SYLLABUS

DATE OF LAST REVIEW: 07/22/14
CIP CODE: 47.0106
SEMESTER: Departmental Syllabus
COURSE TITLE: Dishwashers - Domestic/Professional/Commercial
COURSE NUMBER: MAPR0220
CREDIT HOURS: 3
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: Departmental Syllabus
EMAIL: Departmental Syllabus
KCKCC-issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES: None

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, http://www.kckccbookstore.com for the required text for your particular class.

COURSE DESCRIPTION:
This course teaches the student to use safe and correct procedures, to disassemble, identify components, explain operation, diagnose, repair and reassemble several types of dishwashers, as well as to identify controls, explain their operation, and identify common repair problems with dishwashers. Customer service, repair order write-up, service and parts manual usage, parts ordering and follow through will be discussed and practiced. Upon successful completion of this course, the student should be able to utilize, on-line, and parts ordering software. This course will teach invoice accounting, parts labeling, retail price calculation, packaging and parts distribution systems.
METHOD OF INSTRUCTION: A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:

I. Domestic Dishwasher Systems
   A. Installation
   B. Wash/Drain Motors
   C. Control Circuit boards
   D. Water inlet/drainage
   E. Spray arms
   F. Soap Dispensing
   G. Door Seal Systems
   H. General Maintenance

II. Commercial Dishwasher System.
    A. Installation
    B. Wash/Drain/Conveyor Motors
    C. Control Circuit Boards
    D. Water Inlet/Draining
    E. Spray Arms
    F. Soap Dispensing
    G. General Maintenance

III. Schematics
    A. Domestic Dishwashers
    B. Commercial Dishwashers

IV. Introducing Parts Research and Ordering Systems
    A. Parts are critical
    B. Accuracy
    C. Pictorial Diagrams
    D. Names/Numbers can change
    E. On-line Research
    F. Parts Manuals/Microfiche
    G. Inventory Management
    H. Worksheet Parts list
    I. Manuals

V. Competency Evaluations

EXPECTED LEARNER OUTCOMES:
A. The student should be able to diagnose electrical failures of load and power passing devices.
B. The student should be able to disassemble and reassemble various makes and models of dishwashers
C. The student should be able to remove and replace motors, switches, touch pads, and control circuit boards, and water pumps.
D. The student should be able to understand soil removal/wash ability.
E. The student should be able to install and uninstall built-in dishwashers.
F. The student should be able to interpret appliance parts manuals.
G. The student should be able to maintain Access database of shop stock parts.
H. The student should be able to navigate on-line web based parts research/ordering software.
I. The student should be able to label parts received and distribute replacement parts to live work.
J. The student should be able to interpret parts distributor invoice, and backorder status.

COURSE COMPETENCIES:

The student should be able to diagnose electrical failures of load and power passing devices.

1. The student should be able to diagnose electrical failures of drive motors.
2. The student should be able to diagnose electrical failures of control circuit boards.
3. The student should be able to diagnose electrical failures of water pumps.
4. The student should be able to diagnose electrical failures of water valves.
5. The student should be able to diagnose electrical failures of supply voltage.
6. The student should be able to diagnose electrical failures of timers.
7. The student should be able to diagnose electrical failures of program switches.
8. The student should be able to diagnose electrical failures of door switches.
9. The student should be able to diagnose electrical failures of drain valves.

The student should be able to disassemble and reassemble various makes and models of dishwashers.

10. The student should be able to disassemble and reassemble portable dishwasher.
11. The student should be able to disassemble and reassemble built-in dishwasher.
12. The student should be able to disassemble and reassemble professional dishwasher.
13. The student should be able to disassemble and reassemble commercial dishwasher.

The student should be able to remove and replace motors, switches, touch pads, control circuit boards, and water pumps.

14. The student should be able to remove and replace drive motors.
15. The student should be able to remove and replace control circuit boards.
16. The student should be able to remove and replace water pumps.
17. The student should be able to remove and replace water valves.
18. The student should be able to remove and replace timers.
19. The student should be able to remove and replace program switches.
20. The student should be able to remove and replace door switches.
21. The student should be able to remove and replace drain valves.
22. The student should be able to remove and replace soap dispensers.
23. The student should be able to understand soil removal/wash ability.

24. The student should be able to install and uninstall build in dishwashers.

25. The student should be able to observe safe practices.

26. The student should be able to protect floor surfaces.

27. The student should be able to disconnect and reconnect water supply.

28. The student should be able to disconnect and reconnects water drain hose.

29. The student should be able to secure unit to cabinet.

30. The student should be able to interpret appliance parts manuals

31. The student should be able to accurately determine part numbers by drawing reference number.

32. The student should be able to maintain Access database of shop stock parts.

33. The student should be able to utilize Microsoft Access program to add to and expend Shop parts inventory.

34. The student should be able to acquire part numbers utilizing On-line assets provided via the internet.

35. The student should be able to label parts received and distribute replacement parts to live work.

36. The student should be able to identify dealer vs. retail pricing

37. The student should be able to calculate prices based on markup percentages.

ASSESSMENT OF LEARNER OUTCOMES: Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.
Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center in Rm. 3354 or call (913) 288-7670.