#### NRM 132 Course Outline as of Fall 2014

## **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	<b>S</b>	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0.50	Lecture Scheduled	0.50	17.5	Lecture Scheduled	8.75
Minimum	0.50	Lab Scheduled	0.50	1	Lab Scheduled	8.75
		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: 17.50 Total Student Learning Hours: 35.00

Title 5 Category: AA Degree Applicable

Grading: Grade 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. (Grade 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 Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## **Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

## **Outcomes and Objectives:**

Upon completion of this course, students will 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

# **Assignment:**

- 1. Reading assignments of approximately fifty pages total.
- 2. Written safety exam.
- 3. Field demonstration of proper operational and safety techniques.
- 4. 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.