

COURSE ARTICULATION ANALYSIS

John A. Logan College

High School

Course Title: MAC 162 Machine Tool Laboratory

Course Title(s): _____
(As it appears on transcript)

Instructor(s) _____

Course length: ___ Full year ___ Semester ___ Other
Class meets: _____ Hours per day _____ Hours per week

Contact Hours: Lec. _____ Lab _____ 4Hrs. _____

Number of Credits: _____
Total Contact Hours: _____
Text(s) Used: _____

Text(s) Used: Machine Tool Practices 7th Ed. Kibbe, Neely, Meyer, White
Recommendations:

Recommendations: _____
Required Grade: _____

Course Competencies/Outcomes & Evaluation Methods

| Outcome/Competencies | JALC | | | High School | | |
|--|------|----|------------|-------------|----|------------|
| | Yes | No | Evaluation | Yes | No | Evaluation |
| 1. Using form cutters to mill a work piece | | | | | | |
| 2. Mill simple and compound angles in tool steel | | | | | | |
| 3. Square up a workpiece of a surface grinder | | | | | | |
| 4. Indicate and inspect workpiece to be ground | | | | | | |
| 5. Dress form on grinding wheel | | | | | | |
| 6. Grind form into part | | | | | | |
| 7. Grind angular surfaces | | | | | | |
| 8. Grind straight and tapered surfaces between centers using jig grinder | | | | | | |
| 9. Grinding precision angles using a magnetic sine plate | | | | | | |

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|--|--|--|--|--|--|--|
| 10. Heat treating tool steel to the desired hardness | | | | | | |
| 11. Tempering of tool steel and testing the hardness with a Rockwell Hardness Tester | | | | | | |
| 12. Calculating of feeds and speeds for tool steels on a CNC milling/turning centers | | | | | | |

Code

O = Observation

P = Projects

PF = Portfolio

W = Written Assignment

T = Test

PR = Presentation

S = Skills/Practicum

R = Research Paper

LA = Lab Assignment

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|--------------------------------|---------------------------------------|
| JALC Instructor's Signature: | High School Teacher's Signature: |
| JALC Associate Dean Signature: | Regional System Director's Signature: |
| Date: | Date: |