

**Danville Community College Subject Matter Expert (SME)
Curriculum Review Form Integrated Machining Technology
Program**

Thank you for agreeing to be a SME reviewer for curriculum developed through Retooling America: Retooling its Workforce, Retooling its Educational Programs, funded by the US Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant. In compliance with grant requirements, DCC must identify a SME with demonstrated experience in developing and/or implementing similar training and educational deliverables. SME's review of course curriculum will be documented utilizing the rubric provided. Upon completion, both the curriculum reviewed and the completed rubric will be uploaded to SkillsCommons.org, a repository for all grantees to share curriculum and resources created with grant funding. Please follow the steps provided below:

Step 1: Program and Reviewer Information

Program/Course	MAC 224 Advanced Tooling Applications
Reviewed by	Jason S. Wells
Date	5/31/18

Step 2: Reviewer Credentials

Please provide a thorough overview of your credentials and qualifications.

Credentials (certificates, degrees, industry certifications)	<ul style="list-style-type: none"> - Journeyman Toolmaker - Certified DDI Facilitator - Certified Product Manager - SGS Tool Company Sales Engineer Apprenticeship Certified - Titex Prototype Applications Certification
Professional Qualifications	29 years specifically in the cutting tool industry working at all levels including manufacturing, engineering, sales, marketing, research and development, administrative, and executive levels. Currently holds 5 Patents in cutting tool designs. Created a cutting tool application education system known as the SGS Tool Clinic that has been utilized to educated over 300 industry professionals. Has authored 5 published articles and has been referenced in several articles appearing in a variety of trade periodicals as a subject matter expert. Has conducted paid lectures at global trade events such as IMTS and EMO. Has served as a Board member of the York High School Floyd Rose Technical School and is a current Board member of the CCAM Apprenticeship Academy. Has traveled globally working with a wide variety of industrial machining customers to engineer cutting tool solutions and troubleshoot challenging applications. Jason has also led the creation and start-up of two advanced engineering and technical centers for two global cutting tool companies.

Step 3: Complete the Rubric

Please review the curriculum provided utilizing the rubric on the following pages. For each item, provide a rating. DCC encourages the SME reviewer to provide general comments, strengths and/or recommendations for each section, in order to help other grantees incorporate the recommended changes into the pre-existing curriculum for their use. The following identifies the scale definitions within the rubric:

Exceptional: Content is robust and rigorous. Content utilizes “best practices” for instruction.

Effective: Content is complete with only small tweaks that may need to be made.

Acceptable: Content is adequate but there are opportunities for improvement.

Developing: Content is weak and requires significant improvement.

N/A: Content has not been provided/does not apply for a given section.

Section A: Syllabus and/or Course Outline					
Materials that are given and/or displayed to the student at the beginning of class that provide an overview of the course					
	Exceptional	Effective	Acceptable	Developing	N/A
Initial course information is easily identifiable (<i>course title, course description, objectives/outcomes, credit hours, textbook(s) used, etc.</i>)	X				
Course includes objectives and/or outcomes that relate to the course and are appropriate for the course	X				
Course objectives and/or outcomes are measurable	X				
Assessment methods are described (<i>grading policy, grading scale, types of assessments, etc.</i>)	X				
Course schedule is outlined and appropriately paced	X				
General Comments, Strengths, and/or Recommendations: It may be effective to evaluate the students ability to specify tool geometry needs for specific challenges under the custom tool portion. Maybe a designing tools 101 type of course. It would be good to see a portion of the curriculum address capturing data and using data to drive decisions.					

**Section B: Instructional
Materials and Design**

Materials the instructor uses to teach the course (ex: PowerPoint, informational handouts, videos, media, etc.)

	Exceptional	Effective	Acceptable	Developing	N/A
Materials relate to course objectives and/ or outcomes	X				
Materials are presented in an appropriate format for the learner to understand (<i>ex: language is at a level that is easily understandable, sufficient information has been provided for the learner to understand a concept, visuals have been provided as needed, concepts can be connected to real-world examples, etc.</i>)	X				
Instruction follows a logical format. The instruction and materials are appropriately organized and provide clear structure.		X			
Instruction and materials reflect direct application to current industry standards and practices		X			
Provides option(s) for multiple learning styles in order to engage students	X				
Materials are aesthetically pleasing	X				
Materials are appropriately cited	X				

General Comments, Strengths, and/or Recommendations:

Much of the goal of this course will be realized hands on. It is important to connect the content of the written material with real world application. The lab time will define the success in truly understanding the presentation materials.

Section C: Learning Activities					
<i>Activities utilized to engage students to learn a specific concept(s)</i>					
	Exceptional	Effective	Acceptable	Developing	N/A
Activities clearly support course objectives	X				
Activities utilize various learning styles and provide opportunities for interaction	X				
Activities allow students to connect the content they are learning to real-world application	X				
Activities are easy to understand and follow		X			
Activities can be modified to accommodate various learning needs		X			
General Comments, Strengths, and/or Recommendations:					
It is always a strong experience when students can be placed in an activity that creates a lot of pressure in the form of time constraints, limited resources, and multi-tasking. Activities that can incorporate these demanding scenarios will help determine if skills are being memorized or learned.					
Present the same learning objectives in multiple activities and formats to evaluate the absorption of the materials.					

Section D: Assessments/Evaluation					
<i>Assessments or evaluation utilized to gauge student understanding- can be formal or informal</i>					
	Exceptional	Effective	Acceptable	Developing	N/A
Assessments accurately measure the stated learning objectives and align with course content taught		X			
Assessments are rigorous and require higher-order thinking	X				
The assessment instrument used is appropriate to measure student understanding and mastery of concept(s)/skill(s)	X				
General Comments, Strengths, and/or Recommendations:					
We are of the opinion to challenge the students through utilizing the knowledge gained in several troubleshooting and optimization exercises. We would recommend incorporating these as part of the learning and evaluation process.					

Section E: Final Comments

Please provide any closing comments, recommendations, and/or suggestions for the curriculum reviewed

The material is very well developed, and it is excellent to see such attention provided to the cutting tool. As a veteran in the industry we see companies daily that understand how to make a machine move, but have little knowledge of the tool that is producing their part. This lack of knowledge and awareness creates millions of dollars in waste and lost revenue globally each year. Providing this knowledge to students attending DCC will certainly provide a large competitive advantage that will pay them and future employers dividends throughout their entire career.