

**HIBBING COMMUNITY COLLEGE
COURSE OUTLINE**

COURSE TITLE & NUMBER: ASES 1020: General Service Shop
CREDITS: 2 (0 Lec / 68 Lab)
PREREQUISITES: Instructor approval.

CATALOG DESCRIPTION:

General Service Shop introduces the student to basic shop practices and concepts. Shop safety will be stressed. Automotive maintenance will be introduced.

OUTLINE OF MAJOR CONTENT AREAS:

- I. Shop safety
 - A. Personal safety
 - B. Fire safety
 - C. Shop safety
- II. Tools
 - A. Hand Tools
 - B. Power Tools
- III. Shop equipment
 - A. Hydraulic jacks
 - B. Lifts
 - C. Specialty equipment
- IV. Automotive maintenance

COURSE GOALS/OBJECTIVES/OUTCOMES:

Students will

- 1. define shop safety.
- 2. identify fire hazards.
- 3. identify slip hazards.
- 4. perform spill clean-up.
- 5. perform proper recycling of wastes.
- 6. maintain safe working areas.
- 7. inspect and maintain shop equipment.
- 8. demonstrate proper personal safety items.
- 9. identify fire extinguisher type and uses.
- 10. identify proper tool usage and safety.
- 11. demonstrate proper usage of hydraulic jacks and jack stands.
- 12. demonstrate proper usage of vehicle lifts.
- 13. identify SAE fasteners.
- 14. identify metric fasteners.
- 15. explain fastener strength.
- 16. properly use a torque wrench.
- 17. service engine oil and filter.

18. perform vehicle inspection.
19. service transmission.
20. replace drive belts.
21. service air filter.
22. rotate tires.
23. replace lighting devices.
24. repair exhaust components.
25. flush cooling system.
26. identify vehicle components.
27. explain vehicle components.
28. explain vehicle maintenance schedules.
29. clean shop/work areas.
30. act professional.
31. identify proper belt size and type..
32. analyze belt wear or fatigue, need to replace.
33. discuss tire size and ratings.
34. replace broken lug stud and lug nut.
35. discuss oil grades and ratings.
36. replace compartment air filter.
37. measure brake lining wear.
38. identify proper fluid levels.
39. mount and balance tires, measure road force and wheel runout.
40. analyze tire change and determine repair action.
41. repair tire using proper procedures.
42. explain vehicle labeling & identification using VIN, RPO label, VELI label, & vehicle loading label.
43. TPMS systems precautions & relearning procedure.

MNTC GOALS AND COMPETENCIES MET:

N/A

HCC COMPETENCIES MET :

Thinking Working Productively & Cooperatively

Communicating Clearly & Effectively

Creatively & Critically

**STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS
SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.**

**SPECIAL INFORMATION: (SPECIAL FEES, DIRECTIVES ON HAZARDOUS
MATERIALS, ETC.)**

AASC APPROVAL DATE: December 18, 2013
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REVIEW DATE: December 2018

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