

Agritechnology

Course Syllabus · 2026–2027 School Year

Teacher	Dr. Amy Paterson, Ed.D.	Room	810 (Ag Room)
Email	amy.paterson@ocps.net	Course #	8106820 / 8106830
Chapter Email	winterparkffa@gmail.com	Credit	2.0 credits (Agritechnology 1 & 2, full year)
Website	winterparkffa.org	Program	Builds on Agriscience Foundations 1 — production agriculture pathway
Social Media	Instagram & Facebook: @winterparkffa		

Course Description

Agritechnology builds directly on Agriscience Foundations 1, following Florida's state framework across two courses (Agritechnology 1 and Agritechnology 2). It moves from foundational knowledge into hands-on production agriculture — animal systems, plant production, agricultural mechanics, and agribusiness.

Agritechnology 1

Develops competencies in agriscience industry careers; prevention and treatment of livestock diseases; livestock anatomy; wholesale cuts of meat; animal reproduction and identification; animal safety; animal-health certification; plant growth; plant fertilization; safe use of pesticides; maintenance of tools and equipment; record keeping; and employability skills.

Agritechnology 2

Develops competencies in welding; small gasoline engine service and repair; preventative maintenance procedures; irrigation system repair; refrigeration; new and emerging technologies; financial management skills; and employability skills.

Agritechnology and Animal Science and Services are separate pathways, and students are welcome to take both. The only prerequisite for either pathway is Agriscience Foundations 1.

Within this pathway, Agritechnology 1 is a prerequisite for Agritechnology 2 — courses are taken in order, one per year, not at the same time.

Standards

Agritechnology 1 (8106820) covers standards 09.0–19.0, and Agritechnology 2 (8106830) covers standards 20.0–30.0 — 22 standards total from Florida's CTE Curriculum Framework for this program. The full standards and benchmarks can be looked up by course number at cpalms.org.

Supervised Agricultural Experience (SAE)

Every student in this course develops a Supervised Agricultural Experience — a required part of Florida's agricultural education framework, built on the classroom instruction / FFA / SAE three-circle model. An SAE does not require owning land or animals. Options include:

- Placement — working or volunteering somewhere in an agriculture-related field or role

- Entrepreneurship — starting a small agriculture-related enterprise
- Research or Experimentation — a hands-on agriscience research project
- Exploratory — for students still discovering which area of agriculture interests them

These follow the national SAE for All framework — Foundational SAEs (career exploration, financial planning, workplace safety, employability, and agricultural literacy) that every student builds over their whole time in the program, plus an Immersion SAE like the options above. Learn more at saeforall.org.

We will work together throughout the year to find the right fit for your student.

Industry Certifications

Students in this course have the opportunity to earn a nationally recognized industry certification — a third-party credential that carries weight with employers, counts toward Florida's school grading formula, and strengthens a college or job application.

- AEST Agritechnology Specialist Certification — validates skills in environmental resource conservation and management, plant growth and reproduction, animal systems and livestock management, agricultural mechanics, and agribusiness.
- NOCTI Production Agriculture Certification (hosted on iCEV) — validates knowledge and skills in plant and animal production systems, agricultural mechanics, and agribusiness management.
- NOCTI Welding (Agricultural Science) Certification (hosted on iCEV) — validates welding and metal-fabrication skills as applied in agricultural settings.

Certification testing is administered through the iCEV testing platform.

What Is FFA?

FFA (the National FFA Organization) is a premier leadership organization for students in agricultural education, built around leadership, personal growth, and career success. It isn't separate from this class — it's one of three equal parts of a complete agricultural education, alongside classroom instruction and your SAE.

FFA is student-led and student-driven — members run chapter meetings, plan activities, and hold each other's leadership positions. Adults advise; students lead.

Winter Park FFA is chapter number FL0096.

Want to learn more? Check out these official sites:

- Florida FFA Association — flaffa.org
- National FFA Organization — ffa.org
- ShopFFA (official jackets & gear) — shopffa.org
- SAE for All — saeforall.org

FFA Membership

All students enrolled in this course are members of Winter Park FFA. Every opportunity — Career Development Events (CDEs), Leadership Development Events (LDEs), field trips, and the chance to apply for a chapter officer position — is open to every student, regardless of experience.

FFA is woven into this course, not separate from it. Membership is deliberately low-cost — state dues are just \$10, alongside modest national dues — so cost is as small a barrier as possible. More information is available at winterparkffa.org.



Scan to apply for a chapter officer position — winterparkffa.org/apply

Field Trips

Throughout the year, our chapter may take field trips connected to CDEs, LDEs, and other agricultural opportunities. For any field trip:

- Students are responsible for getting their missing-class documentation signed by each of their teachers. This document is provided along with the field trip paperwork and permission slip at the time of the trip.
- Students are required to make up any work missed in other classes as a result of the field trip.

Upcoming field trip opportunities include:

- Sunbelt Ag Expo (Georgia)
- Florida FFA State Convention — Orlando, June
- Washington Leadership Conference — Washington, D.C., June
- National FFA Convention — Indiana, October

Student Responsibility

As in any high school course, students are expected to advocate for themselves and take ownership of their own success. Specifically, students are responsible for:

- Turning in missing work prior to the final deadline for that grading period.
- Keeping up with their own grades and reaching out with questions before a grade becomes a surprise.
- Communicating with Dr. Paterson about any concerns, conflicts, or circumstances that may affect their work.

Extra Credit

Throughout the year, our chapter plans events for students to get involved in — service projects (at least one every month), community events, and other chapter activities. Students can earn extra credit for their involvement in these events — come participate, and it counts toward your grade.

Classroom Expectations

Our classroom culture is built around the FFA motto:

“Learning to Do, Doing to Learn, Earning to Live, Living to Serve.”

- Learning to Do — come prepared and participate fully in class
- Doing to Learn — engage in hands-on labs and follow all safety procedures
- Earning to Live — act with professionalism and integrity
- Living to Serve — treat classmates and staff with respect, and contribute to our classroom community

Instructional Approach

This class rotates between individual work, small-group work, hands-on activities, outdoor instruction, and traditional in-classroom learning — whichever format best fits the lesson and the standard being taught that day.

Class Procedures

- Be in your seat, binder open, ready to work when the bell rings.
- Follow all posted safety procedures during labs and hands-on activities — no exceptions.
- Keep your binder and scientific notebook organized and up to date; they stay in the classroom.
- Personal electronics are used only when an activity calls for them.
- Raise your hand and wait to be called on during instruction and discussion.

Materials Needed

- 1-inch, 3-ring binder
- Notebook (for a scientific notebook)
- Page protectors
- Colored pencils
- Markers
- Pencils
- Scissors

Binders and notebooks stay in the classroom for the year.

Program Fee

There is no required program fee for this course. Optional items — such as an official FFA jacket — are available separately, and no student is turned away from participating over cost. See winterparkffa.org/parents for details on jackets, fundraising, and our loaner rack.

Contact with Animals, Plants & Food

Throughout the year, hands-on instruction may bring students into contact with live animals — including poultry (chickens, ducks, turkeys), rabbits and caviars (guinea pigs), and sheep and goats — as well as plants and food products used in labs.

Please let Dr. Paterson know if your child has an allergy, and let us know whether an action plan is on file with the school nurse.

Grading Policy

Grades in this course use a points system, similar to a college course — every assignment, lab, assessment, or project is worth a set number of points, and your final grade is the total points earned out of total points possible (not a percentage weighting).

Category	Typical Points
Daily Classwork & Labs	10–25 pts each
Quizzes	20–50 pts each
Tests / Exams	100 pts each
Project-Based Learning	100–200 pts each
Professionalism & Preparedness	5–10 pts per week

Each nine-week grading period includes a minimum of one project-based learning experience — an extended, hands-on project connected to that period's standards, worth a significant share of the points possible that period.

Point values above are typical ranges and may vary by specific assignment; adjust to match your gradebook if it differs.

Attendance & Make-Up Work

Standard OCPS attendance policy applies. Under Florida Statute § 1003.24(2), any day or portion of a day a student misses to participate in an FFA or 4-H sponsored activity must be credited as an excused absence — documentation is available on request. Students have the same number of school days they were absent to complete and submit make-up work.

Assessment Retakes

Students may request to retake a major assessment consistent with OCPS retake policy. Please reach out to Dr. Paterson to discuss the process and timeline for a specific assessment.

Academic Integrity

All work in this course is expected to be a student's own, consistent with the OCPS Student Code of Conduct. Questions about a specific assignment's expectations are always welcome before it's due.

Extra Help & Parent Communication

Dr. Paterson is available in Room 810 before and after school by appointment for extra help. The best way to reach out is by email at amy.paterson@ocps.net. Chapter-wide updates, deadlines, and news are shared through the Wildcat Ag Report newsletter and posted at winterparkffa.org.

Parent volunteers are always welcome and appreciated — all volunteers must be background-check approved through OCPS before assisting with class activities or field trips. If you've volunteered before, please make sure your OCPS volunteer application is renewed for this school year.



Scan to apply or renew your OCPS volunteer application

Acknowledgment

Please sign and return this page to confirm you and your student have reviewed this syllabus together.

Student name: _____ Date: _____

Parent/Guardian signature: _____ Date: _____