

# COURSE DESCRIPTIONS

## AG MECHANIZATION

### AGME 1207 AGRICULTURE EQUIPMENT AND TOOLS

**Format:** 1 lecture / 3 lab (2 credit hours)

Introduction to hand tool and shop equipment skills and safety; including application, operation, maintenance, and repair.

**Credits:** 2

**Distribution:** AGME

**Offered:** Fall Only

**Course Fee:** Lab Fee: \$24.00

### AGME 1209 EQUIPMENT REPAIR

**Format:** 1 lecture / 3 lab (2 credit hours)

Introduction to the skills required for maintenance, repair, and renovation of equipment.

**Credits:** 2

**Distribution:** AGME

**Offered:** Spring Only

**Course Fee:** Lab Fee: \$24.00

### AGME 1353 HARVESTING EQUIPMENT

**Format:** 2 lecture / 3 lab (3 credit hours)

Operation and maintenance including adjustment techniques of harvesting equipment.

**Credits:** 3

**Distribution:** AGME

**Offered:** Fall Only

**Course Fee:** Lab Fee: \$24.00

### AGME 1391 SPECIAL TOPICS IN AGRICULTURE MECHANICS

**Format:** 2 lecture / 3 lab (3 credit hours)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology of occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

**Credits:** 3

**Distribution:** AGME

**Offered:** Spring Only

**Course Fee:** Lab Fee: \$24.00

### DEMR 1166 PRACTICUM I

**Format:** (1 credit hour)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 1

**Distribution:** DEMR

**Course Fee:** Lab fee: \$24.00

### DEMR 1191 SPECIAL TOPICS (CSS)

**Format:** (1 credit hour)

Topics addressed will resemble current topics in the field of John Deere Employment. Topics covered include, but are not limited to, skills, knowledge and/or attitudes and behaviors pertinent to the technology or occupation and will be relevant to the professional development of the students. Students taking the course will receive credit for College Success Skills.

**Credits:** 1

**Distribution:** AGME

**Offered:** Fall Only

### DEMR 1225 SMALL AIR-COOLED ENGINES

**Format:** 1 lecture / 3 lab (2 credit hours)

Fundamentals of air-cooled engines including repair and testing. This course includes the theory of operation, diagnosis, repair, pre-delivery procedures, including assembly and adjustment of attachments, and add-on accessories of small power equipment utilized in lawn, turf, garden, and the rental equipment industry. The course includes the safety of both the 2 cycle and 4 cycle engines.

**Credits:** 2  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1229 PREVENTATIVE MAINTENANCE

**Format:** 1 lecture / 3 lab (2 credit hours)  
 An introductory course designed to provide the student with basic knowledge of proper servicing practices. Content includes record keeping and condition of major systems.

**Credits:** 2  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1301 SHOP SAFETY AND PROCEDURES

**Format:** 2 lecture / 3 lab (3 credit hours)  
 A study of shop safety, rules, basic shop tools, and test equipment.

**Credits:** 3  
**Distribution:** DEMR  
**Offered:** Fall Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1323 HEATING, VENTILATION & A/C (HVAC) TROUBLESHOOTING AND REPAIR

**Format:** 2 lecture / 3 lab (3 credit hours)  
 Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs. Refrigerant recovery/recycling and ozone layer protection procedures are emphasized. Students, upon passing the air conditioning certification test, will be granted air conditioning certification.

**Credits:** 3  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1391 SPECIAL TOPICS-DIESEL ENG MECH & REPAIR

**Format:** 2 lecture / 3 lab (3 credit hours)  
 Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

**Credits:** 3  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1405 BASIC ELECTRICAL SYSTEMS

**Format:** 3 lecture / 2 lab (4 credit hours)  
 Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, and batteries.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Fall Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1406 DIESEL ENGINE I

**Format:** 2 lecture / 6 lab (4 credit hours)  
 An introduction to the basic principles of diesel engines and systems.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Fall Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1416 BASIC HYDRAULICS

**Format:** 2 lecture / 6 lab (4 credit hours)  
 Fundamentals of hydraulics including components and related systems. The operation, testing, repair, and adjustment of the hydraulic components is emphasized. Emphasis is placed on the use of technical language, JIC symbols, and safe operation with high pressure oil.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Fall Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1421 POWER TRAIN I

**Format:** 2 lecture / 6 lab (4 credit hours)

Fundamentals, repair, and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Fall Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1449 DIESEL ENGINE II

**Format:** 2 lecture / 6 lab (4 credit hours)

An in-depth coverage of disassembly, repair, identification, evaluation, and reassembly of diesel engines.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 1466 PRACTICUM

**Format** (4 credit hours)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 4  
**Distribution:** DEMR  
**Offered:** Summer Only

## DEMR 2166 PRACTICUM

**Format** (1 credit hour)

Practical, general workplace training supported by an individualized learning plan developed by the employer college and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 1  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 2332 ELECTRONIC CONTROLS

**Format:** 2 lecture / 3 lab (3 credit hours)

Advanced skills in diagnostic and programming techniques of electronic control systems. This course will include Service Advisor Remote and the John Deere link to prepare the student for servicing the computers and programs provided with today's modern agricultural equipment. AMS (Agricultural Management System), GPS, RTK, and PM Pro will be introduced and studied.

**Credits:** 3  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 2335 ADVANCED HYDRAULICS

**Format:** 2 lecture / 3 lab (3 credit hours)

Advanced study of hydraulic systems and components including diagnostics, testing of hydraulic systems and electronics, electro-hydraulic, and computer controlled systems.

**Credits:** 3  
**Distribution:** DEMR  
**Offered:** Spring Only  
**Course Fee:** Lab fee: \$24.00

## DEMR 2338 POWER APPLICATIONS I

**Format:** 2 lecture / 3 lab (3 credit hours)

Advanced power train applications with emphasis on testing and evaluation of components.

**Credits:** 3

**Distribution:** DEMR

**Offered:** Spring Only

**Course Fee:** Lab fee: \$24.00

## DEMR 2339 ADVANCED ELECTRICAL SYSTEMS

**Format:** 2 lecture / 3 lab (3 credit hours)

A continuation of basic electrical systems to include lighting, computer controls, and accessories. Emphasis on diagnosis, testing, and repair using the various diagnostic tools and procedures for current electronic systems.

**Credits:** 3

**Distribution:** DEMR

**Offered:** Spring Only

**Course Fee:** Lab fee: \$24.00

## HYDR 1305 BASIC HYDRAULICS

**Format:** 2 lecture / 2 lab (3 credit hours)

Fundamentals of hydraulics including safety types of hydraulic pumps, cylinders, valves, motors, and related systems. Introduction to hydraulic schematic symbols as related to components.

**Credits:** 3

**Distribution:** HYDR

**Course Fee:** Lab fee: \$24.00

## SMER 1166 PRACTICUM I

**Format:** (1 credit hour)

Practical, general workplace training supported by an individualized learning plan developed by the employer college and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 1

**Distribution:** SMER

## SMER 1291 SMALL ENGINE MECHANIC & REPAIR

**Format:** 1 lecture / 3 lab (2 credit hours)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

**Credits:** 2

**Distribution:** SMER

**Offered:** Spring Only

**Course Fee:** Lab fee: \$24.00

## SMER 1391 SPECIAL TOPICS IN SMALL ENGINE MECHANIC & REPAIR

**Format:** 2 lecture / 3 lab (3 credit hours)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

**Credits:** 3

**Distribution:** SMER

**Offered:** Spring Only

**Course Fee:** Lab fee: \$24.00

## SMER 1466 PRACTICUM II

**Format:** (4 credit hours)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 4

**Distribution:** SMER

**Offered:** Summer Only

## SMER 2166 PRACTICUM III

**Format:** (1 credit hour)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The college, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

**Credits:** 1

**Distribution:** SMER

**Offered:** Spring Only

## **SMER 2337 ADVANCED EQUIPMENT SERVICE**

**Format:** 2 lecture / 3 lab (3 credit hours)

Advanced study in areas of specialization in marine units, motorcycles, all-terrain vehicles, or outdoor power equipment.

**Credits:** 3

**Distribution:** SMER

**Offered:** Fall Only

**Course Fee:** Lab fee: \$24.00

Navarro College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate and baccalaureate degrees. Navarro College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Navarro College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on [SACSCOC's website](#).