greenhouse Production teaches skills and concepts for students desiring to work in the greenhouse industry. Students will have the opportunity to work in a simulated greenhouse business. Topics will include plant production, marketing, quality control, and automated environmental control systems used in greenhouses. Students will also explore hydroponic growing, careers, and FFA opportunities. Recommended Courses: Introduction to Plant Sciences.
Instructional Topic Headings (please separate each heading by a semi-colon)	Greenhouse Management Techniques (Sanitation, systems, maintenance, and production); Photosynthesis; Integrated Pest Management; Understanding pH relationships; The Experimental Method; Hydroponics; Agribusiness Techniques and Tools (Accounting, marketing, and sales); Greenhouse Management Careers; Opportunities in FFA

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
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Tech Prep

Current Tech Prep Articulation Agreement? (Y/N)	no
Date of Current Agreement	

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Postsecondary Institution Name	
Postsecondary Course Name	
Postsecondary Course Number	
# of Postsecondary Credits	

Additional CTE Course Information

Author	
Course developed by	Don Berberich
Course adapted from	Greenhouse Production
Date of previous course revision	May 2009
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
Use greenhouse management techniques to produce high quality crops.	PS.01 PS.02 PS.03	AG-PL. 1&2	RI.11-12.1 RI.11-12.3	N-Q.1 N-Q.2 N-Q.3 G-GMD.3	A4, B2, B3, B4, C1	A2, A5, A6	Management Technical Skills Technology	Floriculture Career Development Event - FFA Job Interview Career Development Event – FFA
Apply principles of photosynthesis to the growing of commercial plants.	PS.01.03 PS.03.05	AG-FD. 1 & 4 AG-PL. 1 & 3	RI.11-12.1	S-IC.6	B2, B4	A2, A5	Technical Skills	Floriculture Career Development Event – FFA
Apply knowledge of integrated pest management techniques to monitor and	PS.03.03	AG-ENV. 1 & 4	RI.11-12.1	N-Q.1 N-Q.3	B2, B4	A2, A5, A6	Technical Skills	Floriculture Career

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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
control insect populations.			RI.11- 12.3					Development Event – FFA
Adjust the pH of growing media and hydroponic solutions for high quality plant growth.	PS.02	AG-PL. 1 & 2	RI.11- 12.1 RI.11- 12.3	N-Q.3 N-CN.9	B2, B4	A2, A5	Technical Skills	Floriculture Career Development Event – FFA
Apply the experimental method in designing a horticulture related experiment.	PS.02 PS.03	AG. 1 & 2 AG-PL. 4	W.9-10.4	N-Q.1 N-Q.2 N-Q.3 G- GMD.3 S-ID.4 S.IC.5	B2, B4	A2, A5	Technical Skills	Floriculture Career Development Event – FFA
Utilize knowledge of hydroponics to design a system.	PS.02 PS.03	AG-FD.4 AG-PL. 1 &4	L.9-12.6 W.9-10.4	S-IC.5 S-MD.6	B2, B4	A2, A5	Technical Skills	Floriculture Career Development Event - FFA
Utilize agribusiness techniques to plan and manage a class-based enterprise.	ABS.01	AG-BIZ. 1 & 5	RI.11- 12.1 RI.11- 12.3 W.9-10.4	A-APR.7 S-IC.3	B2, B4	A2, A5	Planning Management Finance Work Habits	Floriculture Career Development Event – FFA
Maintain a clean and safe facility work environment	CS.06 CS.07	AG-FD. 1	L.9-12.6	S- MD.6&7 S-IC.6	B2, B3, B4	A2, A5, A6	Technical Skills Health/Safety	Floriculture Career Development Event – FFA

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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
Increase awareness of career opportunities in greenhouse management.	CS.01 CS.02 CS.03 CS.04	AG.5	W.9-10.4	S- MD.6&7 S-IC.6	A1, B2, B3, B4	A2, A5, B1, B2, B3, B4, B5	Work Habits	Job Interview Career Development Event – FFA
Be aware of the local, state, and national opportunities and programs of the National FFA Organization	CS.01 CS.02 CS.04 CS.05	AG.5	LS.11- 12.4 LS.11- 12.5 LS.11- 12.6	S- MD.6&7	A1, B2, B3, B4	A2, A5, B1, B2, B3, B4, B5	Work Habits Community	Job Interview Career Development Event – FFA Supervised Agricultural Experience Program (SAEP)

Instructional Resources

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

Introduction to Horticulture, 6th edition; Publisher: Delmar; Author: Reiley and Shry; ISBN#: 0-7688-1567-6

The Commercial Greenhouse, James Boodley & Steven Newman, 3rd Edition

Occupational Skills Standards:

National FFA Foundation: National Agriculture, Food and Natural Resources (AFNR) 2009 edition WWW.FFA.ORG