

**NRM 132 Course Outline as of Fall 2019****CATALOG INFORMATION**

Dept and Nbr: NRM 132 Title: CHAINSAW OPER/CARE

Full Title: Chainsaw Safe Operation and Care

Last Reviewed: 1/28/2019

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0.50	Lecture Scheduled	0.25	17.5	Lecture Scheduled	4.38
Minimum	0.50	Lab Scheduled	0.75	1	Lab Scheduled	13.13
		Contact DHR	0		Contact DHR	0
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 8.75

Total Student Learning Hours: 26.25

Title 5 Category: AA Degree Applicable

Grading: P/NP Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: NRM 204

**Catalog Description:**

The proper operation, maintenance, and care of chainsaws.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: The proper operation, maintenance, and care of chainsaws. (P/NP Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

**ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

**AS Degree: Area**  
**CSU GE: Transfer Area**

Effective: Inactive:  
Effective: Inactive:

**IGETC: Transfer Area**

Effective: Inactive:

**CSU Transfer:** Effective:

Inactive:

**UC Transfer:** Effective:

Inactive:

**CID:**

**Certificate/Major Applicable:**  
Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Comprehend and employ all safety measures related to chainsaw operation and maintenance.
2. Be aware of and recognize hazardous field situations when operating a chainsaw.

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Perform basic maintenance and trouble-shooting procedures for chainsaw power units.
2. Perform basic maintenance and trouble-shooting procedures for chainsaw electrical systems.
3. Perform basic maintenance and trouble-shooting procedures for chainsaw bar and chains.

### **Topics and Scope:**

- I. Safety Procedures of Chainsaw Operation and Maintenance
  - A. Recognition of hazardous field situations
  - B. Importance of proper equipment maintenance
  - C. Importance of proper safety gear and clothing
  - D. Implementation of proper falling and bucking techniques
  - E. Evaluation of personal factors in chainsaw operation
- II. Saw and Chain Nomenclature
  - A. Two-cycle gas engine theory
  - B. Power system size designation-displacement/horsepower
  - C. Gas and electrical systems
  - D. Bar and chain types and sizes
- III Chainsaw Field Operational Techniques and Procedures\*
  - A. Proper falling and bucking techniques
  - B. Recognition of potential hazardous field situations
  - C. Field maintenance and chain sharpening
  - D. Use of axes and wedges in tree falling and bucking
- IV. Bench Maintenance Procedures
  - A. Power unit and fuel system maintenance
  - B. Spark plug and electrical system maintenance
  - C. Chain and bar maintenance
- V. Purchasing a Chainsaw
  - A. Evaluating overall needs and matching equipment with the job

- B. Comparing individual features of different makes and models
- C. Evaluation of maintenance features of different makes and models
- D. Evaluation of operational features of different makes and models

\*Lab only

**Assignment:**

Lecture-Related Assignments:

1. Reading assignments of approximately fifty pages total
2. Written safety exam

Lab-Related Assignments:

1. Field demonstration of proper operational and safety techniques
2. Demonstration of proper bar and chain maintenance techniques

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving  
0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Chainsaw use demonstration, field work

Skill Demonstrations  
50 - 70%

**Exams:** All forms of formal testing, other than skill performance exams.

Safety exam: Multiple choice, True/false, Matching items, Completion, Short essay questions

Exams  
30 - 50%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Instructor prepared materials.

