**SOUTH SUBURBAN COLLEGE**

**SOUTH HOLLAND, IL 60473**

**COURSE OUTLINE GUIDE**

**ICCB Course Name and Number** MFG 122 **Semester Hours:** 2

**IAI Number:**

**Curriculum:** MFG.BASIC.MAINT

**Required:** Yes **Elective:** **Replacement for:**

**Contact:** Becky Admave 708-210-5763 [badmave@ssc.edu](mailto:badmave@ssc.edu)

**Course Title: SSC Catalog/ICCB: (36 characters)** Industrial Blue Print Reading I

**Contact Hrs: Lecture -**  2 **Lab -**  **Intern -**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Description of course to appear in catalog: (Include prerequisites, lab fee, etc.)**

Industrial Blueprint Reading I is a course designed to progress logically from an introduction to blueprint reading through a study of the fundamental skills and concepts involved in reading, sketching, and interpreting drawings.

**Description for Schedule: (two sentence maximum)**

* **Pre-requisites:** None
* **Lab Fee:** $0
* **Textbook(s) and other required materials:** (include author, title, publisher, etc.)

Amrein, *Blue Print Reading*, Schoolcraft Publishing ISBN # 978-0522030006

**General objectives of the course:** (8-10 measurable objectives preferred)

At the conclusion of the course, the student will be able to:

1. Differentiate objects in an orthographic drawing.
2. Distinguish elements located within the title block of a detail drawing.
3. Identify gears, bearings, and belt drives on drawings.
4. Recognize types of screw threads from a specification.
5. State the definition of an exploded view.
6. Analyze an assembly drawing, including identifying details, markings, and specific machine parts, and recognizing a compound rest swivel.
7. Describe the components represented by common symbols on hydraulic and pneumatic drawings.
8. Differentiate the components in a simple hydraulic power system.
9. Differentiate the components in a simple pneumatic power system.
10. Indicate different electrical symbols on a drawing.
11. Indicate different types of conduit and cable.
12. Compare and the contract the four kinds of sketches.
13. Identify an isometric sketch.
14. Describe the appearance of a perspective drawing.
15. Demonstrate how to sketch straight lines and curved lines.
16. Summarize the definition of a vanishing point.

**Other Aims of this Course**:

**Topical Outline: (may be on a weekly basis)**

1. Introduction to Blueprints

### Machine Parts

### Machine Drawings

### Sheet Metal Drawings

### Hydraulic and Pneumatic Drawings

### Piping and Plumbing Drawings

### Electrical Drawings

### Air Conditioning and Refrigeration Drawings

### Sketching

**Methods of presentation:** (Include out-of-class requirements such as field trips, etc.)

Lecture, Demonstration, Problem solving, small groups and discussion

**Methods of evaluation:**

Examinations, quizzes, and homework

**Course Requirements**:

**1.** **Materials**:

**2.** **Space Needs**: Classroom

**3.** **Library Holding Needs**: Textbook

**4**. **Instructors:** Does certification criteria require that a full-time faculty member be employed for the program to be accredited? NO.

If yes, would the College need to hire a full-time faculty member for this purpose or is there one already in place.

**5**. **Impact on Enrollment:** Estimate the impact this course will have on enrollment in other courses in the same division or group requirement. Enrollments should complement each other.

**6. Statement of Possible Conflict or Overlap:** Indicate statements of agreement or disagreement of other faculty members or division directors concerning subject matter content of course and its relationship with existing course.

**7. Are you considering this course for the General Education Requirements?**

**Yes []** **No [X]**

**If yes, give rationale why and in what grouping.**

**8. Class Capacity:**What is the expected class capacity for this course? 38

If the capacity is different than standard contractual capacities of 38 lectures and 24 lab size classes, please submit supporting documentation and a rationale for the proposed variation in class size.

.

**9**. **Outcomes Assessment Component:** Provide details of the assessment measures that will be used in this course.

80% of students will successfully complete the course.

**10**. **General Education Objectives: G1, G3, G4, G5, C1, C2, C4, M1**

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 personal use by an individual for  non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.