2016-2017 CATALOG ADDENDUM

ABOUT THIS ADDENDUM

The Addendum to the 2016-2017 College of the Redwoods Catalog contains new programs and courses that were approved after the 2016-17 Catalog went to press, and corrections for errors found after the release of the 2016-17 Catalog.

College of the Redwoods has made every reasonable effort to determine that everything stated in the 2016-2017 Catalog is accurate. However, courses, programs and information therein are subject to change due to varied reasons and the rights of the administration to amend contents due to changes in regulations, omissions or oversight.

The District further reserves the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

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NEW DEGREES & CERTIFICATES

ASSOCIATE IN SCIENCE IN **AGRICULTURE PLANT SCIENCE** FOR TRANSFER

The Associate in Science in Agriculture Plant Science for Transfer Degree is intended for students who plan to complete a bachelor's degree in Plant Science at a CSU campus. Students completing the Associate in Science in Agriculture Plant Science for Transfer Degree are guaranteed admission to the CSU system, but not to a particular campus or major. Courses offered by the Agriculture Program meet a wide range of lower division transfer requirements for CSU colleges. The Associate in Science in Agriculture Plant Science for Transfer Degree offers many courses designed to prepare students for transfer to a variety of disciplines including Plant Science, Agriculture and Agriculture Studies.

Students completing the Associate in Science in Agriculture Plant Science for Transfer Degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept the Associate in Science in Agriculture Plant Science for Transfer Degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. The Associate in Science in Agriculture Plant Science for Transfer Degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

To meet the requirements for this degree the students must:
1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
     a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
     b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

PROGRAM REQUIREMENTS	Units	CSU GE	IGETC Area	C-ID Descriptor
REQUIRED CORE	**18.0**			
AG 17* Introduction to Soils	3.0	B1, B3		AG-PS 128L
CHEM 2* Introduction to Chemistry	5.0	B1, B3	5A, 5C	CHEM 101
or CHEM 1A* General Chemistry	5.0	B1, B3	5A, 5C	CHEM 110
AG 32 Introduction to Agriculture Economics	3.0			AG-AB 124
or ECON 10* Microeconomics	3.0	D2	4B	ECON 201
MATH 15* Introduction to Statistics	4.0	B4	2A	MATH 110
AG 23* Introduction to Plant Science	3.0	B2		AG-PS 106L
LIST A: SELECT ONE	**3.0**			
AG 21 Plant Propagation/Production	3.0			
AG 51 Tractor Operation	3.0			
LIST B: SELECT ONE	**0-8.0**			
Any course from List A not already used, or any of the following:				
AG 30 Intro to Agriculture Business and Economics	3.0			
TOTAL UNITS FOR THE MAJOR	**21.0-24.0**			
GENERAL EDUCATION (CSU GE OR IGETC) UNITS:		39.0	37.0	
ELECTIVE (CSU OR UC TRANSFERABLE) UNITS:		*As needed to complete 60 units total*		
TOTAL DEGREE UNITS (MAXIMUM):		60.0	60.0	
Course can be double counted toward General Education				

SUGGESTED PROGRAM SEQUENCE

For information about the program length and suggested sequence of courses for this degree, please see an Academic Advisor.

PROGRAM LEARNING OUTCOMES

- Describe the importance of the agriculture industry to the local, state and national economies.
- Demonstrate proficiency using technologies as they relate to the agriculture industry.
- Apply best Management practices to agriculture production scenarios.

HORTICULTURAL PRACTICES CERTIFICATE OF RECOGNITION

PROGRAM REQUIREMENTS	Units
CORE COURSES	**15.0**
AG 15 Landscape Maintenance	3.0
AG 21 Plant Propagation/Production	3.0
AG 22 Sustainable Vegetable Production	3.0
AG 25 Landscape Construction and Installation	3.0
AG 27 Nursery Practices	3.0
RESTRICTED ELECTIVES	**2.0**
Choose 2 units from the following:	
AG 51 Tractor Operation	3.0
AG 42 Agriculture Work Experience	1.0-3.0
AG 64F Intro to Organic/Sustainable Agriculture (Fall)	1.0
AG 64S Intro to Organic/Sustainable Agriculture (Spring)	1.0
TOTAL UNITS	**17.0**

SUGGESTED PROGRAM SEQUENCE

For information about the program length and suggested sequence of courses for this degree, please see an Academic Advisor.

PROGRAM LEARNING OUTCOMES

- Describe the importance of the agriculture industry to the local, state and national economies.
- Demonstrate proficiency using technologies as they relate to the agriculture industry.
- Apply best Management practices to horticulture production scenarios.

FEDERAL WILDLAND FIREFIGHTER CERTIFICATE OF COMPLETION (NONCREDIT)

A noncredit Certificate of Completion in firefighting, fire control and safety in the wildland fire environment. Students completing this certificate will have the knowledge and skills to work as an entry-level wildland firefighter. This sequence of four courses covers the National Wildfire Coordinating Group (NWCG) training requirements to be eligible for employment as a wildland firefighter for the United States Forest Service, National Parks Service, or Bureau of Land Management. Successful completion of this State Wildland Firefighter certificate does not assure employment with a federal agency.

PROGRAM REQUIREMENTS	Hours
FT 201 Wildland Fire Behavior Training	8
FT 202 Basic Firefighting Training	40
FT 210 Hazardous Materials First Responder Operational	16
HLTH 207 First Aid/CPR/AED	9
TOTAL HOURS	**73**

SUGGESTED PROGRAM SEQUENCE
For information about the program length and suggested sequence of courses for this degree, please see an Academic Advisor.

PROGRAM LEARNING OUTCOMES
- Demonstrate the knowledge and skills to safely perform the tasks required to become an entry-level federal wildland firefighter.

STATE WILDLAND FIREFIGHTER CERTIFICATE OF COMPLETION (NONCREDIT)

A noncredit Certificate of Completion in wildland and structural firefighting. Students completing this certificate will have the knowledge and skills to perform the duties of an entry-level wildland firefighter as required by the California Department of Forestry and Fire Protection (CAL FIRE). Public First Aid (included in this certificate), EMR, or EMT training is required for employment with CAL FIRE. Students are eligible to apply for CAL FIRE certification on successful completion of the training during the CAL FIRE Basic Firefighter Academy when taught by a CAL FIRE instructor.

PROGRAM REQUIREMENTS	Hours
FT 201 Wildland Fire Behavior Training	6
FT 205 CAL FIRE Basic Firefighter - 80 Hours	80
FT 206 Confined Space Awareness	8
FT 207 Firefighter Survival	16
FT 210 Hazardous Materials First Responder Operational	16
HLTH 207 First Aid/CPR/AED	0-24
TOTAL HOURS	**126-150**

SUGGESTED PROGRAM SEQUENCE
For information about the program length and suggested sequence of courses for this degree, please see an Academic Advisor.

PROGRAM LEARNING OUTCOMES
- Demonstrate the basic knowledge and skills to safely perform the tasks required by the California Department of Forestry and Fire Protection (CAL FIRE) as an entry-level wildland firefighter.

	Units
GENERAL EDUCATION REQUIREMENTS	**18.0**
PROGRAM REQUIREMENTS	
CORE COURSES	**31.0**
IT 60A Basic Manufacturing Print Reading	3.0
WT 53 Basic Gas and Arc Welding	2.0
WT 54 General Gas, Braze (emphasis) Welding, and Soldering	2.0
WT 56 Intermediate Arc and Gas Welding Lab	1.0
WT 60 Welding Gas and Arc (emphasis E6013), and Gas Cutting	4.0
WT 61 Welding and Gouging, Gas and Arc (emphasis E7018, Braze)	4.0
WT 63 Weld inspection, Testing, Resistance, and Pattern Cutting	4.0
WT 64 Welding (emphasis corded wire), Surfacing, Lancing, and Automated Cutting	4.0
WT 67 Special Welding Laboratory (emphasis AWS Certification)	2.0
WT 80 Welding Fabrication	2.0
WT 90 Gas Metal Arc and Gas Tungsten Arc Welding	2.0
WT 91 Gas Metal Arc and Gas Tungsten Arc Welding Lab	1.0
RESTRICTED ELECTIVES	**9.0**
Choose 9 units from the following:	
BUS 10 Introduction to Business	3.0
CET 10 Survey of Electronics	3.0
CT 78A Residential Wiring I	2.0
CT 78B Residential Wiring II	2.0
IT 25 OSHA General Industry Safety Management	3.0
IT 125 OSHA Ten Hour General Industry Safety	0.5
IT 152 Technical Computer Application Lab	1.0
MT 10 Fundamentals of Manufacturing Technology	3.0
MT 52 Introduction to Metallurgy and Material Science	3.0
WT 40 Independent Study	0.5-2.0
UNRESTRICTED ELECTIVES – as needed to complete 60 units total.	
TOTAL UNITS	**60.0**

SUGGESTED PROGRAM SEQUENCE

Fall Start
Semester 1: IT 60A, WT 54, WT 80, ENGL 1A, MATH 120 or 194
Semester 2: WT 53, WT 90, WT 91, 10 units GE and Restricted Electives
Semester 3: WT 56, 14 units GE and Restricted Electives
Semester 4: WT-67, 13 units GE and Restricted Electives

PROGRAM LEARNING OUTCOMES

- Demonstrate safe welding and shop practice.
- Setup and operate hand and power tools, manual or semi-automatic welding equipment, such as SMAW, OAW, OAC, OABW, PAC, AAW, CAC, GMAW, FCAW, MIG and MAG.
- Identify and demonstrate weld procedures, manipulative techniques, processes, layout, concepts, and theory to produce welds common to the weld industry.

NEW COURSES

AGRICULTURE [AG]

AG-15 Landscape Maintenance
(3 Units LEC/LAB) Grade Only
Recommended Prep: ENGL-150 or ENGL-102 or ENGL-153
A course of study of the function and aesthetic value of public and private landscapes by applying appropriate maintenance techniques. Topics include planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices.

AG-25 Landscape Construction and Installation
(3 Units LEC/LAB) Grade Only
Recommended Prep: ENGL-150 or ENGL-102 or ENGL-153
A course of study of the fundamentals of landscape construction, which includes soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating, and bid preparation. This course also covers local codes, state requirements, and new technologies.

AG-27 Nursery Practices
(3 Units LEC/LAB) Grade Only
Recommended Prep: ENGL-150 or ENGL-102 or ENGL-153
A course of study of the production and cultural care of commercial container grown and field grown nursery operations. Among the topics covered are: crop scheduling, growing media, watering, fertilization, lighting, pests, temperature control, post-harvest handling, marketing and sales.

AG-33 Agriculture, Environment and Society
(3 Units LEC) Grade Only
Recommended Prep: AG-63 and MATH-380 and (ENGL-150 or ENGL-102 or ENGL-153)
A course covering the sociology of agriculture presented through an examination of relationships between societies and their environments, economics, and agriculture. Emphasis will be on the analysis of agriculture's use of technology and the corresponding impact on the environment, economy and society.

BUSINESS [BUS]

BUS-34 Introduction to Personal Finance
(3 Units LEC) P/NP option
Recommended Prep: CIS-1 and (ENGL-150 or ENGL-102 or ENGL-153) and (MATH-120 or MATH-194)
Transfers to: CSU
An introduction to the basics of personal financial literacy in diverse cultural settings. Topics will include managing income, expenses, credit and insurance. In the area of investments, topics will include financial markets and assets, basic asset valuation and retirement planning.

GERMAN [GERM]

GERM-1A Elementary German I
(4 Units LEC) Grade Only
Recommended Prep: ENGL-150 or ENGL-102 or ENGL-153
A beginning course that presents the fundamentals of German and provides the tools for students to acquire elementary linguistic proficiency. The course emphasizes the communicative use of all four language skills: listening, speaking, reading, and writing. Special emphasis is placed on providing insights into the cultural diversity of the German-speaking world.

GERM-1B Elementary German II
(4 Units LEC) Grade Only
Prerequisite: GERM-1A
Recommended Prep: ENGL-150 or ENGL-102 or ENGL-153
Continuation of GERM-1A. This course presents the fundamentals of German and provides the tools for students to improve linguistic proficiency. The course emphasizes the communicative use of all four language skills: listening, speaking, reading, and writing.

MATHEMATICS [MATH]

MATH-150 Precalculus Review
(0.5 Units LEC) P/NP only
A review course for students who have successfully completed coursework in Precalculus (college algebra and trigonometry). This review course will include topics from college algebra and trigonometry, and is designed for students who are preparing to enroll in the first semester if the calculus. The topics, level, and depth of review will be adjusted to suit the needs of the students in the course.

PSYCHOLOGY [PSYCH]

PSYCH-2L Research Methods in Psychology Lab
(1 Unit LAB) Grade Only
Prerequisite: MATH-15 and PSYCH-1 and PSYCH-2
Corequisite: MATH-15 and PSYCH-2
Recommended Prep: ENGL-1A
A lab course that applies real-life application of various psychological research methods with an emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, statistical analysis, interpretation, and reporting of research data. Actual data collected from research conducted during laboratory sessions will be analyzed with statistical software.

VOCATIONAL TRANING [VOC]

VOC-251 Keep Track of Finances in Excel
(0 Units LAB) P/NP only
Repeatability: No limit to enrollments
A noncredit course introducing students to the basics of Excel in order to track income and expenses. Students learn how to design and create clear and easily navigable spreadsheets. Topics include creating simple formulas, using tables, and sorting and filtering data. The focus is on harnessing the abilities of Excel to increase productivity and maximize savings for those who are self-employed or on fixed or limited incomes.

CORRECTIONS

Basic Gas and Arc Welding is incorrectly numbered in the 2016-2017 Catalog; the correct course number is WT-53.

Certificate of Recognition, General Welding	
Program Requirements	Units
WT ~~54~~ 53 Basic Gas and Arc Welding	2.0
WT 56 Intermediate Arc and Gas Welding Lab	1.0
WT 60 Welding Gas and Arc (Emphasis E6013), and Gas Cutting	4.0
WT 61 Welding and Gouging, Gas and Arc (Emphasis E7018, Braze)	4.0
WT 67 Special Welding Lab (Emphasis AWS Certification)	2.0
WT 80 Welding Fabrication	2.0
Total Units	**15.0**