SYLLABUS

DATE OF LAST REVIEW: 04/01/2015

CIP CODE: 47.0106

SEMESTER: Departmental Syllabus

COURSE TITLE: Cooking Equipment Residential and Commercial

COURSE NUMBER: MAPR0210

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.

PREREQUISITE(S): None

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

COURSE DESCRIPTION:
Obtain an understanding of the process of heat transfer from the heat source through the food product and the importance of accurate heat control. This course will teach proper gas/electrical connecting, gas ignition systems, temperature/electrical controls, disassembly, oven calibration, proper flame adjustment, self clean functions and sealed surface burner service. 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. Gas Cooking Systems
   A. Ignition types
   B. Burners Sealed Gas
   C. Temperature Control
   D. Control Circuit boards
   E. Door systems
   F. General Maintenance
   G. Electric Range Systems
II. Cooking Equipment Types
   A. Conventional Range
   B. Ceran Tops
   C. Sealed gas burners
   D. Induction
   E. Gas Ovens
   F. Electric Ovens
   G. Commercial Ovens
III. Temperature Control devices
   A. Infinite Switch
   B. Thermal cut out
   C. Thermostat
   D. Thermister
IV. Control Circuit Board
   A. Relay
   B. Transformer
   C. Power in
   D. Power out
V. General Maintenance
   A. Clean Ceran Surface
   B. Clean Conventional surface
   C. Cleaning sealed gas burner
   D. Self-Cleaning ovens
VI. Schematics
   A. Gas Ranges
   B. Electric Ranges
   C. Wall Ovens
   D. Commercial Ovens
VII. Introducing Parts Research and Ordering Systems
   A. Parts are critical
   B. Accuracy
   C. Pictorial Diagrams
   D. Names/Numbers can change
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 cooking equipment.
C. The student should be able to remove and replace, switches, touch pads, and control circuit boards, heating elements, and sealed burners.
D. The student should be able to calibrate temperature controls.
E. The student should be able to install and uninstall freestanding, drop-in, and cook top ranges.
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 control circuit boards.
2. The student should be able to diagnose electrical failures of power relay boards.
3. The student should be able to diagnose electrical failures of clock timers.
4. The student should be able to diagnose electrical failures of door switches.
5. The student should be able to diagnose electrical failures of bake and broil elements.
6. The student should be able to diagnose electrical failures of surface elements.
7. The student should be able to diagnose electrical failures of ignition modules.
8. The student should be able to diagnose electrical failures of ignition switches.
9. The student should be able to diagnose electrical failures of hot surface igniters.
10. The student should be able to diagnose electrical failures of self-clean latch switch.

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

11. The student should be able to disassemble and reassemble cook-top gas.
The student should be able to disassemble and reassemble cook-top electrical.

13. The student should be able to disassemble and reassemble free standing range.

14. The student should be able to disassemble and reassemble free standing Ceran top

15. The student should be able to disassemble and reassemble drop-in range

16. The student should be able to disassemble and reassemble cook-top induction.

17. The student should be able to disassemble and reassemble Commercial ranges and combination ovens.

The student should be able to remove and replace switches, touch pads, and control circuit boards, heating elements, and sealed burners.

18. The student should be able to remove and replace control circuit boards

19. The student should be able to remove and replace power relay boards

20. The student should be able to remove and replace clock timers

21. The student should be able to remove and replace door switches

22. The student should be able to remove and replace bake and broil elements

23. The student should be able to remove and replace surface elements

24. The student should be able to remove and replace ignition modules

25. The student should be able to remove and replace ignition Switches

26. The student should be able to remove and replace hot surface igniters

27. The student should be able to remove and replace self-clean latch switch

The student should be able to calibrate temperature controls.

28. The student should be able to accurately measures/calculates oven average temperature.

The student should be able to install and uninstall freestanding Ranges and Wall ovens.

29. The student should be able to observes floor care procedures

30. The student should be able to disconnect and reconnect gas lines without leakage.

31. The student should be able to disconnect and reconnect electrical power properly.

The student should be able to interpret appliance parts manuals

32. The student should be able to identify specific parts and components as provided by a mechanical drawing.

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

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

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

The student should be able to navigate on-line web based parts research/ordering software

35. The student should be able to acquire part numbers utilizing On-line assets provided via the internet.
The student should be able to label parts received and distribute replacement parts to live work.

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

The student should be able to interpret parts distributor invoice, and backorder status.

37. The student should be able to report part status accurately bases on invoice information.
38. The student should be able to identify dealer vs. retail pricing
39. 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 Academic Resource Center in Rm. 3354 or call (913) 288-7670.