**BIRT 2121: Large Brasswind Repair**

**A. COURSE DESCRIPTION**

Credits: 4  
Lecture Hours/Week: 2  
Lab Hours/Week: 4  
OJT Hours/Week: *.*  
Prerequisites: None  
Corequisites: None  
MnTC Goals: None

The french horn will be used to introduce the student to large brasswind repairs as well as rotary valve stringing, adjustment and bearing work. Dent work will focus on the bell section and mouthpipe. Work on other large brasswinds such as baritone horns and tubas may be included for the advancing student. French horn playing methods, 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 & BIRT2110 or field experience commensurate with course content as determined by instructor) (4 Credits: 2 lecture/2 lab)

**B. COURSE EFFECTIVE DATES:** 03/20/2000 - 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 French horn as focus, the student will learn  
   a. Shop safety  
   b. Evaluation of instruments for repair  
   c. Straightening and aligning French horn mouthpipes, bells, and branch parts  
   d. Removal of dents throughout the French horn  
   e. Parts replacement, including mouthpipes and bells  
   f. Rotary valve adjustments and repairs  
   g. Polishing, degreasing and spot-finishing techniques  
   h. Instrument evaluation, repair tag/invoicing writing  
2. By making tools and parts using bench motors, sanders, grinders and metal lathes the student will learn  
   a. Machine safety  
   b. Application of machine functions to repair processes  
3. 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
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted