**Auburn University**

**Syllabus**

1. Course Number: CTCT 2100

Course Title: Power Equipment Technology

Credit Hours: 3 semester hours (Lab 3).

Prerequisites: None

Corequisites: None

2. Term: Summer 2019

**Day/Time:** Class Hours: M-F

Lab Hours:

**Instructor:** Christian Stanley

Graduate Assistant

Auburn University

Meredith Hall

Graduate Assistant

Auburn University

Office Address: Faculty Office: 5060 Haley

Contact Information: Phone: 812-677-2646

Email: cls0120@auburn.edu

jrl0039@auburn.edu

Office Hours: By Appointment

3. Text and Major Resources:

No Text

This course will require the use of Canvas. Canvas can be accessed from the Auburn University website through AU Access.

**4. Course Description:** Small engines are internal combustion engines which convert one form of energy to another form of energy. This course will discuss the theoretical and practical concepts associated with small engine maintenance, repair, overhaul, identification, and systems diagnostics.

**5. Course Objectives:**

Upon completion of this course, students will be able to project themselves as competent, committed, and reflective professionals through their ability to:

1. Apply the principles of internal combustion engines to the operation, disassembly, re-assembly and operation of small engines. (290-3-3-.24-1.a.4)
2. Distinguish between the operation, principles, and applications of 2 stroke and 4 stroke internal combustion engines in agricultural situations.
3. Describe and apply theories of engine operation for internal combustion engines.

4. Perform routine adjustments and preventive maintenance activities to internal combustion engines and power equipment (machinery). (290-3-3-.24-1.a.4) (290-3-3.24-1.b.4)

5. Diagnose typical internal combustion engine malfunctions.

6. Select and use appropriate tools in internal combustion engine maintenance.

**6. Course Content:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Session#** | **Course Topic** | **Readings** | **Assignment** |
| Week One | Introductions and Course Expectations | Syllabus |  |
| Week Two | Safety and Basic Engine Operations |  | Engine Worksheet |
| Week Three | Engine Operation/Maintenance |  | Engine Operation Practicum |
| Week Four | Diagnosing Common Engine Issues |  | Engine Issues Practicum |
| Week Five-  Week Eight | Project Based Learning/Briggs and Stratton Plant Tour |  | Engines Project |

**7. Course Requirements**

1. Attend all class sessions and participate in all class discussions and lab exercises.
2. Complete a mid-term examination.
3. Complete a comprehensive final examination.
4. Complete all laboratory exercises.

**Rubrics and Grading Scale:**

|  |  |  |
| --- | --- | --- |
| **Graded Activity** |  | **Total points available** |
| Quizzes |  | 20 |
| Comprehensive Final Exam  Laboratory Exercises/Attendance | Total Points Available | 15  65  100 |

The following grading scale will be used:

|  |  |
| --- | --- |
| 90 - 100 % | A |
| 80% - 89.9% | B |
| 70% - 79.9% | C |
| 60% - 69.9% | D |
| Below 60% | F |

**8. Class Policy Statements:**

Participation: Students are expected to participate in all class discussions and participate in all exercises. Assignments are due on announced dates. Unexcused late assignments are unacceptable. It is the student’s responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work. Students must satisfy all course objectives to pass the course.

Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:

* Engage in responsible and ethical professional practices
* Contribute to collaborative learning communities
* Demonstrate a commitment to diversity
* Model and nurture intellectual vitality

**Excused Absences**:  Students are granted excused absences from class for the following reasons:  Illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for University classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays.  Students who wish to have an excused absence from this class for any other reason must contact the instructor in advance of the absence to request permission.  The instructor will weigh the merits of the request and render a decision.When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence.  Appropriate documentation for all excused absences is required.  Please see the [*Student Policy eHandbook*](http://www.auburn.edu/student_info/student_policies/) for more information on excused absences (http://www.auburn.edu/student\_info/student\_policies/).

**Make-Up Policy:**Arrangement to make up missed major examination (e.g. hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week from the end of the period of the excused absences.  Except in unusual circumstances, such as continued absence of the student or the advent of University holidays, a make-up exam will take place within two weeks from the time that the student initiates arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.  The format of the make-up exam will be (as specified by instructor).

Course contingency: If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, and addendum to your syllabus and/or course assignments will replace the original materials.

**9. Academic Honesty Statement:**

All portions of the Auburn University student academic honesty code (Title XII) found in the [*Student Policy eHandbook*](http://www.auburn.edu/student_info/student_policies/)will apply to this class.  All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**10. Students with Disabilities Statement:**

“Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).”