

SANTA ROSA JUNIOR COLLEGE
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## SYLLABUS

**AGMEC 50: Agricultural Machinery and Equipment Skills****INSTRUCTOR:** Stuart Schroeder

Office Hours: Fridays 9:30am-10am, 3pm-4pm

Email: [sschroeder@santarosa.edu](mailto:sschroeder@santarosa.edu)

SECTION	DAYS	TIME	ROOM	UNITS
1888	Fridays	10:00 AM – 3:00 PM	CF-RT1	3.0

**CATALOG DESCRIPTION:** This course involves design principles, selection, maintenance, and safe operation of tractors and agricultural equipment. Emphasis will be on proper techniques for the operation and service of common farm implements.

**STUDENT LEARNING OUTCOMES:***Students will be able to:*

1. Select appropriate tractors and equipment for field jobs.
2. Demonstrate safe operation of tractors and common farm implements based on OSHA requirements and recommendations.
3. Perform basic operator level inspection and maintenance of tractors and farm implements.

**STUDENT LEARNING OBJECTIVES:***Upon completion of this course, the student will be able to:*

1. Operate tractors safely and efficiently.
2. Summarize basic tractor operating principles.
3. Recognize and identify the primary tractor parts.
4. Demonstrate proficiency in tractor setup and adjustment.
5. Demonstrate proficiency in attaching equipment to the drawbar, three-point hitch, power take-off shaft, and auxiliary hydraulic outlets.
6. Manage seasonal tractor field operations.
7. Operate specialty equipment safely and efficiently.
8. Diagnose basic operational conditions of equipment.
9. Evaluate service records and set-up appropriate service plans.
10. Perform basic preventive maintenance and repairs.
11. Analyze application requirements for spray, seed, and fertilizer applications.
12. Calculate equipment calibrations for spray, seed, and fertilizer applications and validate application quantity.

**REQUIRED TEXT BOOKS:** Readings will be provided in class and via email.**SUPPLIES REQUIRED:**

- Writing materials
- Appropriate attire for working around farm equipment, i.e. work clothes and closed-toe shoes, hats.
- Safety glasses, ear plugs, and rubber gloves are provided.

**GRADING:** 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; Below 60% = F

**Grading Category Point Values:**

Attendance	170 Points
Participation	200 Points
Midterm Exam	150 Points
Assignments and Quizzes	150 Points
Final Project	150 Points
Final Exam	180 Points
<b>TOTAL</b>	<b>1000 Points</b>

**Grading Category Overview:**

Attendance: Class meets one day per week, so attendance is imperative. Lab time cannot be made up.

Participation: Students are expected to fully engage in all class activities, including lectures, group work, tractor pre-start checks, tractor operation, and any other class activities.

Midterm Exam: A two-part exam in which students will be tested on (1) their fundamental tractor operating skills and (2) their knowledge of important tractor components and controls.

Assignments and Quizzes: Students will be given take-home and in-class assignments and quizzes throughout the semester to help assess student progress.

Final Project: Each student will individually complete a written research project on an agricultural implement or machine that was not discussed in class. Each student will also give a brief presentation of their project to the class.

Final Exam: A two-part exam in which students will be graded on (1) their knowledge of tractor parts and tools related to tractor operation and maintenance and (2) their general knowledge of the theory and practice of agricultural mechanics.

*Final Exam Date: December 21, 7-9:45am. Richard Thomas Classroom, Shone Farm.*

**GENERAL CLASS POLICIES:** It is important that your experience in AgMec 50 is educational, safe, and fun. The following class policies are to ensure that our classroom environment is conducive to student learning.

Each student must be able to access the course Canvas page as this is where course materials, such as assignments and readings, will be available. You will be notified by a Canvas announcement, as well as in class, when new materials are available or when changes have been made to the course Canvas page. All course communication outside of class will be done by email via the SRJC web portal and Canvas. Check your cubby to make sure that your email address on record is correct.

Cell phone use is **not** permitted during class. Distractions are a major safety concern in this class as we work with large and dangerous equipment.

Punctual attendance is important to your success in this class, so please arrive on time. Missing more than 10% of instruction (two classes), may result in you being dropped from the class. Students who do not attend the first day of the class may be automatically dropped. Late assignments will not be accepted (officially documented exceptions include illness or injury, death in immediate family, or college approved activities, all with prior approval).

Every student must abide by the SRJC Student Code of Conduct. In order to preserve the integrity of the academic community, no form of academic dishonesty will be tolerated. For detailed information, please refer to the SRJC policy 3.11 on Academic Integrity and the Student Conduct Code, which is in the SRJC Catalog and part of policy 8.2.8, Student Discipline.

It is essential that we foster a safe and comfortable learning environment for all students. There is no tolerance for disrespectful or discriminatory speech or actions in class.

**ACADEMIC SUPPORT SERVICES:** The following services are available free to all students in order to help insure their academic success. In addition, please let the instructor know of any special needs or concerns you may have as a student early on in the semester.

Service	Location	Phone
College Skills	Analay Village #601	527-4834
Disabilities Resources	3 <sup>rd</sup> Floor, Bertolini Center	527-4278
Tutorial Center	Doyle Library #4251	521-6903
Writing Center	Emeritus Hall #1629	521-7836

**ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:** If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located on the 3rd floor of the Bertolini Student Center on the Santa Rosa campus, and Jacobs Hall on the Petaluma campus.

**IN CASE OF EMERGENCY:** District police can be reached at (707) 527-1000. In the event of an emergency that requires evacuation of the classroom, we will meet safely outside to account for everyone and receive further instructions.

**MORE INFORMATION:** For more information about SRJC student rights and responsibilities, including academic integrity/cheating, complaints/grievances, discrimination, free speech, reporting a student of concern, sexual harassment, student conduct/discipline, student safety, please visit:

<https://studentlife.santarosa.edu/rights-and-responsibilities>.