I. Instructor Information
Name: Michael Slater
Office: 302B LRS
Telephone: 501-812-2285
Office hours: 7:15-8:30AM Monday-Thursday, 9:00-10:00 Friday
Mailbox location: LRS 103
Email: mslater@uaptc.edu

II. Catalog Description
A study of the maintenance and repair of brakes, clutches, hydraulics, steering assemblies and accessory equipment for lawn and garden equipment. Practical application is provided in the laboratory. Safety is emphasized. 3 lecture hours, 3 lab hours. (4 credit hours/special course fee)

III. Course Resources
Required Text books:
YARD & GARDEN TRACTOR (1990 & LATER), 2002, CLYMER
ISBN: 9780872887923

SMALL GAS ENGINES, 11TH Edition, Roth, Fisher, Gauthier, G-W
ISBN: 9781631263903

Required Items:
Safety glasses
Side shields if wearing prescription glasses
Hearing protection (disposable ok)
Multimeter (DVOM preferred)
Work shoes (oil resistant sole necessary and steel toe preferred, NO tennis shoes, or sneakers)
Work clothes (no shorts or tank tops)
Pen or pencil
Notebook or paper

Optional:
Small flashlight
Mechanics gloves
Nitrile gloves
IV. Institutional Learning Outcomes
UA-PTC supports a college-wide institutional learning assessment program which concerns effective instructional methods and promotes student learning achievement by assessing:

1. Communication
2. Critical Thinking
3. Cultural Awareness
4. Information Literacy
5. Professionalism
6. Quantitative Literacy
7. Technology Literacy

For more information, please consult the following website:
http://www.pulaskitech.edu/sla/mission.asp

V. Department/Program Learning Outcomes
The Power Sports/Equipment Technology Program, consistent with the College's mission and the Division's objectives, encourages the success of its students in all technical fields and academic disciplines by promoting:

1. Apply safe work practices in a manner compatible with OSHA requirements and power sports/equipment technology industry expectations.
2. Select specialized tools and equipment for use in power sports/equipment maintenance, diagnostics, and repair.
3. Identify functional relationships among power sports/equipment components and systems.
4. Interpret service manuals and schematics.
5. Apply basic principles of service and repair to power sports/equipment.
6. Identify, troubleshoot, diagnose, and solve mechanical equipment/engine problems associated with power sports/equipment applications.
7. Apply preventative maintenance concepts to power sports/equipment care and storage.

VI. Course Outcomes
1. Students gain knowledge to become employable as a Power Sports/Equipment technicians.
2. Students are able to repair their own power sports/power equipment.
VII. Attendance Policy
Agencies granting financial assistance may be notified of the violation of the attendance policy by students receiving financial aid.

Attendance is taken starting the first day of the semester, with the exception of students who enroll after classes have started. Teachers have the right to count students as absent if they arrive late to class, leave class early, or go in and out of the classroom during class time. Teachers have the right to lower a student’s grade based on excessive absences.

Any student who misses two consecutive weeks of class may be administratively withdrawn from the class.

Any student who does not come to class within the first two weeks of class will be considered a “no show” according to the campus attendance policy and will be reported as such and dropped from the class.

Teachers have the right to enforce UA-PTC’s administrative drop policy for days of consecutive nonattendance. Such particulars as determined by the instructor are detailed in the paragraph below.

Students may miss a maximum of six (6) days of class. Once six (6) days have been exceeded, the student will be administratively dropped.

Other attendance policies are addressed in the UA-Pulaski Technical College (UA-PTC) Academic Catalog.

Roll will be called at the beginning of class. Any person not answering roll will be counted absent. Students can have absences changed to tardy if instructor is notified as soon as student arrives.

Tardy is defined as a student who is not seated when roll is called.

Two tardies equals one absence.

If a student misses more than half of class, it will be counted as an absence.

Leaving class early will be counted the same as a tardy.

Military duty and jury duty are the ONLY excused absences.

VIII. Classroom and Lab Policies
The UA-PTC Catalogue rules and regulations will be enforced in this class at all times.

Please consult the following website for more information: http://www.pulaskitech.edu/admission/web_catalog/

Professional behavior is required. Punctual attendance and intelligent participation are expected. Particulars as determined by the instructor are detailed in the paragraph below.
Students who participate in any type of misconduct; acting rude, foul language, being disrespectful towards others, insubordination, horseplay, or any other reason listed, may be asked to leave for the remainder of the class. Depending on the nature of the misconduct, student services, and/or the police may be notified.

All students must obtain a UA-Pulaski Technical College Student ID. You will be dropped from the Power Sports/Equipment Program if you have not obtained your ID by the beginning of class of the fourth week of the semester.

Cell phones will NOT be used in the class room unless the instructor tells you to do so.

There will be NO SLEEPING in the classroom or lab.

There will be no horseplay in the classroom, lab, or outside.

Racism, sexiest remarks or actions, profanity will not be tolerated.

Trash, dry sweep, rags, and recyclables will be placed in the appropriate container.

Students will wear eye protection while in the lab. No exceptions.

Students will utilize proper PPE while using equipment and tools.

Cell phones may be used in the lab to photograph work being done. No personal use.

No open toe shoes, shorts, or tank tops allowed. Be prepared to get dirty every day.

Students will not wear clothing in a manner that allows their underwear to be seen. If so, they will remedy the problem, or be dismissed from class.

No inappropriate clothing is allowed.

If any student is involved in an accident requiring assistance (for example, getting something in their eyes and needing assistance to the eye wash station), everyone is expected to give assistance. If any student refuses to assist anyone who is injured, that student will be dismissed and will leave campus for the remainder of the day.

All accidents will be reported to the instructor immediately and will have an incident report filed.

If a tool or piece of equipment is found to be broken, not operating properly, or breaks, it will be brought to the instructors attention so it can be replaced and taken out of circulation.

All students will be required to work in the tool room.

If any tool or equipment leaves the tool room, it will be signed for.
All students are required to put tools and equipment back in their designated locations after use.

All students are required to sweep and clean up their work area daily.

No dependents or significant others are allowed in the classroom or lab at any time.

Appropriate behavior is expected for all communications, including any notes, email messages, or telephone conversations. Some guidelines for communication are included in this syllabus to help you.

IX. Grading
Letter grades will be based on the following scale:

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% to 100%</td>
<td>A</td>
</tr>
<tr>
<td>80% to 89%</td>
<td>B</td>
</tr>
<tr>
<td>70% to 79%</td>
<td>C</td>
</tr>
<tr>
<td>60% to 69%</td>
<td>D</td>
</tr>
<tr>
<td>0% to 59%</td>
<td>F</td>
</tr>
</tbody>
</table>

There are 900 possible points for this class broken down as follows:

700 points for six tests, including the final.
30 points for homework.
170 points for daily activities, participation in class and lab, conducting yourself in an appropriate manner.

If a student is absent on a test day, they may make up the test the next time the class meets, however, the maximum score possible will be 70%. If the student refuses to take the makeup test the next time the class meets, there will be no other chances and the student will receive a zero (0) for that test.

Note, the safety tests MUST be passed with a score of 100%. The safety tests are online and self-paced. Students will have until 29 January to pass the safety tests. If a student has not passed all safety tests with a 100% pass rate by 29 January, the student will be dropped from the Power Sports/Equipment Technology program.

Please note that your first attempt on the safety test finals will be used as your grade score.
Online Safety Test: 100 points  
Test II: 100 points  
Test III: 100 points  
Test IV: 100 points  
Test V: 100 points  
Final: 200 points  
Class Participation: 170 points  
Homework: 30 points  
Total Class: 900 points possible

X. Academic Integrity
It is expected that all students who attend UA-PTC conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The UA-PTC catalogue states, “The gaining of knowledge and the practice of honesty go hand-in-hand.”

The catalogue also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy can be found in the UA-PTC code of conduct.

XI. Accommodation Policy
Services for Students with Disabilities: UA-PTC is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Coordinator of Disability Services in Counseling Services (501-812-2220 or www.pulaskitech.edu) prior to the semester of planned enrollment, and must provide recent documentation of medical, educational, and/or psychological records.

Students who need accommodations should inform the instructor at the beginning of the course. Accommodations will only be provided if the instructor receives a letter of approved accommodations from the Coordinator of Disability Services. Failure to provide sufficient notification may result in a delay of services.

XII. Sexual Misconduct
No person at UA-Pulaski Technical College will, on the basis of gender, be excluded from participation in, be denied benefits of, or be subjected to sex discrimination, sexual harassment or sexual misconduct under any education program or activity. All college administrative policies and procedures regarding sex discrimination, sexual harassment, and sexual misconduct are in compliance with Title IX. Students who feel they are victims of sexual misconduct should contact the UA-PTC Title IX Deputy Coordinator for Students:
Michelle Anderson, Dean of Students
Campus Center Building Room 212
501-812-2756
manderson@pulaskitech.edu

Additional information, including the UA-PTC sexual assault policy, procedures, and resources may be found online at http://www.pulaskitech.edu/sexual_misconduct_awareness/.

XIII. Course Evaluations
Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.

XIV. Information Literacy
UA-PTC is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives.
## XV. Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School policies, shop policies, safety videos. Shop safety: proper equipment operation, tool identification and proper usage. Safety Data Sheets (SDS), Hazardous Materials.</td>
</tr>
<tr>
<td>2</td>
<td>Introduction: Discuss common types of outdoor power equipment (OPE) and attachments. Discuss basic maintenance procedures. Discuss service/shop manuals, online resources. Write basic work orders for equipment. Students complete online safety test.</td>
</tr>
<tr>
<td>3</td>
<td>Decks and Blades: Remove mower deck. Identify components, inspect, remove and replace a spindle. Remove, sharpen, balance and reinstall blades. Remove, inspect, and reinstall deck belt.</td>
</tr>
<tr>
<td>4</td>
<td>Continuation of week 4. <strong>Test.</strong></td>
</tr>
<tr>
<td>5</td>
<td>Electrical Systems: Identify components, test and troubleshoot using schematics/wiring diagrams and DVOM. Repair and replace components/wiring as needed. Charge, test, service battery.</td>
</tr>
<tr>
<td>6</td>
<td>Electromagnetic PTO Clutches: Diagnose, troubleshoot, remove, test, and replace PTO clutch.</td>
</tr>
<tr>
<td>7</td>
<td>Safety Interlock System: Locate, identify, troubleshoot, test, diagnoses, remove, replace, and adjust components as necessary.</td>
</tr>
<tr>
<td>8</td>
<td>Continuation of week 8. <strong>Test.</strong> (includes weeks 6, 7, 8, and 9)</td>
</tr>
<tr>
<td>9</td>
<td>Tires and Rims: Remove tire assembly from equipment. Remove tire from rim. Patch as needed. Reinstall tire on rim, inflate, test for leaks, reinstall on equipment. Also will cover plugging tires.</td>
</tr>
<tr>
<td>10</td>
<td>Spring Break</td>
</tr>
<tr>
<td>12</td>
<td>Continuation of week 11. <strong>Test</strong></td>
</tr>
<tr>
<td>13</td>
<td>Basic Hydraulic Theory: Discuss basic principles of hydraulics, hydraulic force theory, basic system components, fluid flow in simple hydraulics, examples of hydraulic fluids used in OPE.</td>
</tr>
<tr>
<td>14</td>
<td>Hydraulic Systems &amp; Maintenance: Discuss components, systems, safety rules when working with hydraulics. Discuss testing procedures, equipment needed and corrective procedures for hydraulic system problems. <strong>Test</strong> includes weeks 13 and 14.</td>
</tr>
<tr>
<td>15</td>
<td>Brakes: Inspect, remove, replace, and adjust brake system components as needed.</td>
</tr>
</tbody>
</table>
Continuation of week 15.

**Final Exam Schedule:** *To be posted*

**Disclaimer:** This schedule is a guide for the semester. The instructor reserves the right to amend the schedule as necessary.
XVI Course Agreement Form

Read, complete, and return to instructor:

I have read the course syllabus for Mike Slater’s Lawn and Garden Equipment Fundamentals class at UA-Pulaski Technical College, and I understand its content. I also understand the rules for the class, and I will follow and abide by these rules, including those relating to attendance, assignments, grading criteria, plagiarism, and behavior.

Semester _____________

Date _________________

Print name _________________________________

Signature _________________________________

Email address ______________________________
(please use your UA-PTC email address)

Telephone _________________________________
Student Drug Testing Administrative Rule of UA-PTC Student Acknowledgement

Please initial each statement

__________ I acknowledge that I have received a copy of the Student Drug Testing Administrative Rule of UA-PTC and understand that I will be subject to random drug testing during this term.

__________ I understand that a positive drug screen will result in being dropped from all classes referenced in the Administrative Student Drug Testing Rule and from this program of study.

__________ I understand there will be no tuition or fee refunds for courses that are dropped as a result of the drug screening process and if I receive financial aid, it may be affected.

__________ I understand that if I am selected for a random drug screen and am absent on the day of screening, I may not return to class without evidence I have completed a drug screening and will be held to the attendance policy of the course.

Printed Name

Signature

Program

Today's Date
Student Drug Testing Administrative Rule

Monday August 21, 2017

I. PURPOSE

University of Arkansas Pulaski Technical College has an obligation to provide a safe learning environment for students. UA-PTC offers various programs that require students to work with and around hazardous equipment with the potential to cause severe injury or death. UA-PTC also offers allied health programs that require direct patient care. Students in these shop areas and patient care areas must be attentive and focused on their actions, as well as other students around them. Students with impaired or delayed reaction time, loss of concentration, or impaired decision making are a hazard to others. Students that are impaired due to prescription medications or illicit drug use pose a serious risk. The purpose of this policy is to promote safety and prevent a potential safety risk to others. This Drug Screening Program shall not be used for law enforcement purposes.

Areas of concern are Air Conditioning and Refrigeration, Automotive, Collision Repair, Diesel, Machining, Outdoor Performance Equipment and Welding.

- Air Conditioning students use shears, oxy/acetylene torches and high pressure refrigerants.
- Automotive and Diesel students use automotive and heavy lifts, tire machines and brake lathes.
- Collision Repair students use automotive lifts and frame alignment equipment.
- Machine Shop students operate milling machines, lathes, and high temperature heat treatment ovens.
- Outdoor Performance Equipment students use a dynamometer.
- Welding students are required to shear half inch steel plate using hydraulic metal sheers, operate hand-held abrasive grinders and cut off wheels, and high-frequency welders.
- Areas of concern in the allied health programs are anesthesia technology, occupational therapy assistant, radiography, respiratory therapy, licensed practical nursing, and dental assisting.

II. POLICY

A. Technical and Industrial Programs

In providing a safe learning environment, UA-PTC realizes that students who are impaired due to prescription medications or illicit drug use are a danger to others. Therefore, certain technical programs cited below will participate in a drug screening
program. Students eligible for acceptance into the technical programs listed in this rule are required to have a drug screen completed before admission to the program. All enrolled students in these specified programs will participate in a random drug screen program at UA-PTC. Applicants/students who have a positive drug screen will be denied entry.

Results or specimens submitted that have been determined to be altered by the student shall result in administrative dismissal from the program by the appropriate dean. Students refusing to submit for drug screenings will be dismissed from the program. The normal refund policy of the campus will apply and students may reapply for entry at a later date.

Students who are taking a current medically prescribed drug that can alter behavior, physical ability or mental function in such a way that their ability to safely perform his/her assigned tasks, must report the use of this drug to the Vice President for Learning who will determine whether any action should be taken.

Students who do not successfully pass the drug test may re-test and apply to the program the following semester or at a later date.

This policy is for enrollment in the following programs:

- Air Conditioning and Refrigeration
- Automotive
- Collision Repair
- Diesel
- Machining
- Outdoor Performance Equipment
- Welding

Specific courses affected are those with the following course abbreviations: ACR, AST, CRT, DTM, MST, POW, WLD

B. Allied Health Programs

Accreditation standards and partner requirements have determined that this drug policy also applies to the following Allied Health Programs:

- Anesthesia Technology
- Occupational Therapy Assistant
- Radiography
- Respiratory Therapy
- Licensed Practical Nursing
- Dental Assisting
However, this policy outlines only the minimum requirements of medical partners. Stricter, more rigid requirements may apply in some cases.

III. PROCEDURES

A. INITIAL ENROLLMENT:

Students applying for the programs cited in this policy are responsible for obtaining their own drug screening through a vendor approved by the college or, in the case of some allied health programs, through a partner healthcare provider. Outcomes of the testing are considered confidential and will be managed accordingly.

1. The test result shall be forwarded directly, by the lab, to both the admissions office and the division office of the program of study.
2. The Admissions Office will take action on student’s enrollment according to policy and inform the student of negative results of student testing.
3. The student will receive a copy of the test results from the administering laboratory.
4. Students may appeal the results of the tests to the Medical Review Officer of the administering laboratory.

B. INCUMBENT STUDENTS:

Random screens will be coordinated by the deans of the affected areas and will be conducted at a minimum of once per year.

1. UA-PTC will contract with a reputable vendor to provide an on-site screening laboratory.
2. All students enrolled in the cited programs will be included in a random sample.
3. Each semester two (2) designated administrators will randomly select the predetermined number of currently enrolled students to be tested.
4. An administrator will then locate the students selected and notify the dean and the instructors of the students.
5. On the appropriate day, the instructors of the selected students will privately notify the students that they have one (1) clock hour to report to the designated campus location and provide the specimen; the student is required to comply. The instructor fills in the notification time on the Student Random Drug Screen Notification Form and, along with selected student, signs the form. The original is submitted to the appropriate program dean, and the student is given a copy to take to the drug screening.
6. Students must have the laboratory sign their time of arrival on their notification form and return it to the dean. The student will also sign specimen custody and control forms.
7. The test result shall be forwarded directly, by the lab, to the office of the appropriate dean. Students with a positive drug screen will be dropped from the program.
C. CONFIDENTIALITY

1. All reports submitted and received will be kept strictly confidential.
2. No information from reports will be revealed to any other person except those whose duty requires him/her to have this information.
3. Reported information can be used only as outlined in this policy and for no other purposes unless directed by court order.
4. Information obtained through this policy will not be transferred to other institutions.
5. Pulaski Technical College will abide by HIPPA regulations throughout this process.
6. No information regarding screening outcomes shall be released to law enforcement.

IV. FORMS

A. Student Random Drug Screen Notification Form

B. Vendor Forms for Specimen Custody and Control