CABLING TECHNIQUES & APPLICATIONS
Course Syllabus

Course Number: RAPA-0185
OCAS Code: None
Course Length: 45 Hours
Career Cluster: Arts, A/V Technology & Communications
Career Pathway: Audio & Video Technology
Career Major(s): Cinematography & Recording Arts Production Assistant

Pre-requisite(s):
The course covers basic cabling techniques.

Textbooks:
Modern Recording Techniques by David Miles Huber and Robert E. Runstein, Focal Press (2005)
Pro Tools, Version 8, DigiDesign (2009)

Course Objectives:

A. Identify and Demonstrate Basic Cabling
   1. Discuss different cable types.
   2. Define input/output.
   3. Describe line-level.
   4. Describe mic-preamp.
   5. Describe amplified level.
   6. Define balanced versus unbalanced.
   7. Identify ground loops.
   8. Discuss phase.

B. Describe and Demonstrate Effects and Their Applications
   1. Explain compressor/limiters.
   2. Demonstrate flangers.
   3. Demonstrate chorus.
   4. Demonstrate wah.
   5. Demonstrate equalizers.
   6. Demonstrate delay.
   7. Demonstrate reverb.
   8. Demonstrate envelope.
   10. Demonstrate distortion.
   11. Compare stomp boxes and rack mount effects.
   12. Discuss effects of sequential order.

C. Identify Methods of Wiring Speakers
   1. Explain wiring in series.
   2. Explain wiring in parallel.
   3. Define resistance (ohms).
   4. Identify method of determining proper amplifier power rating.
   5. Demonstrate wire gauges.
6. Discuss crossovers.

All unmarked objectives are TTC instructor developed.

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
   2. Each course must be passed with seventy (70%) percent or better.
   3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.