Welcome to Montford Middle School, and to our

**Agriscience FOUNDATIONS/SERVICES** course for 7th/8th graders!

**Objective:** this yearlong elective course continues a variety of subjects that we collectively call “AgriCulture”. **AG Foundations** will cover many topics in agriscience including farming, gardening, landscaping, animal husbandry, food safety, nutrition, natural resources, marketing, research, consumer education, and careers in agriculture. The course will emphasize sustainability, conservation, and the humane treatment of animals. Our students will hands-on participate in organic vegetable gardening, free-range poultry farming, composting, orchard management, culinary arts, groundskeeping and landscaping, and construction projects. Students will:

* Work toward earning an Agriculture Associate AEST industry certification.
* Develop, implement and maintain an SAE (Supervised Agriculture Experience).
* Work independently in teams to learn, practice, and apply course content.
* Learn how to take better care of themselves and the planet.
* Research what plants and animals need in order to grow and become healthful foods.
* Plan, design, build, and maintain the class gardens, pathways, and animal enclosures.
* Process, preserve, and prepare recipes using garden and orchard harvests.
* Market their own produce, canned goods, and recipes to teachers and families for fundraising.
* Keep a ledger of costs and proceeds in order to raise money for additional materials.
* Utilize local knowledge and the web to learn about current events, restorative agriculture and best management practices, ethnobotany, and safety/sustainability in everyday products.
* Get outside in all kinds of weather to dig, draw, measure, haul stuff around the schoolyard, and build, plant, weed, harvest, and maintain the gardens.
* Learn to identify native, invasive, and edible wild plants and ID garden pests vs. protectors.
* Create safe, inviting spaces to welcome pollinators, beneficial insects, and other wild things.
* Enjoy the fun and empowerment of being both a problem identifier and problem solver!

**Students SHOULD take this class if they:**

* Like to collaborate in teams to contribute to a positive, cooperative learning environment.
* Enjoy getting dirty outdoors and working physically hard.
* Can be counted on to work safely and independently while waiting their “turn at the wheel”.

**Students should NOT take this class if they:**

* Can’t stand getting their shoes, hands, or clothes dirty.
* Hate being around insects, sweat, pollen, and covering a lot of physical territory.
* Do not like to clean, organize, carry, take care of equipment, and keep careful inventory.

**Special Safety Concerns:** BEES, WASPS, ANTS, POLLEN, MOLD, EGGS, NUTS, GLUTEN, LATEX… please email me directly with health concerns about allergies, so we can plan carefully for the safety of your child in a classroom environment with many of these triggers unavoidablypresent.

**Required Materials:** by Monday 19 August, all AG students must provide:

* A **lined composition book** (NO SPIRALS!)
	+ What, no spirals? They just don’t work in our indoor/outdoor setting.
	+ This “LogBook” will be used to record daily tasks, design projects, take and keep notes for the final exam, and record garden observations. It is crucial to success in this class.
	+ LogBooks remain in our classroom for taking notes and assessments. They may be checked out when reviewing for major tests.
* A **pocket folder** to keep homework and home-to-school communications in (can be the same folder you keep all your other classes homework in your binder).
* A **pencil**, everyday😊

**Suggested Materials (not required):**items students might appreciate keeping in our classroom cubbies. Must be kept in a 1 GAL FREEZER BAG (except shoes). Label the bag AND each item with the student's name and Ag class period in permanent ink!

* **gardening gloves**
* a **sun-hat**, water bottle (sun-screen? some days they will be outside 45 minutes)
* garden **Crocs** or rubber slip-on shoes that will dry quickly (we don’t have room for boots!)

**Grading Policy:**

* **Participation 20%:** averaged bi-weekly and uploaded to FOCUS on Tuesdays. Bi-weekly participation grades consist of the following categories with the acronym **FARM**:
	+ - 25% **F**arm **F**amilies cooperate with table teams, classmates, and teacher
		- 25% **A**re **A**ctively engaged in assignments
		- 25% **R**each learning goals and complete projects,
		- 25% **M**anage **M**aterials safely, uses and stores them as demonstrated
* **Assessments 70%:** quizzes, unit tests, LogBook and vocabulary checks, hands-on projects such as following a recipe, designing a garden plot, research projects.
* **Final Exam 10%:** like all high school credit classes, Agriculture has a final exam that covers ALL the material for the whole year. Keeping careful notes, reviewing, and practicing for the exam will ensure your grade is not brought down by a low score. Passing the exam also earns industry certification for Associate in Agriculture Systems.
* **Late work:** assignments and assessments turned in late are discounted 25% EACH DAY after their due date. Students must notify me with a LATE FORM email (in CANVAS) when they have late-submitted work for me to grade, otherwise I will not know to grade it!

**Absences:** due date extensions for excused absences will apply per school rules.

**Missing Work:** if a "Z" shows in Focus, it is the student's responsibility to notify me BY EMAIL so I can go back and grade the assignment then enter it in Focus during my next grading opportunity.  Use the “Late Form” found in Canvas when emailing me at fains@leonschools.net.

**Entering Grades:** I enter grades on Tuesday evenings.  There is no time during our school day when I can do this.  Please keep this in mind when you turn in an assignment late, and be patient:)

**Citizenship Grades:** MMS believes that citizenship is a vital part of the educational experience.

A student who earns a **4 (Outstanding)** in citizenship consistently exhibits the following behaviors:

• Sets an example by coming to class prepared to work with a good attitude and all materials

• Uses agenda book effectively for daily and long-term planning

• Works to foster a sense of community by respecting all viewpoints

• Volunteers to assist teachers and classmates

A student who earns a **3 (Satisfactory)** in citizenship consistently exhibits the following behaviors:

• Demonstrates responsibility by coming to class prepared with class materials

• Uses agenda book effectively for daily planning

• Maintains a good attitude and helps classmates when asked by the teacher

• Respects and cooperates with others during small-group activities.

A student who earns a **2 (Needs Improvement)** consistently exhibits the following behaviors:

• Comes to class unprepared on occasion

• Does not use agenda book on a daily basis

• Shows little motivation completing assignments

• Shows disrespect to teacher and classmates at times throughout the grading period

• Disrupts class occasionally and interrupts the learning of others

A student who earns a **1 (Unsatisfactory)** consistently exhibits the following behaviors:

• Frequently comes to class unprepared

• Does not use agenda book on a daily basis

• Shows disrespect to teacher and classmates

• Demonstrates dishonesty by submitting plagiarized assignments

• Disrupts class regularly and interrupts the learning of others

**Class expectations:** safety, responsibility, and respect are of the utmost importance when working independently and using tools and equipment, therefore our class expectations reflect this understanding. Students will:

1. Be on time with all materials, a pencil, and appropriate clothing for our activities.
2. Listen carefully with eyes, ears, and whole body language (i.e. watch demonstrations!).
3. Respect the teacher, each other, all materials and equipment, our workspaces, all living things whether plant or animal, and our school campus.
4. Follow all teacher and presenter directions.
5. Use appropriate language and voices to protect the learning environment.
6. Comply with all school (Code of Conduct) and class **Safety Rules** (see, “**Safety Contract**”).

**First Warning:** non/verbal reminder and redirection by teacher.

* **If Safety Violation:** also removed from activity for remainder of the day\*

 **Second Warning:** student conference and/or class detention and parent contact.

* **If Safety Violation:** also removed from activity for that day and the following day\*

 **Third Warning:** office referral.

* **If Safety Violation:** removed from that activity for remainder of NINE WEEKS\*

\*Students removed from activities for misconduct or Safety Violations will receive 0% for whichever part of **FARM** they failed to comply with for each day they miss activities, plus they will be given a paper-based assignment that must be completed to make-up for whatever activity they will miss due to the violation. Maximum credit students can earn on these alternate assignments is 75%.

**Student Classroom Resources:**

**Textbook**: *Agriscience Foundations*

**Supplemental Resources:**

* AEST (Agriculture Education Services and Technology): https://aest.ag/certify/certifications/agriculture/
* Teacher PowerPoints, notes, handouts, and videos
* Quizlet, Blooket, Kahoot!, Jeopardy, YouTube, Quizzes

**Communication:**

* To contact Ms. Fain: send an email to fains@leonschools.net
* To find course information, assignments, Ppt’s, notes, announcements: log into CANVAS
* To check grades: log into FOCUS

PS: Ms. Fain does not check Canvas, Teams, or Focus for messages, only email 😊

I’m so excited to work with you again in AgriCulture class as a “seasoned” Montford Mustang!

Ms.Fain Jo Sigrid Fain fains@leonschools.net

**Agriscience FOUNDATIONS/SERVICES Course Outline**

**STANDARD 1:**

* Students should be familiar with the history of agriculture including but not limited to technological advancements.
* Students should know the impact that agriculture has on the local, state, national and global economy. This includes statistics related to the number of farmers, how much food farmers produce, careers in agriculture, etc.

**STANDARD 2**

* Students should be able to identify potential accidents in agriculture and know how to prevent accidents through the use of personal safety equipment and clothing.
* Students should know basic pesticide safety information including how to read a Material Safety Data Sheet (MSDS) and how to properly dispose of hazardous waste materials.

**STANDARD 3**

* Students should be able to use common laboratory equipment and employ scientific measurement skills.
* Students should be able to identify the parts/functions of plant and animal cells and describe the phases of cell reproduction.
* Students should be able to carry out agriscience research including interpreting, analyzing and reporting data.
* Students should be familiar with DNA, genetic applications in agriscience and advances in biotechnology.

**STANDARD 4**

* Students should know how different climatic and geological activity influences agriculture.
* Students should be able to describe ecosystems and environmental resources related to agriculture production.
* Students should be able to identify regulatory agencies, apply Best Management Practices and conservation practices related to agriculture and natural resources.

**STANDARD 5**

* Students should know the following concepts related plant science/growth:
	+ Plant categories
	+ Plant parts
	+ Photosynthesis
	+ Respiration
	+ Reproduction
	+ Nutrients required for growth
* Students should able to analyze a fertilizer label.
* Students should be familiar agricultural pests and pest control solutions.

**STANDARD 6**

* Students should know the following concepts related animal science:
	+ Animal categories (use, type, breed, scientific classification)
	+ Terminology
	+ Internal & External anatomy
	+ Animal management
	+ Animal health
	+ Animal safety
* Students should be aware of animal welfare issues.
* Students should know the food, fiber and by-products provided by animals.

**STANDARD 7**

* Students should be able select, service and maintain and use agriscience tools, equipment and instruments.
* Students should know various physical science principals as applied in mechanical applications including but not limited to:
	+ Levers, pulleys, hydraulics, internal combustion
* Students will solve mathematical problem in agriscience including but not limited to:
	+ Distance, area, volume, proportion, percentage

**STANDARD 8**

* Students should know how to develop, implement and maintain an SAE including using a record keeping system.
* Students should have an understanding of oral communication, written communication nonverbal communication and good listening skills.

**STANDARD 9**

* Students should be able to identify and describe leadership characteristics and opportunities to acquire leadership skills.
* Students should be able to conduct meetings using correct parliamentary procedure.
* Students should be aware of opportunities available through the National FFA Organization.