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Curriculum, Syllabus, and Course Content Review Rubric

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Program/Materials Reviewed: CAM 1116 Fundamentals of Computer Numerical Control Operations

College: Sinclair Community College

Reviewed by: Robert E. Speckert, Professor Emeritus, Miami University

Date: June 9, 2018

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Review Scale definitions:

Excellent: Review component is excellent, represents a “promising practice”, and is a model for replication.

Very good: Review component is complete and can be replicated.

Good: Review component is adequate but represents opportunities for improvement

Ineffective: Review component is weak and in need of significant improvement.

No or insufficient evidence: Review component was missing information and not able to be assessed.

**Syllabus Assessment:**

Curriculum Overview and Syllabi	Excellent	Very Good	Good	Ineffective	No or Insufficient Evidence
1. Course objectives support one or more programs or program outcomes.		X			
2. Unit/Module Outcomes are clearly stated and measurable.		X			
3. Unit/Module Outcomes support one or more course outcomes.		X			
4. Syllabus includes the following information: a. Course title and Number b. Credit hours c. Pre-requisites d. Course description	X All items listed are covered in the syllabus.				

<ul style="list-style-type: none"> <li>e. Plagiarism policy</li> <li>f. ADA Statement/Policy</li> <li>g. Student Resources</li> <li>h. Institutional Policies/Procedures</li> <li>i. Technical Support</li> <li>j. Grading Policy stated clearly and how grades are calculated</li> <li>k. Criteria by which student work will be evaluated (Rubric)</li> </ul>					
<p>Comments or Recommendations Specific to Curriculum Overview and Syllabi</p> <p>Very good syllabus. Meets all criteria listed. Clear expectations for students. Syllabus contains all items listed above.</p>					

E-Course site is well developed and very useful. Information provided is very useful for improving student learning.

**Course Content:**

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Good: Review component is adequate but represents opportunities for improvement

Ineffective: Review component is weak and in need of significant improvement.

No or insufficient evidence: Review component was missing information and not able to be assessed.

**Course Content Assessment:**

Course content is very good. Course content is consistent with syllabus. Content makes extensive use of machine manuals provided by vendor and ToolingU. Content meets all stated learning outcomes. Assessments are frequent and varied in nature which tends to support various learning styles. Grading and assessment is clear and fair. Content is relevant to Manufacturing and at an appropriate level.

### Instructional materials and Lab Activity Assessment

Labs are very good. This course requires multiple hands-on labs. Most lab activities are taken from machine manual and ToolingU. These labs are supportive of the learning outcomes and provide additional method of assessment of learning. It is an effective way of measuring student competency on specific skills. Lab content is consistent with syllabus. Lab content meets all stated learning outcomes and is relevant to Manufacturing.

Instructional Materials and Lab Resources	Excellent	Very Good	Good	Ineffective	No or Insufficient Evidence
1. Align with stated course or unit learning objectives.	X				
2. Meet/reflect current industry practices and standards.	X				
3. Provide options for multiple learning styles.		X			
4. Instructional materials are cited properly.	X				
5. There is evidence of materials and resources that support innovative learning techniques.		X			
<p>Comments or Recommendations Specific to each section rated:</p> <ol style="list-style-type: none"> <li>The various labs seem to be effective and supportive of the learning outcomes.</li> <li>Content is consistent with industry practices.</li> <li>Multiple learning options are limited by the nature of the course. Assessment is based on multiple activities.</li> <li>Instructional materials are cited as needed.</li> <li>Materials provided support various learning techniques.</li> </ol>					

# Robert E. Speckert

Professor Emeritus

Miami University, Department of Engineering Technology  
513-785-1810, speckere@miamioh.edu

## Education:

1975-1980 University of Cincinnati. Master of Business Administration Degree, Quantitative Analysis major.

1973-1975 Miami University, Oxford, OH. Bachelor of Science degree in Applied Science, Engineering Technology major.

1971-1973 Cincinnati Technical College. Associate of Applied Science degree, Engineering Technology major.

## Certifications:

- Certified Manufacturing Engineer (Society of Manufacturing Engineers)
- Academic Jonah (Avraham Y. Goldratt Institute)

## Additional Training: (some activities)

- Train the Trainer in Nano Technology, Penn State University, August 2009
- Nano Technology, Penn State University, May 2009
- Nano Technology, January 2009, Las Vegas (sponsored by NSF)
- Geometric Dimensioning and Tolerancing, March 2-3, 2008, Detroit, Michigan.
- Lab View workshops, National Instruments, various dates.
- Lean Manufacturing, Fanuc Robots, Mason, OH February 2005
- Academic Jonah Training on Theory of Constraints, Avraham Y. Goldratt Institute's program on Theory of Constraints/Continuous Improvement, Summer 1992
- Quality in Daily Work, Procter and Gamble's (P&G) Total Quality Management program, Spring 1992
- Team Member Training, Procter and Gamble's (P&G) Continuous Improvement program, Summer 1992
- Executive Decision Making, Avraham Y. Goldratt Institute's program on Theory of Constraints/Total Quality Management, Fall 1991

## Experience:

Jan. 1985 – Present: Miami University, 1601 University Blvd., Hamilton, OH 45011 (513-785-1810)

1985-1997: Associate Professor and Chair; 1997-2006: Professor and Chair; 2006-Present: Professor and Assistant Chair; 2013 Professor Emeritus

June 1975 - Jan 1985: Cincinnati Technical College - 1.5 years as Division Coordinator of Cooperative Education and Public Relations. 8.0 years as Instructor/Program coordinator for Electro-Mechanical Engineering Technology and Computer Integrated Manufacturing Technology. Spent 6 months at Cincinnati Milacron in customer training.

Sept. 1974 - Sept. 1975: Kenner Products, Cincinnati, OH. Computer Operator. I operated a Burrough's 3500 system processing a variety of business reports.

June 1973 - Sept. 1974: General Electric Company, Evendale, OH. Engineering Assistant.

## Consulting and Seminars Presented: (partial list)

2017 – Consultant for Lorain County Community College. Developed a Manufacturing Foundations Curriculum and pathway.

2017 – Served as Subject Matter Expert/Consultant on CNC programming curriculum for Cincinnati State Technical and Community College

2005-present Educational Consultant for Ohio Department of Higher Education, TechPrep, and others on various projects including curriculum review, curriculum development, program assessment, and continuous improvement.

2010-present Consultant, TechPrep of Greater Cincinnati

2006-2017 Consultant, Ohio Board of Regents, Transfer and Articulation

2006 Consultant, University of Cincinnati—College of Applied Science, Spring and Fall 2006. I worked with the administration on assessment processes.

2006-2007 Consultant for Tipco Punch, Inc, in Fairfield assisting them with quality control issues.

2004 Assessment Consultant, University of Cincinnati—College of Applied Science.

**Publications and Presentations:** (selected works)

- “Developing an Assessment Plan to Meet TAC/ABET Criteria 1-8” at the Rose-Hulman Best Assessment Practices VII, February 26-28, 2006.
- “Developing a Meaningful Assessment and Continuous Improvement Plan”, Best Assessment Processes VI, Rose Hulman, Terre Haute, IN, March 2004. Also presented in April 2005 at Best Assessment Processes VII by invitation.
- “Alternative Delivery of a Baccalaureate Degree in Engineering Technology”, October 24, 2000—Co-Presenters: R Speckert, D. Hergert , and D. Bickerstaff
- “TQM: The Topics, Tools and Techniques for Your Classroom”, - League for Innovation in Community Colleges conference - November 1993 - Co authors: R. Speckert, P. Cantonwine and J. Streb.
- “Teaching Automated Manufacturing: Beyond Concept to Implementation” - Society of Manufacturing Engineer's Conference - November, 1992: Co-Authors J. Streb, P, Cantonwine and R. Speckert
- “Teaching Computer Integrated Manufacturing in the Interdisciplinary Classroom” - League for Innovation in Community Colleges conference - October 1991 - Co authors: J. Streb, P. Cantonwine and R. Speckert
- “LINK-UP/BCX” - Manufacturing simulation software for Lathes and Mills (1984-1993)

**Service:** (Recent activity)

2017-present	Chaired, Search Committee, Electrical and Computer Engineering Technology
2015-2016	Chaired, Search Committee, Mechanical Engineering Technology, James A. Meyers Endowed Professorship
2015-2016	Chaired, Search Committee, Electro-Mechanical Engineering Technology Associate Professor position
2015-present	Served, Advisory Council, Cincinnati Public Schools Career Tech
2014-present	Served, Advisory Council, Butler Tech—Adult Programs
2012	Served, Search Committee, Mechanical Engineering Technology Associate Professor position
2010-2015	Chaired, SEAS Evaluation of Administrators Committee
2010-2015	Chaired, SEAS Grievance Appeals Board
2005	Chaired, Search Committee, Chair/Director of Nursing Department, Miami University
2004-2006	Judge, B.E.S.T Robotics, University of Cincinnati—College of Applied Science.
2003-Present	Judge, Senior Design Projects, University of Cincinnati—College of Applied Science, Mechanical Engineering Technology.
2002-Present	Advisory Council, Greater Cincinnati TechPrep Consortium
2002-present	Served, Advisory Council, Cincinnati State Technical and Community College, Electro-Mechanical Engineering Technology
2002-present	Served, Advisory Council, Northwest School, Electro-Mechanical program
2000-present	Served, Advisory Council, Hamilton High School, Engineering Design program

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