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| **Aquaculture**  **The following three courses must be taken in this sequence.** |

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| **STEM** | |
| **Q Agriscience Foundations 1** | |
| **Course #** | 81068101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in February 2012, for courses already existing in the course code directory, become effective with the 2012-2013 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2012-2013 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q Aquaculture 2** | |
| **Course #** | 8112010 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriscience Foundations 1 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of nature and origin, career opportunities, biological principles, safety, water quality, seed production, market outlets, rules and regulations, technological advances, problem solving and leadership employability communication and human relations skills.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in January 2013, for courses already existing in the course code directory, become effective with the 2013-2014 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2013-2014 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q Aquaculture 3** | |
| **Course #** | 8112020 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriscience Foundations (8106810) and Aquaculture 2 ( 8112010) |
| **Credit** | 1 credit each |
| This course is designed to develop competencies in the area of management and use of water, the propagation and rearing of seed, producing aquaculture species, control of diseases, pests and water quality problems, harvesting and processing, marketing and transportation, management skills and leadership, employability, communication and human relation skills.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in January 2013, for courses already existing in the course code directory, become effective with the 2013-2014 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2013-2014 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **HORTICULTURE SCIENCES**  **The following three courses must be taken in this sequence.** |

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| **STEM** | |
| **Q Agriscience Foundations 1** | |
| **Course #** | 81068101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| See course descriptions on first page of HS Agribusiness and Natural Resources Education.  Curriculum will align with Common Core State Standards. | |

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| **Q Introductory Horticulture 2** | |
| **Course #** | 81215101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriscience Foundations |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of career opportunities; global importance of agriculture; plant classification; propagation; growing media; nutritional needs; fertilization; irrigation; pest identification; pest control, pruning; plant installation; transplanting; safe hand-tool use; and employability skills.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in February 2012, for courses already existing in the course code directory, become effective with the 2012-2013 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2012-2013 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q** \***Horticultural Science 3** | |
| **Course #** | 81215201,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Introductory Horticulture 2 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of industry regulations; plant classification; plant transportation; soil sampling and analysis; fertilizer calculations; recording keeping; irrigation components, water quality; drainage; integrated pest management; pesticide safety and regulations; equipment calibration; chemical growth regulators; xeriscaping; integrated landscape management; safe use of power equipment; record keeping; and employability skills.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in February 2012, for courses already existing in the course code directory, become effective with the 2012-2013 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2012-2013 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q Horticulture Science & Services 4** | |
| **Course #** | 81216101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Horticulture Science 3 |
| **Credit** | 1 |
| This course is designed to further develop competencies in the areas of plant identification and classification: growing media: irrigation system set up; and maintaining and analyzing records including production costs.  Curriculum will align with Common Core State Standards. | |

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| **Q Horticulture Science & Services 5** | |
| **Course #** | 81216201,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Horticulture Science 4 |
| **Credit** | 1 |
| This course is designed to further develop competencies in the areas of identifying and evaluating IPM practices; maintaining and repairing irrigation systems; analyzing and evaluating fertilizer usage.  Curriculum will align with Common Core State Standards. | |

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| **Q Horticulture Science & Services 6** | |
| **Course #** | 81216301,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Horticulture Science 5 |
| **Credit** | 1 |
| This course is designed to further develop competencies in the areas of irrigation; growing media; planting beds and sites; propagation; marketing; repair and maintenance of nursery equipment and facilities.  Curriculum will align with Common Core State Standards. | |

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| **VETERINARY ASSISTING**  **The following three courses must be taken in this sequence.** |

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| **Q Veterinary Assisting 1** | |
| **Course #** | 81115101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| The purpose of Veterinary Assisting 1 and 2 is to provide a core of general knowledge about Veterinary Technology and to prepare students for advanced training and employment in the veterinary industry.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in February 2012, for courses already existing in the course code directory, become effective with the 2012-2013 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2012-2013 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q Veterinary Assisting 2** | |
| **Course #** | 81115401,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Veterinary Assisting 1 |
| **Credit** | 1 |
| The purpose of Veterinary Assisting 1 and 2 is to provide a core of general knowledge about Veterinary Technology and to prepare students for advanced training and employment in the veterinary industry.  Curriculum will align with Common Core State Standards. | |
| *\*Quality Points approved for the first time in February 2012, for courses already existing in the course code directory, become effective with the 2012-2013 entering ninth grade class and subsequent years. (see district policy 5420.03, Final Grades, (H) Honors Quality Points)*  ***Note:*** *Students* ***not*** *enrolled in the 2012-2013 entering ninth grade class may* ***not*** *receive quality points for these courses.* | |

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| **Q Veterinary Assisting 3** | |
| **Course #** | 81115501,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Veterinary Assisting 2 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of companion animal digestive systems; animal breeding; preventative medicine and disease control; control of parasites; animal marketing and analyzing records.  Curriculum will align with Common Core State Standards. | |

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| **Q Veterinary Assisting 4** | |
| **Course #** | 81115201,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Veterinary Assisting 3 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of companion animal restraint and control; veterinary science terminology; basic first aid; animal overpopulation and exotic animals.  Curriculum will align with Common Core State Standards. | |

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| **Q Veterinary Assisting 5** | |
| **Course #** | 81115301,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Veterinary Assisting 4 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of human-animal bond; animal-related laws; animal research; genetics and biotechnology in reproduction; and enterprise management.  Curriculum will align with Common Core State Standards. | |

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| **ENVIRONMENTAL STUDIES**  **The following three courses must be taken in this sequence.** |
| **Use the following courses for Land Resources Technology, and Water Resources Technology.** |

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| **Introduction to Environmental Technology** | |
| **Course #** | 89130101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of hydrology, environmental standards and regulations, site assessment, geologic principles, career opportunities; scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **Environmental Technology 2** | |
| **Course #** | 89130200 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Intro to Environmental Tech. |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of water treatment, storm water systems, Geographic Informational and Global Positioning systems, environmental standards and regulations, career opportunities; scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **WATER QUALITY TECHNOLOGY**  Daggered for Deletion No New Enrollments in this Program after 2011-12 |

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| **Q Water Quality Resources 3** | |
| **Course #** | 89160101,2 |
| **Grade Level** | 9-12, 30-31 |
| **Length** | 1 year |
| **Prerequisite** | Environmental Tech 2 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of hydrology, geology principles, water treatment techniques, storm water systems, water distribution, management of water resources, management of fisheries, drainage systems, career opportunities; scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **Q Water Quality Resources 4** | |
| **Course #** | 89160201,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Water Quality Resources 3 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas water treatment techniques, storm water systems, water distribution, management of water resources, management of fisheries, career opportunities; scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **LAND RESOURCES TECHNOLOGY** |

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| **STEM** | |
| **Q Land Resources 3** | |
| **Course #** | 89130301,2 |
| **Grade Level** | 9-12, 30-31 |
| **Length** | 1 year |
| **Prerequisite** | Environmental Tech 2 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of managing wetlands, wildlife, forest, fire, pests, and ecosystems, solid waste disposal, scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **STEM** | |
| **Q Land Resources 4** | |
| **Course #** | 89130401,2 |
| **Grade Level** | 9-12, 30-31 |
| **Length** | 1 year |
| **Prerequisite** | Land Resources 3 |
| **Credit** | 1 |
| Land Resources 4 is an in depth study of land resources from the environmental standpoint. Students planning careers as park rangers, foresters, agronomists, land and animal conservationist, and related careers should consider this course.  Curriculum will align with Common Core State Standards. | |

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| **Environmental Water Reclamation Technology**  **The following three courses must be taken in this sequence.** |

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| **Environmental Water Technology** | |
| **Course #** | 8007110 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| This course is designed to develop competencies in the area of hydrology, safety skills and procedures, geological principles of water resources, management of wetlands, storm water systems, environmental water resources, equipment and facility maintenance, scientific and research concepts; principles of leadership; and employability, and human relations skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |
| **Intermediate Environmental Water Technology** | |
| **Course #** | 8007120 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Introduction to Environmental Water Technology |
| **Credit** | 1 |
| This course is designed to develop competencies in the area of standards and regulations, site assessments, safety, managing data and physical resources, prepare a plan, perform remediation, collect and dispose of solid waste, record keeping and sampling procedures, career opportunities, leadership, teamwork, and money management concepts.  Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **Advanced Environmental Water Reclamation Technology** | |
| **Course #** | 8007210 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Introduction to Environmental Water Technology (8007110) and Intermediate Environmental Water Technology (8007120) |
| **Credit** | 1 credit each |
| This course is designed to develop competencies in the area of career opportunities, scientific concepts in water treatment, safety hazards, government regulations, facility operational principles, and equipment inspections. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |

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| **Environmental Resources** |

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| **STEM** | |
| **Q Agriscience Foundations 1** | |
| **Course #** | 81068101,2 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| See course descriptions on first page of HS Agribusiness and Natural Resources Education. | |

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| **STEM** | |
| **Q Agricultural Biotechnology 2** | |
| **Course #** | 8106850 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriscience Foundations 1 (8106810) |
| **Credit** | 1 |
| This course was developed as a core and is designed to develop competencies in the areas of agricultural biotechnology in agriculture, scientific investigation, laboratory safety, scientific and technological concepts; and the fundamentals of biotechnology.  Curriculum will align with Common Core State Standards. | |
| **STEM** | |
| **Q Environmental Resources 3** | |
| **Course #** | 8113010 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agricultural Biotechnology 2 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of water resources, native flora and fauna, Florida ecosystems, soil characteristics, and collecting, recording and analyzing data.  Curriculum will align with Common Core State Standards. | |

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| **STEM** | |
| **Q Environmental Resources 4** | |
| **Course #** | 8113020 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Environmental Resources 3 |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of land management, weather systems, wildlife programs, commodity and non-commodity resources, sustainable agriculture and environmental research.  Curriculum will align with Common Core State Standards. | |

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| **Principles of Agribusiness**  The purpose of this program is to serve as a supplemental program to provide Agriculture, Food, and Natural Resource Education students with the opportunity, to learn the business side of agriculture commodities as well as essential functions of leadership and management.  **The following three courses must be taken in this sequence.** |

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| **STEM** | |
| **Q Agriscience Foundations 1** | |
| **Course #** | 81068100 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | None |
| **Credit** | 1 |
| This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.  Curriculum will align with Common Core State Standards. | |
| **Agriculture Leadership and Management** | |
| **Course #** | 8009110 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriscience Foundations |
| **Credit** | 1 |
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| **Principles of Agribusiness** | |
| **Course #** | 8009120 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Agriculture Leadership and Management |
| **Credit** | 1 |
| TBA | |

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| **Agriculture, Food, & Natural Resources Cooperative Education - OJT (Name Change)** | |
| **Course #** | 81004100 |
| **Grade Level** | 9-12 |
| **Length** | 1 year |
| **Prerequisite** | Concurrent enrollment in a specific Agribusiness job prep program. |
| **Credit** | Multiple Credits |
| The purpose of this course is to provide the OJT training components when the cooperative method of instruction is used with Agribusiness job preparatory programs. This course may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The specific student performance standard which the student must achieve to earn credit must be specified in the OJT training plan.  Curriculum will align with Common Core State Standards. | |

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| **Agriculture, Food, & Natural Resources Directed Study (Name Change)** | |
| **Course #** | 81001000 |
| **Grade Level** | 9-12 |
| **Length** | 1 semester |
| **Prerequisite** | Completion of any job prep |
| **Credit** | Multiple Credits |
| The purpose of this course is to provide students with learning opportunities in a prescribed program of study within the Agriculture, Food and Natural Resources cluster that will enhance opportunities for employment in the career field chosen by the student.  Curriculum will align with Common Core State Standards. | |

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| **Advanced Concepts of Agriscience** | |
| **Course #** | 81003300 |
| **Grade Level** | 11-12 |
| **Length** | 1 year |
| **Prerequisite** | Completion of a program |
| **Credit** | Multiple Credits |
| The purpose of this course is to provide students who have completed or are currently completing an OCP in an agricultural program, a capstone experience in agriscience education.  Curriculum will align with Common Core State Standards. | |

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| **Explanation of Symbols** | |
| **Symbol** | **Explanation** |
| **\*** | Practical Arts Courses meet the Fine Arts High School Graduation Requirement for students who entered their first year of high school in the 2007-2008 school year and subsequent years due to the statutory changes in the revised high school graduation section of the statute. |