

Valid Credentials: General Rules

Introduction

This document is designed to assist districts in implementing the requirements and in ensuring that PreK-12 educators are assigned to classes they are validly credentialed to teach. It identifies the credentials required for teaching specific courses. Teachers are to hold one of the credentials identified in this document for each course they teach.

Elementary Credentials

Courses in the elementary grade range, other than PE, do not appear in this document, because a general rule for elementary credentials applies to all such courses. The general rule for elementary credentials, including Kindergarten-Primary (KP), Kindergarten-Elementary (KE), Elementary (EL), Early Childhood (EC), Primary (PF), and endorsements extending the grade range of EC credentials, allows the teachers who hold these credentials to teach any course within the relevant grade range. An exception to this rule is for those initially hired on or after July 1, 2013, to teach physical education. These teachers must be licensed in PE and are included in this document.

Community School Courses

Courses that are taught at a community school, with the exception of special education courses, can be taught by an educator who holds any valid teaching credential including substitute teaching licenses.

Special Education

For courses with student populations SE or SP, any teacher holding an education of the handicapped certificate (EH) or an intervention specialist license (PI, IL or ES) can teach students—at the grade levels for which the teacher is certificated or licensed—with any disability.*

*Exceptions:

1. Any SE or SP course that is comprised of all deaf or hard of hearing students must be taught by someone certificated or licensed to teach deaf or hard of hearing students. This includes the following:
 - EH 196010, 196015, 196070 (grades K-12)
 - IL 196116 (grades P-12)
2. Any SE or SP course that is comprised of all visually impaired students must be taught by someone certificated or licensed to teach visually impaired students. This includes the following:
 - EH 196110 (grades K-12)
 - IL 196109 (grades P-12)

Agriculture and Environmental Systems

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010105 - Agriculture, Food and Natural Resources	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010001 - Env & Agricult Sci		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010001 - Env & Agricult Sci		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	VO - Vocational Education	010101 - Animal Production		
	VO - Vocational Education	010001 - Env & Agricult Sci		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010904 - Landscape Hort		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010102 - Plant Science-Vo		
VO - Vocational Education	010200 - Agribusiness			
VO - Vocational Education	010901 - Animal Sci & Mgmt			
VO - Vocational Education	010700 - Forestry			
VO - Vocational Education	010502 - Voc Horticulture Ii			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010115 - Business Management for Agricultural and Environmental Systems	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010101 - Animal Production		
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010904 - Landscape Hort		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010102 - Plant Science-Vo		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			
VO - Vocational Education	010701 - Natural Resrce Mgnt			
VO - Vocational Education	010502 - Voc Horticulture Ii			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010120 - Mechanical Principles	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010001 - Env & Agricult Sci		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010200 - Agribusiness			
VO - Vocational Education	010102 - Plant Science-Vo			
VO - Vocational Education	010901 - Animal Sci & Mgmt			
VO - Vocational Education	010300 - Agricultural Industrial Equipment			
010125 - Animal and Plant Science	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	VO - Vocational Education	010200 - Agribusiness		4 - 12
	VO - Vocational Education	010100 - Agriscience		4 - 12
	VO - Vocational Education	010001 - Env & Agricult Sci		4 - 12
	VO - Vocational Education	010104 - Production Agriculture		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010130 - Global Economics and Food Markets	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	VO - Vocational Education	010904 - Landscape Hort		4 - 12
	VO - Vocational Education	011140 - Farm Business Planning and Analysis		4 - 12
	VO - Vocational Education	019900 - Other Agriculture		4 - 12
	VO - Vocational Education	010802 - Env Management li		4 - 12
	VO - Vocational Education	010699 - Environmental Management		4 - 12
	VO - Vocational Education	010801 - Env Management I		4 - 12
	VO - Vocational Education	010601 - Horticulture		4 - 12
	VO - Vocational Education	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		4 - 12
	VO - Vocational Education	010503 - Vo Horticulture lii		4 - 12
	VO - Vocational Education	010700 - Forestry		4 - 12
	VO - Vocational Education	010502 - Voc Horticulture li		4 - 12
	VO - Vocational Education	010400 - Food Science		4 - 12
	VO - Vocational Education	010902 - Agr Res&Envrn Sci		4 - 12
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		4 - 12
	VO - Vocational Education	010201 - Agr & Indust Equip		4 - 12
	VO - Vocational Education	010500 - Horticulture		4 - 12
	VO - Vocational Education	010200 - Agribusiness		4 - 12
	VO - Vocational Education	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010701 - Natural Resrce Mgnt		4 - 12
	VO - Vocational Education	010191 - Zoo Animal Production and Care		4 - 12
	VO - Vocational Education	010131 - Equine Science		4 - 12
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010101 - Animal Production		4 - 12
VO - Vocational Education	010001 - Env & Agricult Sci		4 - 12	
VO - Vocational Education	010100 - Agriscience		4 - 12	
VO - Vocational Education	010102 - Plant Science-Vo		4 - 12	

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010155 - Plant and Horticultural Science	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010904 - Landscape Hort		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010102 - Plant Science-Vo		
	VO - Vocational Education	010001 - Env & Agricult Sci		
VO - Vocational Education	010100 - Agriscience			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010190 - Agricultural and Environmental Systems Capstone	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010904 - Landscape Hort		
	VO - Vocational Education	010902 - Agr Res&Envrn Sci		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010001 - Env & Agricult Sci		
	VO - Vocational Education	010102 - Plant Science-Vo		
010210 - Agricultural and Industrial Power	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010200 - Agribusiness		
VO - Vocational Education	010100 - Agriscience			

Agriculture and Environmental Systems

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010215 - Electronic and Electrical Systems	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
010220 - Engines and Fuel Systems	VO - Vocational Education	010600 - Natural Resources		
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010225 - Hydraulics and Pneumatics	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171302		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171301		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12	
CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12	
CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12	
CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12	
CT - Career Technical (4-12)	160610 - Technology Education		4 - 12	
CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12	
CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12	
CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12	
CT - Career Technical (4-12)	010100 - Agriscience		4 - 12	
CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12	

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010225 - Hydraulics and Pneumatics	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171302		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171301		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	DS (4-12) - Designated Subject (4-12)	132160 - Physical Science/Physics		4 - 12
	DS (4-12) - Designated Subject (4-12)	132150 - Physical Science: Chemistry		4 - 12
	DS (4-12) - Designated Subject (4-12)	132040 - Earth Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132030 - Life Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132010 - Integrated Science		4 - 12
	DS (4-12) - Designated Subject (4-12)	110094 - Integrated Mathematics		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12	
SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12	
SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12	
SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12	
SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12	
TM - STEM (6-12)	160610 - Technology Education		6 - 12	
TM - STEM (6-12)	132010 - Integrated Science		6 - 12	
TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12	
VO - Vocational Education	173100 - Power Equipment Technology			
VO - Vocational Education	172307 - Tool and Die Making			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010225 - Hydraulics and Pneumatics	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171200 - Medium/Heavy Truck Technician		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170802 - Marine Maintenance		
	VO - Vocational Education	170801 - Maritime Occupations		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	170403 - Ground Operations		
	VO - Vocational Education	170401 - Aircraft Maintenance		
	VO - Vocational Education	170400 - Aviation Occupations		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170303 - Auto Specialization		
	VO - Vocational Education	170302 - Automotive Technology		
	VO - Vocational Education	170301 - Auto Collision Repair		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
	VO - Vocational Education	010100 - Agriscience		
010230 - Power Trains	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
VO - Vocational Education	010100 - Agriscience			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010235 - Outdoor Power Technology	CT - Career Technical (4-12)	173100 - Power Equipment Technology		4 - 12
	CT - Career Technical (4-12)	170802 - Marine Maintenance		4 - 12
	CT - Career Technical (4-12)	170801 - Maritime Occupations		4 - 12
	CT - Career Technical (4-12)	170403 - Ground Operations		4 - 12
	CT - Career Technical (4-12)	171200 - Medium/Heavy Truck Technician		4 - 12
	CT - Career Technical (4-12)	170401 - Aircraft Maintenance		4 - 12
	CT - Career Technical (4-12)	170400 - Aviation Occupations		4 - 12
	CT - Career Technical (4-12)	170303 - Auto Specialization		4 - 12
	CT - Career Technical (4-12)	170302 - Automotive Technology		4 - 12
	CT - Career Technical (4-12)	170301 - Auto Collision Repair		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	171200 - Medium/Heavy Truck Technician		4 - 12
	CW - Career Technical Workforce Development	170802 - Marine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170801 - Maritime Occupations		4 - 12
	CW - Career Technical Workforce Development	173100 - Power Equipment Technology		4 - 12
	CW - Career Technical Workforce Development	170403 - Ground Operations		4 - 12
	CW - Career Technical Workforce Development	170401 - Aircraft Maintenance		4 - 12
	CW - Career Technical Workforce Development	170400 - Aviation Occupations		4 - 12
	CW - Career Technical Workforce Development	170303 - Auto Specialization		4 - 12
	CW - Career Technical Workforce Development	170302 - Automotive Technology		4 - 12
	CW - Career Technical Workforce Development	170301 - Auto Collision Repair		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	VO - Vocational Education	173100 - Power Equipment Technology		
	VO - Vocational Education	171200 - Medium/Heavy Truck Technician		
	VO - Vocational Education	170802 - Marine Maintenance		
	VO - Vocational Education	170801 - Maritime Occupations		
	VO - Vocational Education	170403 - Ground Operations		
	VO - Vocational Education	170401 - Aircraft Maintenance		
	VO - Vocational Education	170400 - Aviation Occupations		
	VO - Vocational Education	170303 - Auto Specialization		
VO - Vocational Education	170302 - Automotive Technology			
VO - Vocational Education	170301 - Auto Collision Repair			
VO - Vocational Education	160610 - Technology Education			
VO - Vocational Education	010301 - Ag Power-Machnry-Vo			
VO - Vocational Education	010300 - Agricultural Industrial Equipment			
VO - Vocational Education	010100 - Agriscience			
010240 - Power Sports	CT - Career Technical (4-12)	010300 - Agricultural Industrial Equipment		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010300 - Agricultural Industrial Equipment		4 - 12
	VO - Vocational Education	010301 - Ag Power-Machnry-Vo		
	VO - Vocational Education	010300 - Agricultural Industrial Equipment		
VO - Vocational Education	010100 - Agriscience			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010610 - Greenhouse and Nursery Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		4 - 12
VO - Vocational Education	010100 - Agriscience			
010615 - Landscape Systems Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010100 - Agriscience		
010620 - Agronomic Systems	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010100 - Agriscience		
010625 - Floral Design and Marketing	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010630 - Landscape Design	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010100 - Agriscience		
010635 - Turf Science and Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
VO - Vocational Education	010100 - Agriscience			
010640 - Landscape Hardscapes	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	VO - Vocational Education	010601 - Horticulture		4 - 12
	VO - Vocational Education	010503 - Vo Horticulture Iii		4 - 12
	VO - Vocational Education	010502 - Voc Horticulture Ii		4 - 12
	VO - Vocational Education	010500 - Horticulture		4 - 12
	VO - Vocational Education	010100 - Agriscience		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010710 - Natural Resources	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010902 - Agr Res&Environ Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010200 - Agribusiness		
VO - Vocational Education	010104 - Production Agriculture			
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010715 - Energy Systems Management	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12	
CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12	
CT - Career Technical (4-12)	160610 - Technology Education		4 - 12	
CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12	
CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12	
CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12	
CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12	
CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12	
CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12	
CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12	

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010715 - Energy Systems Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	DS (4-12) - Designated Subject (4-12)	132160 - Physical Science/Physics		4 - 12
	DS (4-12) - Designated Subject (4-12)	132150 - Physical Science: Chemistry		4 - 12
	DS (4-12) - Designated Subject (4-12)	132040 - Earth Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132030 - Life Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132010 - Integrated Science		4 - 12
	DS (4-12) - Designated Subject (4-12)	110094 - Integrated Mathematics		4 - 12
	DS (4-12) - Designated Subject (4-12)	101315 - Industrial Technology		4 - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12	
MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12	
MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12	
MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12	
MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12	

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010715 - Energy Systems Management	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		KG - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		KG - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		KG - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		KG - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	010902 - Agr Res&Environ Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	010001 - Env & Agricult Sci		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010716 - Bio Energy	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010802 - Env Management Ii		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			
010717 - Solar and Wind Energy	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010802 - Env Management Ii		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			
010718 - Oil and Gas Operations	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010902 - Agr Res&Envirn Sci		
	VO - Vocational Education	010802 - Env Management Ii		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010720 - Environmental Science for Agriculture and Natural Resources	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	012100 - Agricultural Biotechnology		4 - 12
	VO - Vocational Education	010902 - Agr Res&Environ Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010601 - Horticulture		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010503 - Vo Horticulture Iii		
	VO - Vocational Education	010502 - Voc Horticulture Ii		
	VO - Vocational Education	010400 - Food Science		4 - 12
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			
010725 - Environmental Systems Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	VO - Vocational Education	010902 - Agr Res&Environ Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES	
010730 - Forestry and Woodland Ecosystems	CT - Career Technical (4-12)	010700 - Forestry		4 - 12	
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12	
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12	
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12	
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12	
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12	
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12	
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12	
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12	
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12	
	VO - Vocational Education	010902 - Agr Res&Environ Sci			
	VO - Vocational Education	010801 - Env Management I			
	VO - Vocational Education	010701 - Natural Resrce Mgnt			
	VO - Vocational Education	010700 - Forestry			
	VO - Vocational Education	010699 - Environmental Management			
	VO - Vocational Education	010600 - Natural Resources			
	VO - Vocational Education	010104 - Production Agriculture			
	VO - Vocational Education	010100 - Agriscience			
	VO - Vocational Education	010001 - Env & Agricult Sci			
	010735 - Park and Recreational Management	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
CT - Career Technical (4-12)		010699 - Environmental Management		4 - 12	
CT - Career Technical (4-12)		010600 - Natural Resources		4 - 12	
CT - Career Technical (4-12)		010500 - Horticulture		4 - 12	
CT - Career Technical (4-12)		010100 - Agriscience		4 - 12	
CW - Career Technical Workforce Development		010700 - Forestry		4 - 12	
CW - Career Technical Workforce Development		010699 - Environmental Management		4 - 12	
CW - Career Technical Workforce Development		010600 - Natural Resources		4 - 12	
CW - Career Technical Workforce Development		010500 - Horticulture		4 - 12	
VO - Vocational Education		010902 - Agr Res&Environ Sci			
VO - Vocational Education		010801 - Env Management I			
VO - Vocational Education		010701 - Natural Resrce Mgnt			
VO - Vocational Education		010700 - Forestry			
VO - Vocational Education		010699 - Environmental Management			
VO - Vocational Education		010600 - Natural Resources			
VO - Vocational Education		010500 - Horticulture			
VO - Vocational Education		010100 - Agriscience			
VO - Vocational Education		010001 - Env & Agricult Sci			
010740 - Urban Forestry		CT - Career Technical (4-12)	010700 - Forestry		4 - 12
		CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12	
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12	
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12	
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12	
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12	
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12	
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12	
	VO - Vocational Education	010902 - Agr Res&Environ Sci			
	VO - Vocational Education	010801 - Env Management I			
	VO - Vocational Education	010701 - Natural Resrce Mgnt			
	VO - Vocational Education	010700 - Forestry			
	VO - Vocational Education	010699 - Environmental Management			
	VO - Vocational Education	010601 - Horticulture			
	VO - Vocational Education	010600 - Natural Resources			
	VO - Vocational Education	010503 - Vo Horticulture Iii			
	VO - Vocational Education	010502 - Voc Horticulture Ii			
	VO - Vocational Education	010500 - Horticulture			
	VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci				

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010745 - Wildlife and Fisheries	CT - Career Technical (4-12)	010700 - Forestry		4 - 12
	CT - Career Technical (4-12)	010699 - Environmental Management		4 - 12
	CT - Career Technical (4-12)	010600 - Natural Resources		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010700 - Forestry		4 - 12
	CW - Career Technical Workforce Development	010699 - Environmental Management		4 - 12
	CW - Career Technical Workforce Development	010600 - Natural Resources		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010902 - Agr Res&Environ Sci		
	VO - Vocational Education	010801 - Env Management I		
	VO - Vocational Education	010701 - Natural Resrce Mgnt		
	VO - Vocational Education	010700 - Forestry		
	VO - Vocational Education	010699 - Environmental Management		
	VO - Vocational Education	010600 - Natural Resources		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010101 - Animal Production		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			
010910 - Animal Science and Technology	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
VO - Vocational Education	010100 - Agriscience			
010915 - Animal Health	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
VO - Vocational Education	010100 - Agriscience			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010920 - Livestock Selection, Nutrition, and Management	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	010925 - Companion Animal Selection, Nutrition, and Management	CT - Career Technical (4-12)	010200 - Agribusiness	
CT - Career Technical (4-12)		010191 - Zoo Animal Production and Care		4 - 12
CT - Career Technical (4-12)		010131 - Equine Science		4 - 12
CT - Career Technical (4-12)		010104 - Production Agriculture		4 - 12
CT - Career Technical (4-12)		010101 - Animal Production		4 - 12
CT - Career Technical (4-12)		010100 - Agriscience		4 - 12
CW - Career Technical Workforce Development		010200 - Agribusiness		4 - 12
CW - Career Technical Workforce Development		010191 - Zoo Animal Production and Care		4 - 12
CW - Career Technical Workforce Development		010131 - Equine Science		4 - 12
CW - Career Technical Workforce Development		010104 - Production Agriculture		4 - 12
CW - Career Technical Workforce Development		010101 - Animal Production		4 - 12
VO - Vocational Education		010901 - Animal Sci & Mgmt		
VO - Vocational Education		010200 - Agribusiness		
VO - Vocational Education		010191 - Zoo Animal Production and Care		
VO - Vocational Education		010131 - Equine Science		
VO - Vocational Education		010104 - Production Agriculture		
010930 - Veterinary Science	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
VO - Vocational Education	010101 - Animal Production			
VO - Vocational Education	010100 - Agriscience			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
010935 - Equine Selection, Nutrition, and Management	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
VO - Vocational Education	010100 - Agriscience			
010940 - Zoo and Aquarium	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010191 - Zoo Animal Production and Care		
	VO - Vocational Education	010131 - Equine Science		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
VO - Vocational Education	010100 - Agriscience			
010945 - Animal Anatomy and Physiology	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010191 - Zoo Animal Production and Care		4 - 12
	CT - Career Technical (4-12)	010131 - Equine Science		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010191 - Zoo Animal Production and Care		4 - 12
	CW - Career Technical Workforce Development	010131 - Equine Science		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010901 - Animal Sci & Mgmt		4 - 12
	VO - Vocational Education	010200 - Agribusiness		4 - 12
	VO - Vocational Education	010191 - Zoo Animal Production and Care		4 - 12
	VO - Vocational Education	010131 - Equine Science		4 - 12
	VO - Vocational Education	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	010101 - Animal Production		4 - 12
VO - Vocational Education	010100 - Agriscience		4 - 12	

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
011010 - Science and Technology of Food	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	VO - Vocational Education	012100 - Agricultural Biotechnology		
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			
011015 - Food Marketing and Research	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			
011020 - Meat Science and Technology	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
VO - Vocational Education	010101 - Animal Production			
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			
011030 - Applications of Food Science and Safety	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010100 - Agriscience		
VO - Vocational Education	010001 - Env & Agricult Sci			

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
012010 - Animal and Plant Biotechnology	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010500 - Horticulture		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010200 - Agribusiness		4 - 12
	CT - Career Technical (4-12)	010104 - Production Agriculture		4 - 12
	CT - Career Technical (4-12)	010101 - Animal Production		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010500 - Horticulture		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	CW - Career Technical Workforce Development	010200 - Agribusiness		4 - 12
	CW - Career Technical Workforce Development	010104 - Production Agriculture		4 - 12
	CW - Career Technical Workforce Development	010101 - Animal Production		4 - 12
	VO - Vocational Education	010500 - Horticulture		
	VO - Vocational Education	010400 - Food Science		
	VO - Vocational Education	010200 - Agribusiness		
	VO - Vocational Education	010104 - Production Agriculture		
	VO - Vocational Education	010101 - Animal Production		
VO - Vocational Education	010100 - Agriscience			
VO - Vocational Education	010001 - Env & Agricult Sci			
012015 - Principles and Practices of Bioscience	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010400 - Food Science		
VO - Vocational Education	010100 - Agriscience			
012020 - Genetics of Plants and Animals	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010400 - Food Science		
VO - Vocational Education	010100 - Agriscience			
012025 - Bioresearch	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	012100 - Agricultural Biotechnology		4 - 12
	CT - Career Technical (4-12)	010400 - Food Science		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	012100 - Agricultural Biotechnology		4 - 12
	CW - Career Technical Workforce Development	010400 - Food Science		4 - 12
	VO - Vocational Education	010400 - Food Science		
VO - Vocational Education	010100 - Agriscience			