**KISHWAUKEE COLLEGE SYLLABUS**

**AUTOMATED Fall 2014**

Course Title: Print Reading for Industry

Prerequisite: None

Number of Credits: Two (2), One (1) Hour Lecture/Discussion and Two (2) Hours Lab a Week

Course Number: MT-101 Section 3001

Course Ref. Number: 24380

Classroom Number: A - 1407

Day & Time: Wednesday 6:30 p.m. – 9:15 p.m.

Start & End Date: 08/27/14 – 12/19/14

Mid Term Date: Wednesday 10/15/14, 6:30:00 p.m. – 9:15 p.m.

Final Exam Date: Wednesday 12/17/14, 6:00 p.m. – 7:50 p.m.

Last Withdrawl Date; Monday 21/01/14

Instructors Name: Rick Bunton

Office Location: A - 1426

Office Hours: Wednesday 4:00-6:00

Work Phone: 815-825-2086 x 6084

Home Phone: 815-762-3207

E-mail: richard.bunton@kishwaukeecollege.edu

**Course Description:** Emphasis on analysis and interpretation of drawings applicable to the metal trades. Includes principles of multi-view projection, sections, dimensional characteristics, notes, and specifications. One hour lecture/discussion and two hours lab a week.

**Expected Learner Outcomes:** Given an engineering drawing of an object, the student will:

1. Identify the object, the title block, and change notes.
2. Form a vivid idea of the shape of the object based on the pictorial elements of the drawing.
3. Recognize features represented by various conventional, abstract-symbolic systems.
4. Determine the dimensions and dimensional tolerance of the object and its features.
5. Determine the tolerance imposed by Geometric Dimensioning and Tolerance Symbols.

**Required Texts:** Print Reading for Industry Ninth Edition, Walter C. Brown, Ryan K. Brown, Publisher: The Goodheart-Willcox Company, Inc.

**Required Student Materials:** 2 H pencils, 6 inch steal rule (quick-reading 10ths, aircraft quick-reading 100ths, 32nds and 64ths), and a pad of graph paper. Graph paper can be printed from the internet. I like these two formats.

Standard ¼’ Grids <http://www.printablepaper.net/preview/grid-portrait-letter-4-index>

Isometric ¼” Grids <http://www.printfreegraphpaper.com/gp/i-i-14.pdf>

**Additional Student References:** Machinist’s Ready Reference, C. Weingartner.

**Breakdown of Course Requirements:**

1. Homework: 240 12@20 pts. Each
2. Quizzes: 150 2@75 pts. Each
3. Mid Term: 100
4. Final: 100
5. Participation \_25

615 Total Points

**Final Grade Determination:** Grade reports will not be mailed out. Please check KishSOS, My Student Info, under Academic Profile, Grades, for grade reports.

615 - 554 = A

553 - 492 = B

491 - 430 = C

429 - 369 = D

368 - below = F

**Attendance Policy:** Due to the structure of this class, students will be expected to be on time for every class. Five (5) points for each absence in excess of two (2) will be deducted from the final grade total unless arrangements are made between the instructor and the student prior to the next class meeting.

**Make-up Policy for Tests and Other Course Requirements:**

1. Homework should be turned in on time. Work turned in on time will receive full credit. **Late homework will not be accepted without notifying the instructor prior to class.**
2. Illness or absence due to family trips, medical leave, etc. will be dealt with separately. Makeup assignments/tests not completed due to illness will be accepted for full credit when turned in within a reasonable time frame (the following class meeting), which will be determined on an individual basis.

**Learning Skills Center (A-1300):** Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to <http://www.kishwaukeecollege.edu/go/lsc>. Tutoring is available to all Kishwaukee students free of charge. The Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc.

Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center.

**Withdrawal Policy:** A “W” cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at “MY CLASS SCHEDULE” on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

**INCOMPLETE GRADE** All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an “Incomplete” (I) grade may be given.  Taking an Incomplete is possible only at the instructor's discretion.  To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time.  If the conditions of the contract are not met, an “I” grade may revert to an “F”.

**Class Cancellations:** Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu. or announced by the local radio stations. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at [www.kishwaukeecollege.edu/class\_cancellations](http://www.kishwaukeecollege.edu/class_cancellations). Room changes will be announced in advance whenever possible and posted on the classroom door.

**Emergency Procedures/Safety:** Yellow and red *Emergency Information Flip Charts* are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

**Graduation Requirements for Transfer Students:** All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at [www.kishwaukeecollege.edu/portfolio](http://www.kishwaukeecollege.edu/portfolio).

**Academic Dishonesty:** In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

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**Copyright:**  As a Kishwaukee College Student, you may have software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense

**Assistive Resources Center/Disability Services:** Any student having a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A 317 or at (815) 825-2086 Ext. 3960, (815) 825-9106 (TTY), or send an email to [awilson@kishwaukeecollege.edu](mailto:awilson@kishwaukeecollege.edu). The student’s disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

**RELIGIOUS OBSERVANCES**

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

**Student Email:** Your Kishwaukee College e-mail account will be the only way to receive official notices from the college. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

**COMMUNITY RESOURCES** There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at <http://www.kishwaukeecollege.edu/go/communityresources>

**Tentative Course Outline:**

Week 1, Aug. 27: Unit 1: Prints: The Language of Industry -- Appendix A: Applied Mathematics. -- Sketching

Week 2, Sep. 3: Unit 2: Line Conventions and Lettering. Appendix C: Basic Technical Sketching and Lettering.

Week 3, Sep. 10: Units 3, 4: Title Blocks and Part Lists. Geometric Terms and Construction.

Week 4, Sep. 17: Units 5: Multi-view Drawings. Appendix D: Sketching Pictorial Drawings

Week 5, Sep. 24: Quiz

Week 6, Oct. 1: Units 6, 7, 8: Section Views. Auxiliary Views. Screw Thread Representation.

Week 7, Oct. 8: Units 9, 10: Dimensioning. Tolerancing. Appendix B: Measurement Tools.

Week 8, Oct. 15: Mid Term.

Week 9, Oct. 22: Units 11, 12: Machining Specifications and Drawing Notes. Surface Texture Symbols. Appendix E: Abbreviations and Tables.

Week 10, Oct. 29: Units 13, 14: Geometric Dimensioning and Tolerancing. Drawing Revision Systems.

Week 11, Nov. 5: Units 15, 16: Detail Drawings. Assembly Drawings

Week 12, Nov. 12:: Quiz.

Week 13, Nov. 19: Units 17, 18, 19: Springs and Fasteners in Industrial Prints. Gears, Splines, and Serrations. Cam Diagrams and Prints.

Week 14, Nov. 26: No Class

Week 15, Dec. 3: Units 20, 21, 22: Cam Diagrams and Prints. Plastic Parts. Welding Prints.

Week 16, Dec 10: Unit 23: Instrumentation and Control Drawings.

Week 17, Dec. 17: Final Exam

**Course outline is subject to change.**

This course supports the terminal objectives approved under the Illinois Network for Advanced Manufacturing (INAM) grant for the following Kishwaukee Certificate programs:

#233 Precision Machining Apprentice

#242 Certified Production Tech

#252 Basic Welding Technology

At the successful completion of the above certificates, the student is able to:

1. Utilize effective, safety-enhancing workplace practices in multiple industries.
2. Demonstrate an understanding of quality practices and measurement.
3. Identify basic fundamental of blueprint reading.
4. Determine resources and workflow required of the production process.
5. Document product and process compliance with customer requirements.
6. Recognize potential maintenance problems, issues or concerns with basic production systems.
7. Recognize preventative maintenance indicators to ensure correct operations.
8. Identify different types of basic production and related mechanical principles, mechanical linkages, and production materials.
9. Demonstrate use of basic math skills to facilitate technical competences.
10. Sit for the national Certified Production Technician (MSSC-CPT) exam.

This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or persona use by an individual for non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.