**SOUTH SUBURBAN COLLEGE**

**SOUTH HOLLAND, IL 60473**

**COURSE OUTLINE GUIDE**

**ICCB Course Name and Number** MFG 121 **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 Safety

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

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

This course provides a basic overview of the concepts of safety in industrial plant situations. Topics include tool and machine safety, fire protection, eye safety, basic electrical safety, ladder safety, and government safety regulations as well as the elements of a good safety program.

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

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

Bolender, *Safety and Health*, Schoolcraft Publishing ISBN # 978-0840083500

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

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

1. Understand both the employer's and employee's rights and obligations for providing and maintaining a safe work environment.
2. Illustrate the elements of a good workplace safety program and the need for such programs.
3. Articulate the need for personal protective equipment and be able to identify the appropriate protective equipment for different safety situations.
4. Identify and describe different types of hazards associated with the workplace and the correct approach for dealing with each type of hazard.
5. Demonstrate an understanding of electrical and fire safety programs.
6. Characterize the most common health hazards, the regulations governing those hazards, and the methods used to control those hazards within the workplace.
7. Generalize the benefits of good safe work practices within the workplace.

**Other Aims of this Course**:

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

1. Introduction to Safety
   1. Responsibilities
   2. Hazard recognition
   3. Accident investigation
   4. Careers in manufacturing and safety
2. Safety Laws
   1. OSHA, The act and related laws
   2. NIOSH and EPA
3. Contractor Safety
   1. Safety regulations
   2. Elements of a contractor safety program
4. Other Safety and Health Regulations
   1. Construction, shipbuilding, DOT, etc.
5. Personal Protective Equipment
   1. Introduction
   2. Types of PPE
   3. Engineering controls
6. Chemical Safety
   1. Physical hazards
   2. Health Hazards
   3. Exposure routes
7. Tool Safety
   1. Hand tools
   2. Power tools
8. Safety Materials Handling
   1. Causes of injuries
   2. Material handling hazards
   3. Material handling tools
9. Machine Safety
   1. Machine guards
   2. Other safety devices
10. Electrical Safety
    1. Electricity
    2. Electrical injuries
11. Electrical Protection
    1. Grounding
    2. Fuses and breakers
    3. Hazards
12. Fire Protection
    1. Chemistry of fire
    2. The fire experience
    3. Basic fire protection
13. Health Protection
    1. Health hazards
    2. The work environment
14. Safe Work Practices
    1. Housekeeping
    2. Walking and work surfaces
    3. Tools
    4. Other hazards

**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.

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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**

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