

# Minnesota State College Southeast

## BIRT 2110: Brasswind Repair II

### A. COURSE DESCRIPTION

Credits: 5

Lecture Hours/Week: 2

Lab Hours/Week: 6

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Using the trombone as focus, the student will learn aspects of handslide repair including tube straightening, dent removal, crook repair and installation, and tube installation. Bell section repairs will include alignment, crook dent removal, and gooseneck and flare repairs. The student will also be introduced to piston brass casing, valve and thread repairs. Machine tool operation, aspects of a safe work environment as well as instrument inspection, repair and invoicing are also included. Grading is based on project evaluation and written tests. (Prerequisites: BIRT1110 & BIRT1125 or field experience commensurate with course content as determined by the instructor) (5 Credits: 2 lecture/3 lab)

**B. COURSE EFFECTIVE DATES:** 09/29/1998 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Applying common brass instrument maintenance
2. Applying common brass instrument repairs
  - a. Specific to trombones
  - b. Specialized skills such as piston, casing and thread repairs
3. Parts manufacture
4. Tool manufacture

### D. LEARNING OUTCOMES (General)

1. Using the trombone as focus, the student will learn
  - a. Shop safety
  - b. Evaluation of instruments for repair
  - c. Straightening and aligning thin-walled, hard trombone tubing
  - d. Removal of dents throughout the trombone
  - e. Tube replacement, including outer and inner trombone handslide tube
  - f. Polishing, degreasing and spot-finishing techniques
  - g. Instrument evaluation, repair tag/invoicing writing
2. By completing projects on time, following BIR rules and policies regarding tardiness, absences, quiz/exam make-up, by using tools and facilities appropriately and safely, and by interacting with instructors and peers professionally, the student will learn
  - a. Employer expectations related to day-to-day operations
  - b. How to succeed on a bench test
  - c. How to advance in the work place
3. By making tools and parts using bench motors, sanders, grinders and metal lathes the student will learn
  - a. More advanced lathe operation including turning multiple dimensions within one tool/part, cutting off, tool bit honing and grinding
  - b. Machine safety
  - c. Application of machine functions to repair processes

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted