J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: ETR 214                Credits: 2

Course Title: Advanced Circuits and New Devices

Course Description (including lecture hours, lab hours, total contacts)
Includes lectures and demonstrations on the latest developments in electronics. Lecture 2 hours per week.

General Course Purpose
This course is a required course in the Electronics Technology Career Studies Certificate program. It will be used to present current developments in consumer electronics technology.

Course Prerequisites/Corequisites (Entry-level competencies required for enrollment)
Prerequisite: ETR 113 or equivalent; co-requisite: ETR 203 or equivalent.

Course Objectives
Upon completing the course, the student will be able to:
   a. identify and discuss recent developments in consumer electronics technology.
   b. describe applications of recent electronics technology developments for residential and commercial use.
   c. discuss advantages, disadvantages, tradeoffs and relative costs of utilizing various electronics technology and systems developments.

Major Topics to be Included
The course will cover one or more of the following topics:
   a. Home entertainment systems
   b. Wireless communication systems
   c. Hand-held devices
   d. Stand-alone microcomputer systems, laptops and tablets
   e. Communications networks
   f. Entertainment and office communications media systems
   g. Other pertinent topics as appropriate

Effective Date of Course Content Summary: May 2009