Plant Science

Course Number: 01.46100
Phone: (229)903-2260
Room: 712
Prerequisite: Basic Ag Curriculum and None (1st level)

Instructor: Mr. Farbotko
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Planning: 3rd Period

Plant Science Google Classroom Code: gc6cfiz

FFA Google Classroom Code: dn6hu5i

Course Description:
This course is designed as an introduction for the Horticulture-Plant Science Pathway Program of Study. The course introduces the major concepts of plant and horticulture science. Furthermore, this course introduces students to the scientific theories, principles and practices involved in the production and management of plants for food, feed, fiber and conservation and ornamental use. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Units of Instruction:
Course Standards:

Standard	Description
AFNR-GHPS-1	Demonstrate employability skills required by business and industry
AFNR-GHPS-2	Learns to work safely in the agriculture lab and work sites, demonstrates selected competencies in leadership through the FFA and agricultural industry organizations and initiates their plan for there Supervised and Agricultural Experience Program (SAEP)
AFNR-GHPS-3	Define and explain the importance of plant science
AFNR-GHPS-4	Differentiate between utilizing scientific plant classification
AFNR-GHPS-5	Identify plant parts, growth and reproductive processes
AFNR-GHPS-6	Explain technological advancements in plant development, reproduction and protection
AFNR-GHPS-7	Identify and describe plant nutritional needs based on specific plants (Based on Nursery & Landscape, Floriculture, Sod Production, Forestry Trees and Interior Plants)
AFNR-GHPS-8	Evaluate soil characteristics for production capability (Based on the above)
AFNR-GHPS-9	Diagram the life cycles of plants and explain plant reproduction
AFNR-GHPS-10	Explain the importance of genetics in plant breeding
AFNR-GHPS-11	Analyze the environmental requirements of plants
AFNR-GHPS-12	Explain the uses of plants in medicine, food crops, animal feeds and ornamental applications
AFNR-GHPS-13	Propagate plants using methods ovegetabtive cloning and sexual reproduction
AFNR-GHPS-14	Identify and classify weeds, prescribe control methods and describe the economic and environmental effects that weeds have on agricultural and greenhouse production
AFNR-GHPS-15	Identify, determine control methods and define the environmental and economic impact insects have on plant production
AFNR-GHPS-16	Identify diseases, related organisms and physiological disorders affecting plants prescribe methods of prevention and control
AFNR-GHPS-17	Analyze the water-plant relationship and describe how water and other materials through the plant
AFNR-GHPS-18	Evaluate environmentally controlled plant growth systems
AFNR-GHPS-19	Analyze the effect of plant production on the environment

Student Materials:
Each student is required to have something to write with (pencil, pen, etc.), something to write on (paper), and somewhere to keep items given to you as resources or references for this class (notebook). Students will be encouraged to submit assignments using technology. We have chromebooks available for your use in class, but you are welcome to bring your own technology to use for classwork purposes as well. However, the school is not responsible for lost, stolen, misused, or damaged personal belongings.

All students are required to bring $10 to cover the classroom dues. This fee can be paid through IC or in the front office.

Labs:
Dress appropriately for lab situations (no flip flops, clothes that can't get dirty, etc). I will notify you of labs at least one day in advance so that you may be prepared. Failure to participate in labs will result in a '0' for the lab activity.

9 Weeks Grades will be weighted as follows:

10% Classwork… daily journals, daily grades (worksheets/handouts), minor presentations, minor SAE grades (Teacher Approval Form, SAE Progress Checks), Participation

20% Quizzes

30% Test/Exams

40% Projects/Laboratories… Projects & presentations, laboratories & performance assessments, major SAE grades (Proficiency Application, Presentations, Notebook Checks)

Supervised Agricultural Experience (SAE):
The Supervised Agricultural Experience (SAE) is a project that is state mandated and carried out through the nation. This serves as an opportunity for the student to venture on his/her passion in learning something career related that sparks their personal interests. Each student will develop and plan an SAE project in which they will spend at minimum of 30 hours outside of class completing. We will discuss the SAE in detail during the first few weeks of the school year. Many examples/ideas will be shared during this time. Check point grades will be taken periodically throughout this course to ensure projects are continuously and adequately completed. This is a large portion of the student's grade and will require some parent involvement and supervision. Data is the keyword. This project's objective is to teach students how to keep information and present it in an appropriate manner. SAE paperwork will be made available for you to reference.

- VISIT – The instructor will be available ANY time to come and assist you with your project. Students must sign-up for visitation appointments. Agreement Forms should be signed by the parent and student. The instructor will make visits throughout the year.
- RECORDS – These are to be kept on your projects and will be graded. You must include a minimum of 6 working (student is actively working on the experience) photographs of project work.
- CONTENT – You may choose from a wide array of agriculture experiences for the SAE. However, the teacher and a parent must also approve the projects.
- PRESENTATION – At the end of the semester the student will be required to give a presentation on his/her SAE project.

FFA:
Agriculture Education's student organization is a co-curricular component of Basic Ag. Students will review the history of FFA and the activities, awards, and benefits of being an FFA member. Students are encouraged to participate in all three areas of the Agriculture Education program including classroom instruction, SAE, and FFA membership. Students participating in FFA career development events must be a current member of the FFA chapter. Active participation is strongly encouraged to get the full output of the course.

Professionalism:
Students are to come to class every day to work for the entire time just as if the classroom was a job location. Professional development would include among other things an attitude of teamwork, punctuality, dress appropriate to the work environment, courtesy and respectful language. This portion will be graded in the class participation section of your final grade.