Lansing Community College



**Course Cover Sheet** 

M-CAM Training Area: □CNC/Machining □Multi-Skilled Mechatronics ⊠Production Operation □Welding/Fabrications

### Program(s): CPT Safety

Course: Safety

#### **Course Description:**

This course covers OSHA regulations, safety rules related to the use of cranes, hoists, and rigging equipment.

Delivery method is hybrid, open entry/open exit.

Date Created: September, 2015.

**Employer/Industry Partner:** Magna/DexSys, Lansing, Michigan and various manufacturing companies in Mid-Michigan.

#### Faculty Developer(s)/Instructional Designers(s): Mike Taylor, Nathan Webb/Ann Lapo

College Contact: Jill Doederlein

Phone: 517.483.9665

Email: doederj@lcc.edu

Additional Information/Comments: Due to the increased need to offer a flexible delivery format to meet the needs of students'/workers' busy schedules, to offer open entry open exit modular courses in a hybrid format. LCC instructors added content based AMTEC (Automotive Manufacturing Technical Education Collaborative) led by Kentucky Community Technical College the needs of local industry and MSSC (Manufacturing Skills Standard Council).

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, warrantees, 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, timeliness, usefulness, adequacy, continued availability, or ownership.

The eight community colleges and MCAM is an equal opportunity employer/program provider. Auxiliary aids and services are available upon request to individuals with disabilities. TTY users please call 1-877-878-8464 or visit www.michigan.gov/mdcr."

This work is licensed under a Creative Commons Attribution 4.0 International License.



#### **DESCRIPTION:**

This instructor-led, blended-media training program provides participants with the knowledge and skills to apply safety measures within the industrial workplace and on construction worksites. The focus of this class will be on the prevention of accidents but will also teach the correct response if an accident should occur.

Upon successful completion, participants will have received 10 hours of OSHA training and will also have the opportunity to earn the MSSC CPT Safety Certification, as well as certificates in, CPR/AED/Basic First Aid.

This course and assessment also includes cross-functional employability skills (e.g. communications, teamwork, customer awareness, workplace conduct, training ability).

PREREQUISITES: Reading Level 4. Basic computer skills.

#### **OBJECTIVES:**

After completing this course, the student should be able to:

- Identify Local, State and Federal Safety Regulation.
- Work in a safe and productive manufacturing workplace.
- Describe the importance and use of personal protective equipment and practices.
- Perform safety and environmental inspections.
- Perform emergency drills and participate in emergency teams.
- Demonstrate the use of lock-out procedures.
- Identify unsafe conditions and take corrective action.
- Provide safety orientation for all employees.
- Train personnel to use equipment safely.
- Suggest processes and procedures that support safety of work environment.
- Fulfill safety and health requirements for maintenance, installation, and repair.
- Monitor safe equipment and operator performance.
- Utilize effective, safety-enhancing workplace practices.
- Describe the characteristics of an effective team, barriers to teamwork and strategies for overcoming those barriers.
- Apply the concepts of effective communication, including listening, giving feedback and avoiding roadblocks, while working with each other to design a product.
- Fulfill certification requirement for OSHA-10, CPR, AED and Basic First Aid.
- Take the MSSC Safety Certification assessment.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. 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, timeliness, usefulness, adequacy, continued availability, or ownership.

#### **MATERIALS:**

- MSSC online content
- OSHA-10 course content
- Heartsaver, First Aid CPR AED Student Workbook
- Safety glasses
- Team Dynamics handouts and PowerPoint presentation.
- Waterworks Participant handouts and PowerPoint presentation.

#### **GRADING POLICY:**

• Satisfactory completion of training (at least 75%) recommended.

College Grading Standards	Percent
4.0 Excellent	91-100%
3.5	86-90%
3.0 Good	81-85%
2.5	76-80%
2.0 Satisfactory	71-75%
1.5	66-70%
1.0	60-65%
0.0	0-59%

#### ACCEPTABLE USE POLICY:

#### **Computer Resources**

Use of College-owned computer resources is a privilege extended by the College to students, employees, and other authorized users as a tool to promote the mission of the College. All users agree to be bound by the terms and conditions of the LCC Acceptable Use Policy at the time they complete an account application form. Copies of the LCC Acceptable Use Policy are available at the Library Circulation Desk and may also be accessed on the World Wide Web. The URL is <u>http://www.lcc.edu/policy/policies 1.aspx#ACCEPTABLE USE POLICY</u>

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. 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, timeliness, usefulness, adequacy, continued availability, or ownership.

Unless otherwise noted, this work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, go to http://creativecommons.org/licenses/by/4.0/ on your web browser.

#### **Transfer Potential**

For transferability information, please consult the Transfer Equivalency Information located at the LCC website at <u>http://www.lcc.edu/transfer</u>. For additional transferability information, contact the LCC Academic Advising Center, (517) 483-1904.

The MACRAO Transfer Agreement simplifies the transfer of students from one Michigan institution to another. The most current MACRAO Transfer Agreement information can be found at <a href="http://www.lcc.edu/transfer/macrao\_agreement.aspx">http://www.lcc.edu/transfer/macrao\_agreement.aspx</a>.

#### Student Code of Conduct and General Rules and Guidelines

LCC supports a positive educational environment that will benefit student success. In order to ensure this vision, the College has established the LCC Student Code of Conduct and the Student General Rules and Guidelines to ensure the protection of student rights and the health and safety of the College community, as well as to support the efficient operation of College programs. In addition, the College has established guidelines for the redress of grievances by individuals accused in such proceedings. A copy of the most current Code can be found on the College's website at http://www.lcc.edu/catalog/policies\_procedures/studentrulesguidelines.aspx#code.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. 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, timeliness, usefulness, adequacy, continued availability, or ownership.

# MSSC Certified Production Technician (CPT) Safety Session Plan

CPT Safety, OSHA Ten Card, CPR/AED/First Aid, BCI Completion

Instructors: CPT, Team Build, OSHA, CPR/AED M-CAM Support Staff

(48 hours)

	(48 hours)	
Day 1: M-CAM Support 4:00pm-5:00pm CPT Instructor 5:00pm- 9:00pm	Session 1 of 12 Welcome & Introductions Orientation, Enrollment, Resources Units 1 - 3 MSSC Registration, eLearning Log In Recap, Wrap Up, Next Steps Units 4 - 6	<b>Resources</b> Prerequisites Course Binder Content Computer Lab Online / LCC TUID MSSC Websites MSSC M1 Registration Online 1 <sup>st</sup> eLearning Class: <i>WMSSCOS1-BX01XEN</i> <i>Production Teams</i>
Day 2: CPT Instructor 5:00pm-9:00pm	Session 2 of 12 Welcome Back Review Session 1 Units 4 - 6 Recap, Wrap Up, Next Steps Units 7 - 18	ResourcesCPT Candidate HandbookMSSC CPT StandardsMSSC CPT Lesson PlanStudy GuideWMSSCOS1-BX02XENTraining and Leadership
Day 3: Team Build Instructor 5:00pm-9:00pm	Session 3 of 12Essentials of CommunicationCommunication Basics – Sender, Medium, ReceiverCommunication Skills (costs of miscommunication)Redemptive Listening and Giving/Receiving Feedbackw/ Communication Practice Triads ActivityRoadblocks to CommunicationCommunication in a Diverse EnvironmentCommunication and TechnologyTeam Building IntroductionTeam Leadership and RolesTeam Dynamics: Characteristics & BarriersGroups vs TeamsStages of Team Growthw/ "Storming, Norming, Performing Activity	ResourcesWaterworks DesignSolutions Module:HandoutsTeam Dynamics Module:HandoutsMSSC CPT Lesson PlanUnits 7 – 9WMSSCOS1-BX03XENSafety Organization(Safety and Health)
Day 4: Team Build Instructor 5:00pm-9:00pm	Session 4 of 12 Team Building Continued : Waterworks Design Solutions Module Introduction Successful Team Characteristics w/ successful teams teach back activity Problem Solving and Brainstorming Goal Setting Resolving Conflict within Teams Waterworks Design Solutions Module Activity Communication and Team build reflection and action planning	Resources Waterworks Design Solutions Module: Handouts Team Dynamics Module: Handouts MSSC CPT Lesson Plan Units 7 – 9 WMSSCOS1-BX04XEN Personal Protective Equipment

# MSSC Certified Production Technician (CPT) Safety Session Plan

CPT Safety, OSHA Ten Card, CPR/AED/First Aid, BCI Completion

Instructors: CPT, Team Build, OSHA, CPR/AED M-CAM Support Staff

(48 hours)

	(48 hours)	
Day 5: OSHA Instructor 5:00pm-9:00pm	Session 5 of 12	<b>Resources</b> MSSC CPT Lesson Plan Units 10 – 18 <i>WMSSCOS1-BX05XEN Fire</i> and Electrical Safety
Day 6: CPR/AED Instructor 5:00pm-9:00pm	Session 6 of 12	Resources MSSC CPT Lesson Plan Units 10 -18 WMSSCOS1-BX06XEN Work Area Safety
Day 7; OSHA Instructor 5:00pm-9:00pm	Session 7 of 12	Resources MSSC CPT Lesson Plan Units 10 – 18 WMSSCOS1-BX07XEN Hazardous Material Safety
Day 8: CPT Instructor 5:00pm-9:00pm	Session 8 of 12 Welcome Back Review Sessions 3-7 Units 7 - 12 Recap, Wrap Up, Next Steps Units 13, 14, 15	Resources MSSC CPT Lesson Plan Units 7, 8, 9, 10, 11, 12 WMSSCOS1-BX08XEN Tool and Machine Safety
Day 9: OSHA Instructor 5:00pm-9:00pm	Session 9 of 12	Resources MSSC CPT Lesson Plan 10 – 18 WMSSCOS1-BX09XEN Material Handling Safety
Day 10: CPT Instructor 5:00pm-9:00pm	Session 10 of 12 Welcome Back Review Sessions 8, 9 Units 13, 14, 15 Recap, Wrap Up, Next Steps Units 16, 17, 18	<b>Resources</b> MSSC CPT Lesson Plan Units 13, 14, 15, Study Guide
Day 11; CPT Instructor 5:00pm-9:00pm	Session 11 of 12 Welcome Back Review Session 10 Units 16, 17, 18 Recap, Wrap Up, Next Steps Units 1 - 18	<b>Resources</b> MSSC CPT Lesson Plan Units 16, 17, 18 Study Guide
Day 12: CPT Instructor 5:00pm-7:00pm MSSC Proctored Assessment 7:00pm-8:30pm	Session 12 of 12 Welcome Back Review Sessions 1 - 11 Wrap Up Next Step – MSSC CPT Quality	Resources MSSC CPT Lesson Plan Units 1 – 18 Study Guide



## Subject Matter Expert (SME) Course Review Summary

**College: Lansing Community College** 

**M-CAM Training Area:** CNC/Machining Multi-Skilled/Mechatronics Production Operation Welding/Fabrication

**Degree Program Name:** 

Title of Course: MSSC CPT Safety

Subject Matter Expert (SME) Reviewer Information

Name: Robert C. Hess

**Title: Senior Instructional Designer/Trainer** 

Phone: 566-322-1033

Email: bob.hess@mhtechnologies.net

**Organization/Affiliation: MH Technologies** 

Attach Resume or provide credentials (showing years of experience and work experience that is relevant to course content):

#### Synopsis of Findings:

- 1. First two slides on PPT could use a larger image. Too much white space, can't read info.
- 2. Video link doesn't work on slide pages #22, 23, 29, 32,43,.
- 3. Overall PPT is good, but on some slides, there is too much white space, and not enough picture. Enlarge any images that can be expanded to allow better clarity.
- 4. Book is well written and concise to the subject.

Reviewers Signature Robert C. Hesss

3/10/17 Date:



# Michigan Coalition for Advanced Manufacturing Subject Matter Expert Course Review

1. Course Overview and Objectives	Exceptional	Satisfactory	Ineffective
The goals and purpose of the course is clearly stated.		Х	
Prerequisites and/or any required competencies are clearly stated.		X	
Learning objectives are specific and well-defined.		Х	
Learning objectives describe outcomes that are measurable.		Х	
Outcomes align to occupational focus (industry skills and standards).		Х	
Comments or recommendations:			
2. Material and Resources	Exceptional	Satisfactory	Ineffective
The instructional materials contribute to the achievement of the course learning objectives.		Х	
The materials and resources meet/reflect current industry practices and standards.		Х	
The instructional materials provide options for a variety of learning styles.		Х	
Resources and materials are cited appropriately. If applicable, license information is provided.		Х	
Comments or recommendations:			
3. Learning Activities	Exceptional	Satisfactory	Ineffective
Provide opportunities for interaction and active learning.		Х	
Help understand fundamental concepts, and build skills useful outside of the learning object.		Х	
Activities are linked to current industry practices and standards.		Х	

ional Satisfactory X X	Ineffective
X	Ineffective
X	Ineffective
Х	
X	
X	
I	<u> </u>
ional Satisfactory	Ineffective
X	
X	
X	
_	ional Satisfactory X

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, warrantees, 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, timeliness, usefulness, adequacy, continued availability, or ownership.

The eight community colleges and MCAM is an equal opportunity employer/program provider. Auxiliary aids and services are available upon request to individuals with disabilities. TTY users please call 1-877-878-8464 or visit www.michigan.gov/mdcr."

This work is licensed under a Creative Commons Attribution 4.0 International License.



# **Robert C. Hess**

47737 Remer Ave. Shelby Twp., MI 48317 586-322-1033 bob.hess@mhtechnologies.net

### Qualifications

Dedicated, articulate, and enthusiastic with strong analytical and organizational abilities. Effective communication and interpersonal skills. Ability to work independently or as an integral part of a team to accomplish goals. Experience prioritizing and completing numerous concurrent responsibilities while meeting time and organizational goals. Sound professional attitude, strong work ethic and pride in personal performance.

#### Experience

#### 2015 – Present M H Technologies LLC Senior Instructional Designer/Trainer

- Perform Needs Analysis and quote training programs
- Develop on-line training programs, system manuals, student workbooks, and job aids •
- Deliver on-site training programs

#### 2002 - 2015 **R.C.** Technologies

#### Business Owner – R.C. Technologies

- Research and quote training programs
- Development of training programs for Ford Motors, DaimlerChrysler, General Motors, Kuka Robotics, Fame Conveyor, Lamb Technicon, Delphi, Magna, and SPX
- Design training programs, system manuals, student workbooks, PowerPoint presentations, and job aids
- Deliver on-site training programs .
- Professional Industrial photography

#### 1995 - 2002DCT Inc.

## **Training Designer**

- Research and quote training programs •
- Design training programs, system manuals, student workbooks, and job aids
- Deliver on-site training programs •

#### 1990 - 1995**Bond Robotics Training Manager / Field Service Engineer**

- Managed Training Department •
- Research and quote training programs •
- Design operation and maintenance manuals plus training guides •
- Deliver all training programs
- Perform on-site electrical and mechanical customer support for installation, start-up, and debugging of pressroom automation

#### 1986 - 1990**Robotic Vision Systems, Inc. Sterling Heights Field Service Engineer / Trainer**

Research, installation, programming and training of 3D vision guided robotic welding and sealant systems for military, aerospace, and automotive industry

1977 - 1981 Education

Ferris State University

**Big Rapids**, MI

BSEE

# Shelby Twp. MI

Warren, MI

### Sterling Heights, MI

Sterling Heights, MI