# ILLINOIS VALLEY COMMUNITY COLLEGE

### **COURSE OUTLINE**

**DIVISION: Workforce Development** 

COURSE: WHS 1200; Basic Forklift Operation

Date: Fall 207	15	
Credit Hours:	1	
Prerequisite(s):	None	
Delivery Method:	⊠ Lecture	.5 Contact Hours (1 contact = 1 credit hour)
	Seminar	0 Contact Hours (1 contact = 1 credit hour)
	🖂 Lab	1 Contact Hours (2 contact = 1 credit hour)
	Clinical	0 Contact Hours (3 contact = 1 credit hour)
	Online	
	Blended	
Offered: 🔀 Fall	🖂 Spring	⊠ Summer

IAI Equivalent - Only for Transfer Courses-go to http://www.itransfer.org:

#### CATALOG DESCRIPTION:

This course is designed to ensure that all forklift operators, regardless of their degree of experience, have uniform understanding of the safe and efficient operation of forklifts and compliance with the safety rules and OSHA regulations at their worksite. Students will learn safe driving skills while gaining concise knowledge of how a forklift works. Safety will be stressed as means of reducing accidents and injuries in the workplace.

#### **GENERAL EDUCATION GOALS ADDRESSED**

[See the last page of this form for more information.]

Upon	comple	etion o	of the	course,	the st	tudent v	vill be	able:

[Choose those goals that apply to this course.]

$\boxtimes$	] To apply analytical and problem solving	skills to	personal,	social and
	professional issues and situations.			

- To communicate orally and in writing, socially and interpersonally.
- ] To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

#### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals.]

#### Upon completion of the course, the student will be able to:

- 1. identify components of Powered Industrial Trucks (PIT) or forklifts.
  - 1.1 identify the 7 classes of PITs.
  - 1.2 identify the components of the load handling system of a PIT.
  - 1.3 identify the components of the operating control system of a PIT.
  - 1.4 identify the safety equipment of a PIT.
  - 1.5 define common terminology associated with PITs.
- 2. identify information on the forklift nameplate.
- 3. discuss forklift attachments.
  - 3.1 identify types of attachments
  - 3.2 explain impact of attachments on load
- 4. explain principles of stability.
  - 4.1 define stability.
  - 4.2 explain the stability triangle.
  - 4.3 understand the three-point suspension system.
  - 4.4 explain the importance of the center of gravity.
  - 4.5 explain the differences between longitudinal, lateral, and dynamic stability.
  - 4.6 explain the concept of weight distribution.
  - 4.7 identify and explain the load center.
- 5. demonstrate how to safely operate a forklift on an incline.
- 6. demonstrate how to safely turn a PIT by utilizing the pivot point.
- 7. demonstrate how to safely load and unload a trailer with a PIT.
- 8. identify similarities and differences between automobiles and forklifts.
- 9. identify operational and traveling concerns.
- 10. explain how to safely change power sources for propane and electric forklifts.
- 11. explain proper safety protocols.
  - 11.1 explain the importance of accident reporting.

- 11.2 demonstrate a proper pre-operation/trip inspection.
- 11.3 identify potential hazard in the work environment.
- 12. successfully complete a Performance Test using the appropriate training equipment.

#### COURSE TOPICS AND CONTENT REQUIREMENTS:

- 1. Classes of PITs.
- 2. Designations of PITs.
- 3. Load handling systems.
- 4. Operation control systems.
- 5. Safety Equipment.
- 6. Terminology.
- 7. Nameplates.
- 8. Attachments.
- 9. Principles of stability.
  - A. Stability triangle.
  - B. Center of gravity.
  - C. Load Capacity
  - D. Load Center
  - E. Counterweight
  - F. Maximum Fork Height
  - G. Fulcrum point
  - H. Attachments
- 10. Weight distribution.
- 11. Load center.
- 12. Operating a forklift:
  - A. Incline
  - B. Turning
  - C. Lifting a load.
  - D. Traveling with a load.
  - E. Setting a load
- 13. Similarities/Differences between auto & forklift
- 14. Changing power sources.
- 15. Safety procedures.
  - A. Lockout/tagout.
  - B. Haz-Com
  - C. MSDS Sheets
  - D. Accident reporting.
  - E. Pre-trip/operation inspection.
- 16. Performance test.
- 17. Hazards in work environment.

#### **INSTRUCTIONAL METHODS:**

Lecture, hands-on lab activities, reading assignments, quizzes and tests, videos, instructor demonstrations, supervised work experience.

#### **INSTRUCTIONAL MATERIALS:**

To Be Decided

#### STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

#### **OTHER REFERENCES**

"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."

## Course Competency/Assessment Methods Matrix

WHS 1200; Basic Forklift Operation		Assessment Options																													
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	<b>Course Embedded Questions</b>	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation		vritteri report Assignment
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			_		D	D					
1. identify components of Powered Industrial Trucks (PIT) or forklifts.					×		×	×							×																
2. identify information on the forklift nameplate.					×		×	$\times$							$\times$																
3. discuss forklift attachments.					$\times$		$\times$	$\times$							$\times$																
4. explain principles of stability.					×		Х	×							$\times$																
5. demonstrate how to safely operate a forklift on an incline.					×		Х	×							×																
<ol><li>demonstrate how to safely turn a PIT by utilizing the pivot point.</li></ol>					$\times$		×	$\times$							$\times$																
<ol><li>demonstrate how to safely load and unload a trailer with a PIT.</li></ol>					Х		Х	X							X																
8. identify similarities and differences between automobiles and forklifts.					X		Х	×							×																
9. identify operational and traveling concerns.					×		×	×							×																
10. explain how to safely change power sources for propane and electric forklifts.					×		X	×							×																
11. explain proper safety protocols.					$\times$		$\times$	$\times$							$\times$																

Curriculum Committee - Course Outline Form Revised 02/2/10

WHS 1200; Basic Forklift Operation											A	sse	ess	me	ent	: <b>O</b>	pti	on	S													
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	-	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	/e Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site		In Class Feedback	Simulation	Interview	Written Report	Assignment
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect	D	D	D	D	Δ				D	Δ	D I					יר		Δ	Δ.			_	_		D						
12. successfully complete a Performance Test using the appropriate training equipment.					×		×	×						;	×																	