Prepared: Dave Holley Approved: Corey Meunier

Course Code: Title	MTF238: BLUEPRINTS AND PATTERNS
Program Number: Name	4051: METAL FABRICATION
Department:	IRONWKR APPR./WELDING RELATED
Semester/Term:	17F
Course Description:	Students are to use skills developed in applied blueprint reading and Advanced Blueprinting classes, to produce a complete drawing package. Drawings to include Assembly, Shop prints, detailed views of each component and field sketches overall material and cutting list. This complete set of drawings will correspond to the individual shop project students are to build in Field Fitting and Layout.
Total Credits:	2
Hours/Week:	2
Total Hours:	30
Prerequisites:	MTF140
Substitutes:	MTF232
Vocational Learning Outcomes (VLO's): **Please refer to program web page for a complete listing of program outcomes where applicable.**	**4051 - METAL FABRICATION** #1. Interpret blueprints and produce basic drawings and bills of materials. #4. Create and use patterns and templates using common layout and measuring tools. #6. Develop project plans relating to component and sub-assembly production. #7. Complete all work in compliance with health and safety legislation and prescribed organizational practices and procedures to ensure safety of self and others. #8. Work responsibly and effectively in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.
Essential Employability Skills (EES):	#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. #2. Respond to written, spoken, or visual messages in a manner that ensures effective communication. #3. Execute mathematical operations accurately. #4. Apply a systematic approach to solve problems. #5. Use a variety of thinking skills to anticipate and solve problems. #10. Manage the use of time and other resources to complete projects.

	#11. Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, D
Other Course Evaluation & Assessment Requirements:	Late hand in penalties will be 10% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances. 2. If a student misses a test/lab he/she must have a valid reason (i.e. medical or family emergency documentation shall be required). In addition, the instructor MUST be notified PRIOR to the test or lab sitting. If this procedure is not followed the student will receive a mark of zero on the test/lab with no make-up option. 3. Re-writes are NOT allowed for any written assignment, quiz or test. 4. Repeats are NOT allowed for any shop test. 5. Course attendance is mandatory. One percent (1 %) per hour will be deducted from the final course grade for unexcused* absence. [Any absence without a written, valid reason will be deemed unexcused.] Valid reasons would include: Doctors note Family Death or Serious Illness supported by a written note.
Evaluation Process and Grading System:	**Evaluation Type** / **Evaluation Weight** Hand in Assignments / 80% Tests / 20%
Course Outcomes and Learning Objectives:	**Course Outcome 1.** Students are to use skills developed in MTF 140 and 200 Blueprinting classes, to produce a complete drawing package. Drawings to include Assembly, Shop prints, Detailed views of each component and field sketches. This complete set of drawings will correspond to the individual shop project students are to build in MTF 236. **Learning Objectives 1.** Field Sketch Potential Elements of the Performance: Produce accurate Field sketch • Transfer dimensions as directed for customer. • Ensure correct sizing and placement • Visualize product is workable • Obtain customers approval Shop Drawings Potential Elements of the Performance: Create workable Shop Drawings • Develop individual orthographic views or each component • Supply detailed views of each for construction • Notes and specifications • Dimensioning • Holes • Threads • Welding symbols • Welding procedures and specifications, notes Assembly Drawing Potential Elements of the Performance:

	Produce Assembly Drawing • Use field sketch, shop drawings and detailed views • Add any revisions required to complete product • List all part numbers and materials are listed.
Date:	Monday, December 18, 2017
	Please refer to the course outline addendum on the Learning Management System for further information.