

AUTO 1020 Basic Shop Practices - Fasteners and Job Management Syllabus

Instructor and Class Information

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| Instructor Name | Shane Schmidt |
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| Phone | 308-324-4691 |
| Office Location | Lexington High School Skills Armory – 302 South Washington St. |
| Office Hours | 7:10 a.m. – 3:45 p.m. Monday - Friday |

Additional Instructor Information

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|-------------------|-----------|
| Start Date | 1/3/2024 |
| End Date | 5/21/2024 |

Course Information

Course Description

Students will learn safety practices using various shop equipment, including hand tools, special tools, measuring tools, fire equipment, fasteners, and references materials needed in every day shop activity.

Homework Expectations: For each hour of classroom time, typically you can expect one hour of homework per week.

Purpose/Goals

The goals of this course are to introduce the necessary safety practices needed to make the shop a safe place to work.

To introduce the student to the manual and electronic information available to them and how to properly use the information systems.

The student will become acquainted with the procedures involved with everyday operations of shop activities.

Target Population

Students who are interested in obtaining an Associate of Applied Science Degree, one year diploma, and certificates.

Pre/Corequisites

Prerequisite AUTO 1000 - Basic Shop Practices

Textbooks

Textbook and workbook will be given to students at the beginning of the year. Students will be responsible for textbook and workbook care and return at the end of course.

Learner Supplies

Pen

Notebook

Safety glasses (optional – no tinted safety glasses allowed)

School issued device

Grading Information

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|--------|----|-------|----|-------|----|
| 98-100 | A+ | 85-89 | B | 74-76 | D+ |
| 93-97 | A | 82-84 | C+ | 70-73 | D |
| 90-92 | B+ | 77-81 | C | <70 | F |

Instructor Grading Information

The student will be graded on their attendance, ability to work with others on projects, participation in class, workbook assignments, tests, and quizzes.

Shop – 55%

Tests – 25%

Workbooks/Quizzes – 20%

All late work will be 50% off and 1 point off every day after due date.

Semester Final Grading

1st Quarter – 45% / 2nd Quarter – 45% / 1st Semester Final – 10%

3rd Quarter – 45% / 4th Quarter – 45% / 2nd Semester Final – 10%

Course Competencies

1. Review information using electronic service information.

Learning Objectives

- 1.a. Navigate electronic service information.
- 1.b. Identify Internet technician forums and repair sites.
- 1.c. Differentiate between technical service bulletins, safety campaigns, and repair information.

Criteria

Performance will meet expectations when the student:

- 1.1. uses service information to find necessary information for vehicle repair.
- 1.2. identifies a proper vehicle inside service information.
- 1.3. uses service information to identify vehicle repair steps.

2. Identify the different types of fasteners.

Learning Objectives

- 2.a. Indicate the use of fasteners in specific applications.
- 2.b. Identify the grade markings of threaded fasteners.

Criteria

Performance will meet expectations when the student:

- 2.1. classifies characteristics of fasteners on a written exam.
- 2.2. selects and installs the proper fastener for a component.
- 2.3. identifies fasteners based on hardness, length, and thread pitch.

3. Compare standard and metric fasteners.

Learning Objectives

- 3.a. Identify the differences between standard and metric fasteners.
- 3.b. Identify metric and standard fasteners by their length, size, and grade.

Criteria

Performance will meet expectations when the student:

- 3.1. identifies fasteners.
- 3.2. recognizes fasteners by using grade markings and thread pitch.
- 3.3. classifies fasteners by their dimensions.

4. Explain proper use of a torque wrench.

Learning Objectives

- 4.a. Identify the different types of torque wrenches.
- 4.b. Demonstrate the proper procedure in using a torque wrench.

Criteria

Performance will meet expectations when the student:

- 4.1. explains proper set up, calibration, and use of a torque wrench.
- 4.2. uses a torque wrench to properly tighten a fastener.
- 4.3. implements service information to find proper torque specifications.

5. Demonstrate vehicle preventative maintenance procedures.

Learning Objectives

- 5.a. Demonstrate vehicle preventive maintenance.
- 5.b. Demonstrate vehicle inspections.

Criteria

Performance will meet expectations when the student:

- 5.1. verifies operation of instrument panel gauges and warning/indicator lights; reset maintenance indicators.
- 5.2. inspects, services, or replaces air filters, filter housings, and intake duct work.
- 5.3. inspects condition of exhaust system hangers, brackets, clamps, and heat shields; repairs or replaces as needed.
- 5.4. inspects, replaces, and adjusts drive belts, tensioners, and pulleys; checks pulley and belt alignment.
- 5.5. performs engine oil and filter change.
- 5.6. checks fluid level in a transmission or a transaxle equipped with and without a dip-stick.
- 5.7. rotates tires according to manufacturer's recommendations.
- 5.8. verifies windshield wiper and washer operation, replaces wiper blades.

6. Document customer concerns and repair work.

Learning Objectives

- 6.a. Explain the three C's (concern, cause, and correction).
- 6.b. Illustrate work order completion.

Criteria

- 6.1. identifies information needed and the service requested on a repair order.
- 6.2. completes work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction.
- 6.3. reviews vehicle service history.
- 6.4. demonstrates use of the three C's (concern, cause, and correction).

Students are expected to:

1. Turn in their work for grading and evaluation.
2. Correctly attempt the citations of all sources of information and ideas.
3. Read the Academic Integrity Procedure and sign manually or electronically to acknowledge they have read and understand this procedure.

Instructors are expected to:

1. Clearly discuss and communicate a procedure about academic integrity to students and ensure that students have read and signed this procedure.
2. Reduce opportunities for dishonesty through vigilant exam security and proctoring, and give clear instructions for homework and projects.
3. Be fair when evaluating information that may indicate a student has violated academic integrity.

Violations of Academic Integrity Behaviors that violate the fundamental values of academic integrity may include, but are not limited to:

A. Plagiarism: Presenting the written, published, or creative work of another as the student's own work. Whenever the student uses wording, arguments, data, design, etc., belonging to someone else in a paper, report, oral presentation, or other assignment, the student must make this fact explicitly clear by correctly

citing the appropriate references or sources. The student must fully indicate the extent to which any part or parts of the project are attributed to others. The student must also provide citations for paraphrased materials.

The following are examples of plagiarism:

1. Copying another student's assignment, computer program, or examination with or without permission from the author.
2. Copying another student's computer program and changing only minor items such as logic, variable names, or labels.
3. Copying or paraphrasing material from an Internet or written source without proper citation.
4. Copying words and then changing them a little, even if the student gives the source. Paraphrasing is still plagiaristic if one doesn't cite the paraphrased source.
5. Verbatim copying without using quotation marks, even if the source is cited.
6. Expressing in the student's own words someone else's ideas without giving proper credit.
7. Submitting a purchased or downloaded paper or other materials to be used to meet part or all of course requirements.
8. Using visual images such as photos, diagrams, charts, graphs, and Power Points, or audio such as music, speech, or sounds without proper citation.

B. Unauthorized Collaboration: Completing someone else's work, having someone else complete one's work, completing an assignment or examination with the other students, or turning in work that is identical or very similar to others' work. This may also include excessively relying upon and borrowing the ideas and work of others in a group effort. A student who is not sure what might constitute unauthorized collaboration should check with his/her individual instructor.

C. Multiple Submissions: Submitting substantial portions of the same academic work for credit in more than one class (or to the same class if the student repeats a course) without permission of the instructors.

D. Cheating on Examinations: Gathering unauthorized information before or during an examination from others, using notes or other unapproved aids, such as the use of a smart phone to call up a website, during an examination, failing to observe the rules governing the conduct of examinations (for example, continuing to work on an examination after time is called at the end of an examination), or having another student take an examination for the student.

E. Fabricating Information: Making up references for a bibliography, falsifying laboratory or research data (for example, tampering with experimental data to obtain "desired" results or creating results for experiments that were not done), or using a false excuse for an absence.

F. Helping Another Person Cheat: Providing information about an examination to another student (for example, sending an electronic message with answers during an examination), giving unauthorized help on assignments, or failing to prevent misuse of work by others (for example, allowing another student to copy an examination, assignment, or computer program). A student must take reasonable care that examination answers are not seen by others or that assignments or projects are not plagiarized or otherwise misused by others. This category also includes taking an examination on behalf of another student.

G. Unauthorized Advance Access to Examinations: Obtaining an advance copy of an examination without the instructor's permission or getting questions and answers from someone who took the examination earlier.

H. Academic Sabotage: Changing or damaging computer files, papers or other academic products that belong to others. Stealing or defacing books, journals, or any Lexington High School property. Intentionally destroying or obstructing another student's work.

I. Fraudulently Altering Academic Records: Altering graded papers, computer material/records, course withdrawal slips, or academic documents. This includes forging an instructor or adviser signature and altering transcripts.

These behaviors may subject the student to disciplinary action including receiving a failing grade on an assignment, examination, or course.

Please see the school calendar for scheduled student days: 2022-2023 LPS School Year Calendar is available at <https://www.lexschools.org/calendar/>