



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title – Special Topics in Manufacturing Technology/Technician
Course Prefix and Number – INMT 1491
Department – Manufacturing Technology **Division** – Vocational Science
Course Type: (check one)
 Academic General Education Course (from ACGM – but not in WCJC Core)
 Academic WCJC Core Course
 WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture Hours # : Lab/Other Hours # 4:3:2

Equated Pay hours for course - 4

List Lab/ Other Hours
Lab Hours 2
Clinical Hours
Practicum Hours
Other (list)

Course Catalog Description – Topics address recently identified current events, skills knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. This course includes special topics such as statistical process control (SPC), quality, safety, industrial manufacturing processes, and other special manufacturing related topics.

Prerequisites/Co-requisites - TSI requirements met.

Prepared by Rudolph Henry *Date* 10/31/2014
Reviewed by Department Head Rudolph Henry *Date* 10/31/2014
Accuracy Verified by Division Chair Tim Guin *Date* 10/31/2014
Approved by Dean or Vice President of Instruction *Date* 12/03/2014
 Amy LaPan, Dean or L.A. Collins, VPI



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

Topical Outline -> Dedicated Instructional Time

- IHSHS005-GCU -> Safety in Maintenance -> 8 Hrs.
- ELECTRICAL -> Safety -> 16 Hrs.
- IQTSI002-GCU -> Statistical Process Control -> 12 Hrs.
- IPRHT003-GCU -> Heat Treatment 1 -> 8 Hrs.
- MGMCI001-GBE -> Continuous Improvement L1 -> 8 Hrs.
- IHSEN001-GBE -> The 5S Plan -> 4 Hrs.
- IPRXXO42-GBE -> SMED -> 8 Hrs.
- IMTME022-GCU -> Predictive Maintenance L1 -> 16 Hrs.

Lab:

This course will feature hands-on lab to enhance the lectures.

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Apply /Implement Safety in Maintenance 2. Apply /Implement Electrical Safety 3. Apply /Implement Statistical Process Control and Quality tools/procedures 4. Apply and recognize methods of Heat Treatment (Heat Treatment 1) 5. Define and incorporate Continuous Improvement Tools (Continuous Improvement L1) 6. Apply the techniques of The 5S Plan 7. Apply the SMED technique 8. Apply Predictive Maintenance principles (Predictive Maintenance L1) 	<p>Periodic written quizzes and exams.</p> <p>Hands-on laboratory assessments.</p> <p>Exam / hands-on performance analysis will be performed to identify weaknesses in the program.</p>

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Industry hand-outs and selected text.

IV. Suggested Course Maximum - 20

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Associated lab requirements.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

1. Quizzes, homework, assignments, and class participation – 25%
2. Lab, and cross disciplinary skills (work ethic, safety, teamwork, housekeeping, attitude). – 25%
3. Mid-term exam – 25%
4. Final Exam – 25%

Grading.

A – 100-90.

B – 89-80

C – 79-70

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Review Forms

- Critical Thinking
- Communication
- Empirical & Quantitative Skills
- Teamwork
- Social Responsibility
- Personal Responsibility

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.