Horticulture II Syllabus Instructor: Gary Nelson Email: <u>gnelson@delsearegional.us</u> Phone: 856-694-0100, Ext. 346

Program Description:

Horticulture II is a five credit elective course for students in grades 10-12. Students must have successfully completed Horticulture I in order to take Horticulture II. This program reinforces the skills, knowledge and experiences taught in Horticulture I. This program places great emphasis on science, math, reading, writing and hands-on skills needed for college bound students or for students interested in entry level positions in the Horticulture industry. This program's main emphasis will be greenhouse plant production, and plant science. Greenhouse plant production will involve growing food crops in Aquaponic and Hydroponic grow systems. This growing technology is considered to be the future of farming. The major units of study will include: fish husbandry, plant morphology, integrated pest and disease management, greenhouse food production, landscape architecture, and Aquaponic/Hydroponic growing technology. Student grades are based on projects, performance, tests, quizzes, homework, classwork, participation in Career Development Events (CDE) and Supervised Agricultural Experience (SAE), teacher observation and marking period assessments. This course will also put an emphasis on preparation for post-secondary education and employment through academic and technical skill integration with the goal of a degree, certificate or credential. Prerequisite: Horticulture I

Students will be able to:

- Identify careers found in the industry
- Explain the purpose of a site analysis sketch
- Describe the three major areas of residential landscape
- Explain the principles of design as applied to the landscape
- Identify plant qualities to be considered when selecting plants
- Lay out a complete residential landscape design plan
- Describe proper landscape bed preparation
- Demonstrate proper planting procedures
- Demonstrate how to properly prune landscape plants
- Determine fertilizer needs
- Describe how to establish turf
- List common turf management practices
- Explain how to control pests in the landscape
- Complete the FFA Chapter Degree Application

- Carry out a Supervised Agriculture Experience Project
- Demonstrate employability skills

9.3 - Career & Technical Education (CTE) - Content Area: 21st Century Life and Careers

9.3.12.AG.1 - Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster

9.3.12.AG.2 - Evaluate the nature and scope of the Agriculture, Food & Natural Career cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy

9.3.12.AG.3 - Examine and summarize the importance of health, safety and environmental management systems in AFNR businesses

9.3.12.AGBIZ.1 - Apply management planning principles in AFNR businesses

9.3.12.AG.FD.3 - Select and process food products for storage, distribution and consumption

9.3.12.AG.PL.3 - Propagate, culture and harvest plants and plant products based on current industry standards

Career Ready Practices:

- CRP1. Act as a responsible and contributing citizen and employee
- CRP2. Apply appropriate academic and technical skills
- CRP3. Attend to personal health and financial well-being
- CRP4. Communicate clearly and effectively and with reason
- CRP5. Consider the environmental, social and economic impacts of decisions
- CRP6. Demonstrate creativity and innovation
- CRP7. Employ valid and reliable research strategies
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them
- CRP9. Model integrity, ethical leadership and effective management
- CRP10. Plan education and career paths aligned to personal goals
- CRP11. Use technology to enhance productivity
- CRP12. Work productively in teams while using cultural global competence