I. **TITLE**: MANUFACTURING PROCESSES AND MATERIALS

II. **CATALOG DESCRIPTION**:  
Study of manufacturing processes and materials as they apply to contemporary industrial products.

III. **PURPOSE**:  
The purpose of this course will be to develop knowledge of industrial materials and the processes used in the manufacturing of contemporary industrial products.

IV. **COURSE OBJECTIVES**:  
As a result of this course, each student will:  

**General Objectives:**  
A. Develop an understanding of basic processes used in the production and fabrication of industrial products.  
B. Familiarize students with the safe operation of the range of tools and equipment in industrial materials processing operations.  
C. Develop an understanding of the properties and characteristics of those materials commonly used in industry.  

**Specific Objectives:**  
A. To be able to execute a range of basic industrial processes on woods, metals, plastics.  
B. To be able to apply principles of research and development to modify and design processes for new applications.  
C. To be able to select the most efficient processes for selected industrial applications.  
D. To be able to select materials for their proper use in industrial application.  
E. To be able to use finishing or coating processes in each of the materials areas.  
F. Know and apply the proper safety rules and procedures for basic industrial processes on woods, metals, plastics.

V. **CONTENT OUTLINE**:  

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Industrial Materials</td>
</tr>
<tr>
<td>2</td>
<td>Metal Forming Fundamentals</td>
</tr>
<tr>
<td>3</td>
<td>Hot Working Processes</td>
</tr>
<tr>
<td>4</td>
<td>Metal Separation Processes</td>
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<tr>
<td>5</td>
<td>Measurement and Inspection</td>
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<tr>
<td>6</td>
<td>Introduction to Welding</td>
</tr>
<tr>
<td>7</td>
<td>Machining Operations</td>
</tr>
<tr>
<td>8</td>
<td>Cylindrical Hole Production and Threading</td>
</tr>
<tr>
<td>9</td>
<td>Abrasive Machining</td>
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<tr>
<td>10</td>
<td>Non-traditional Machining</td>
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<tr>
<td>11</td>
<td>Numerical Control</td>
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<tr>
<td>12</td>
<td>Finishing Processes</td>
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VI. **INSTRUCTIONAL ACTIVITIES**:  
Content for examinations will be taken from lectures, demonstrations, reading assignments, laboratory exercises and any audio-visual materials used, i.e. films, tapes, slides, etc.
VII. FIELD, CLINICAL, AND/OR LABORATORY EXPERIENCES:
Metalworking Project
Woodworking Project

VIII. RESOURCES:
Society of Manufacturing Engineers video tape series.

IX. GRADING PROCEDURES:
Grade Scale Breakdown:
A = 90 - 100%
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F = Below 60%

X. ATTENDANCE POLICY:
Attendance will be taken at every scheduled class and laboratory. No make-ups unless:
A. Organized university trip.
B. Illness or death in immediate family.
C. Illness of student.
*Each one of these will require either a doctor’s statement or a signed statement from the individual in charge of the trip.
*Homework will be due at the beginning of the class following the period in which it was assigned. No late work will be accepted.
*Make up examinations are the student’s responsibility. No excuses will be accepted after the exam is given. The instructor must be notified prior to the scheduled exam. If not, the student forfeits their right to take the exam. Quizzes will not be made up unless prior acceptable excuse for absence has been received by the instructor.

XI. ACADEMIC HONESTY POLICY:
Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks or other sources in order to secure or give help during an examination; the unauthorized copying of examinations, assignments, reports or term papers; or the presentation of unacknowledged material as if it were the student’s own work.
Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

XII. TEXT AND REFERENCES:
A. Text:
B. Laboratory Materials:
   Students will be required to provide the following: approved safety glasses.

XIII. PREREQUISITIES:
None
XIV. **STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:**

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or other provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities.

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